Call for Evidence Responses to Shortage Occupation List Commission 2019

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Academy of Medical Royal Colleges and Faculties in Scotland

Migration Advisory Committee
Call for evidence: Shortage occupation list review 2018
Response from the Academy of Medical Royal Colleges and Faculties in Scotland

The Academy of Medical Royal Colleges and Faculties in Scotland - known as the "Scottish Academy" - contributes to improvements in the health of the people of Scotland by the promotion and co-ordination of the work of the Medical Royal College and Faculties and giving the medical professions a collective voice on clinical and professional issues. The Scottish Academy are involved in consultant appointments in medical specialties across Scotland by virtue of the *National Health Service (Appointment of Consultants) (Scotland) Regulations 2009*[i].

Workforce context:

The Scottish Academy supports improved medical workforce planning across the four nations of the UK to recruit and retain the highest quality doctors. Over recent years, members of the Scottish Academy have consistently raised concerns about recruitment and retention issues across the medical specialties. There are workforce shortages across the country with rota gaps creating additional pressures in an already difficult environment. Workforce planning needs a clear strategic direction to tackle these concerns. We acknowledge that this involves a wide range of stakeholders and a variety of issues, and collectively we urge the UK Government to allow increased overseas recruitment in a structured way to support all involved and ensure high quality training.
Furthermore, to ensure medicine remains an attractive career choice across the UK, the Scottish Academy emphasises the need to value healthcare professionals at every stage and offer support for medical professionals as they progress throughout their careers.

Recommendations from the Scottish Academy: Data from the Scottish Academy (see appendices) supports the following calls:

● The MAC should recognise the case for Acute Internal Medicine; Geriatric Medicine; Old Age Psychiatry; General Psychiatry; Psychiatry of Learning Disability; Child & Adolescent Psychiatry and Oral & Maxillofacial Surgery posts to be added to the SOL in their own right based on the significant evidence that these specialties are in shortage.

● The MAC should consider the role it could play in making a recommendation that Junior doctor foundation year 1 and year 2 posts are added to the SOL.

● The MAC should consider the skilled roles undertaken across the health and social care professions that currently are not included on the SOL are are unlikely to meet the MACs recommendation for experienced workers salary threshold of £30,000. If these roles remain in shortage the workload for doctors will increase which further exacerbates workforce shortages.

● The Scottish Academy supports the call made in the response of the Federation of Royal Colleges of Physicians of the UK for the MAC to consider the case for adding all physician posts to the SOL for a defined period of time, which would offer for international and EU recruitment into the NHS. This could then be subject to a review moving forward.

● The Royal College of Radiologists have advised the Scottish Academy that they have already been designated a shortage specialty and the Scottish Academy is fully in support of this decision.

Appendix 1:
The following tables are drawn from Assessment Panel data as set out in The National Health Service (Appointment of Consultants) (Scotland) Regulations 2009 (panels for the purpose of candidate assessment and selection). The full dataset is available on request.

Table 1: All specialties: reasons given for the cancellation of assessment panels in Scotland

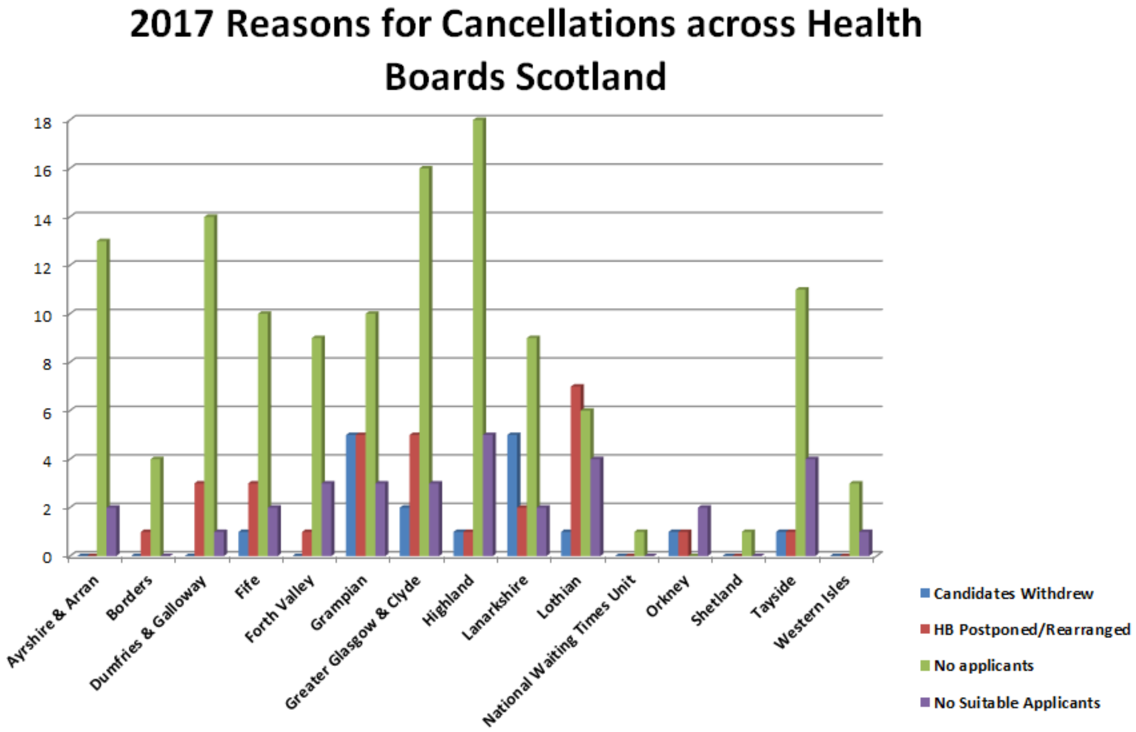


Table 2: Reasons given for the cancellation of assessment panels in Scotland by Health Board

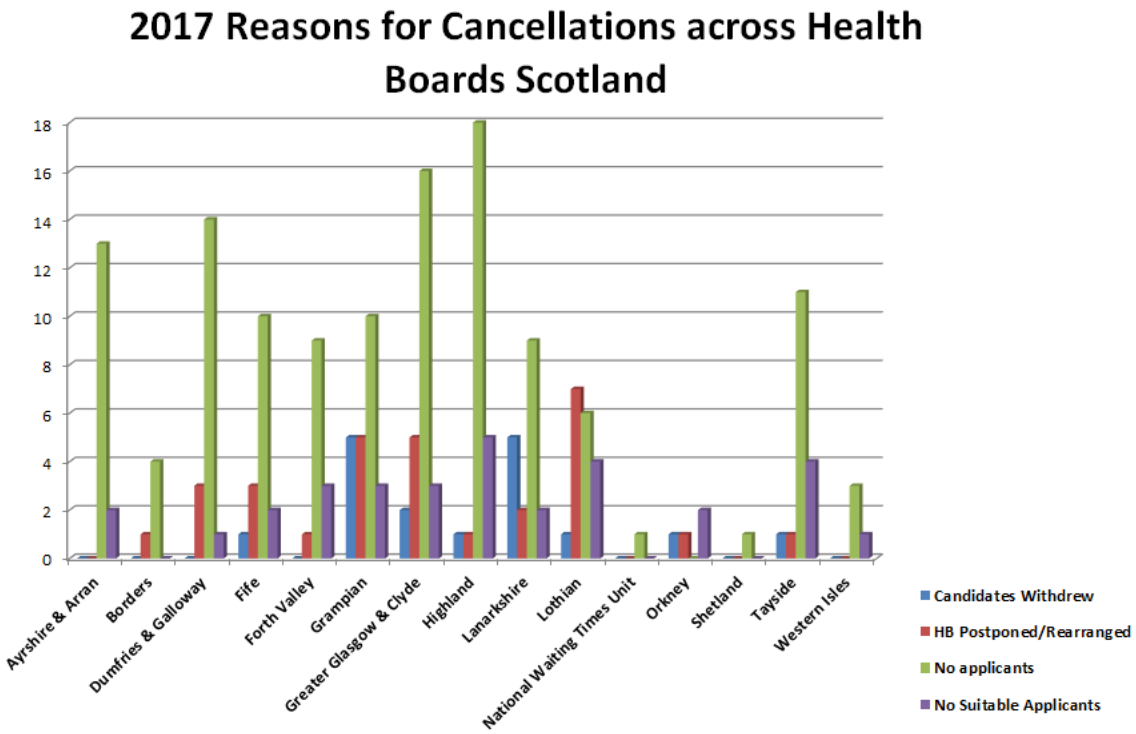


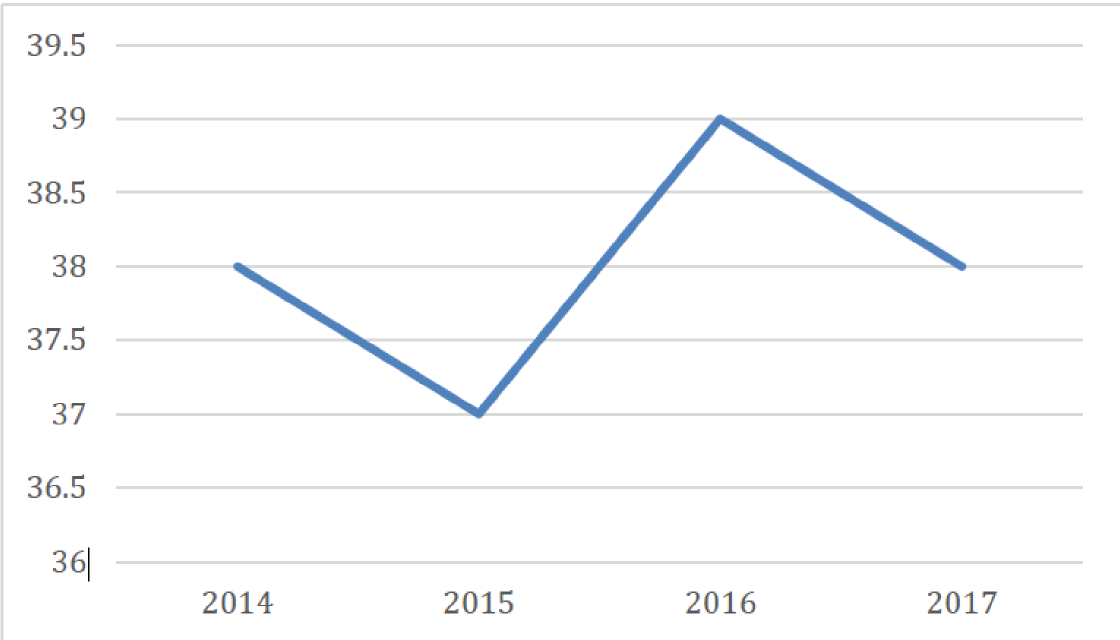
Table 3: top five specialties with the highest % of assessment panels cancelled 2014- 2017

2017					
Specialty	**Completed**	**Total Panels**	**Appts**	**% Panels cancelled**	**Cancelled**
Oral & Maxillofacial Surgery	1	6	1	83.33%	5
Acute Medicine	4	15	4	73.33%	11
Otolaryngology	2	6	3	66.67%	4
Endocrinology & Diabetes Mellitus	2	6	3	66.67%	4
Chemical Pathology	1	3	3	66.67%	2
Geriatric Medicine	9	23	12	60.87%	14
Old Age Psychiatry	10	23	12	56.52%	13
2016					
Specialty	**Completed**	**Total Panels**	**Appts**	**% Panels Cancelled**	**Cancelled**
Psychiatry of Learning Disability	0	3	0	100%	3
Child & Adolescent Psychiatry	6	20	7	70%	14
General Medicine	5	16	2	69%	11
Haematology	6	13	7	54%	7
General Psychiatry	23	50	26	54%	27
Public Health Medicine	4	8	5	50%	4
Respiratory Medicine	9	18	11	50%	9
Special Care Dentistry	1	2	1	50%	1
Paediatric Dentistry	2	4	1	50%	2
Orthodontics	5	10	6	50%	5
Oral Medicine	1	2	1	50%	1
Infectious Diseases	1	2	1	50%	1
Community Child Health	1	2	2	50%	1

2015					
Specialty	**Completed**	**Total Panels**	**Appointm**	**% Panels Cancelled**	**Cancelled**
Genito-Urinary Medicine	1	4	0	75%	3
General Medicine	6	21	6	71%	15
Infectious Diseases	1	3	1	67%	2
Old Age Psychiatry	5	12	7	58%	7
Medical Oncology	4	9	3	56%	5
Urology	4	9	4	56%	5

2014					
Specialty	**Completed**	**Total Panels**	**Appointm**	**% Panels Cancelled**	**Cancelled**
Oral & Maxillofacial Surgery	0	4	0	100%	4
Genito-Urinary Medicine	0	1	0	100%	1
Clinical Genetics	0	1	0	100%	1
Community Child Health	0	2	0	100%	2
General Medicine	3	12	3	75%	9
Oral Surgery	2	7	2	71%	5
Clinical Oncology	4	10	5	60%	6
Rehabilitation Medicine	2	5	1	60%	3
Cardiology	6	13	7	54%	7

Table 4: % of assessment panel cancellations across all specialties 2014-2017



Appendix 2: Members of the Academy of Medical Royal Colleges and Faculties in Scotland

Faculty of Dental Surgery
Faculty of Occupational Medicine
Faculty of Public Health
Royal College of Anaesthetists
Royal College of Emergency Medicine

Royal College of General Practitioners
Royal College of Obstetricians and Gynaecology
Royal College of Ophthalmologists
Royal College of Pathologists
Royal College of Physicians and Surgeons of Glasgow
Royal College of Physicians of Edinburgh
Royal College of Psychiatrists
Royal College of Radiologists
Royal College of Surgeons of Edinburgh
Scottish Committee of Royal College of Paediatrics and Child Health

iThe National Health Service (Appointment of Consultants) (Scotland) Regulations 2009 http://www.legislation.gov.uk/ssi/2009/166/pdfs/ssi_20090166_en.pdf "5. (1) A Board proposing to make an appointment to which these regulations apply must appoint a person to act as an adviser to the Board throughout the recruitment process, such person to be known as the External Adviser. (2) The External Adviser must be– (a) named on a list of suitable and trained persons held by or on behalf of the Medical Royal Colleges and Faculties in Scotland."

Association of British Orchestras

Dear Professor Manning

CALL FOR EVIDENCE: SHORTAGE OCCUPATION LIST

The Association of British Orchestras is the representative body for professional orchestras and the wider classical music industry.

Our evidence relates to **orchestral musicians**. These are musicians who are either on a permanent contract of employment with an orchestra or a member of a self-governing or freelance orchestra. We are unable to comment on the status of musicians in general.

Orchestral musicians are a **skilled** occupation. The orchestral musician will in almost all cases either have a degree or an equivalent qualification from a recognised music conservatoire (i.e. minimum SOC skill level 4 and NQF level 6) and will be in receipt of a salary or yearly income that is commensurate with or above the appropriate rates as agreed between the orchestra or ABO and the Musicians' Union. While there is no mandatory qualification for an orchestral musician, most will have had at least 14 years of training and will have been through a series of graded exams and a course equivalent to NQF level 6. This will often be supplemented by experiential learning. To take a position in an orchestra, the musician must already have the requisite standard of musicianship and qualification, and, importantly, suit the sound and repertoire of that orchestra. And an orchestral musician cannot, of course, be replaced by automated technology.

Orchestral Musicians were included on the Migration Advisory Committee's Shortage Occupation List in April 2009. We have submitted reports for all subsequent reviews carried out by the MAC. While we have in the past argued that all orchestral musicians should be included on the SOL, we did agree, following a meeting with the MAC and the Musicians' Union that this should be limited to Leader, Principal, Sub-Principal and Numbered positions, and that *Tutti* (otherwise known as Rank-and-File) positions would be subject to a Resident Labour Market Test. However, our view was that, due to the extended period of time of up to 24 months that it takes to advertise, audition, trial and appoint an orchestral musician of whatever level, coupled with the restriction that a Certificate of Sponsorship should be issued within 6 months of the position first being 2 advertised, the only workable mechanism for the appointment of orchestral musicians was continued inclusion on the Shortage Occupation List.

However, following the last review of the Shortage Occupation List, we had productive discussions with the UK Border Agency and the Home Office, following which they agreed a 24 month carve-out from the RLMT to enable the removal of Tutti musicians from the Shortage Occupation List.

For clarity, both the ABO and the MU accept that all sub-divisions of these ranks should be included on the Shortage Occupation List ie. Leaders, Co-Leaders, Assistant Leaders, Principals, Sub-Principals, Co-Principals, Section Principals and Section Leaders and any numbered position that contractually includes the need to "sit-up" and lead the section when necessary. This covers the fact that there is no standardisation of orchestral positions or nomenclature.

In relation to Tutti positions, the ABO was willing to concede to their removal from the Shortage Occupation List in 2010 on the basis that our members could recruit from a

European labour market. However, our members have reported difficulties in recruitment of Tutti positions. We also have serious concerns that, should the Points Based System be extended to EEA nationals post-Brexit, our members will struggle to recruit Tutti positions from within the UK labour market alone. We therefore recommend restoring **all** orchestral musicians to the Shortage Occupation List.

We have recently surveyed our members to assess the current position with regards to vacancies in orchestral positions, the length of time these positions have been vacant and recent appointments of musicians from outside the EEA. The report is attached and shows the relatively small number of overall migrant numbers that are involved. This small number however remains vital to the orchestral sector and to British orchestras' place on the international stage. It also reveals a high vacancy rate across all positions.

Once again we should point out that the UK's orchestras are similar to premiership football teams, requiring the most skilled and talented musicians in order to compete on the international stage, both in the live and recorded media. Our orchestras are in competition with other leading orchestras across the globe, from the Berlin Philharmonic to the Boston Symphony Orchestra.

Our international competitors are able to recruit musicians regardless of their country of residence and with cultural globalisation and the emergence of new markets for classical music in China and the Middle East there will be increased competitiveness in the coming years, and therefore an even greater need for UK orchestras to be able to recruit the very finest musicians from across the globe, ensuring that they retain the UK's place at the peak of global talent.

Current Recruitment Situation

- 26 respondents (professional orchestras from the ABO membership)

- A total regular workforce of approximately 1400 orchestral musicians in these orchestras

- 81 musicians from outside the EEA appointed to these orchestras

- 167 musicians from other EEA countries appointed to these orchestras

- 20 non-EEA musicians recruited in the last 18 months

- 225 vacancies as at 18 December 2018 – this is a significant increase on the 95 vacancies reported in November 2012 and represents a vacancy rate of 16% of the workforce

Observations and notes on the Data

Firstly, it is to be noted that there is no standard nomenclature or structure to orchestral positions from orchestra to orchestra. Some will differentiate between Section Principal and Principal and some will not. Some will title specific string seats (No.3, No. 4 etc.) as Principal or Sub Principal and some will not. The general premise here is that if a seat is numbered then there is a contractual requirement for the player to "sit-up" and lead the section when required under the orchestra's rostering. This will necessitate some solo playing and therefore regardless of whether the seat is titled it should be inferred that Principal status would apply.

Wind and Brass chairs are generally titled as Principal, Co-Principal or Sub-Principal on the basis that most 2nd part players would be required to "sit up" in certain circumstances. It is also the case that the title of Principal or Co-Principal or Sub-Principal will all have the implication that the player occupying those positions will usually be the only person playing that part, that solos and individual playing will be a large part of the job and as such very particular skills and tone are required.

The previous terms and also the titles of Section Leader and Section Principal are again generally interchangeable and are not standard across the orchestras. Leader and Concertmaster are also interchangeable. Without an acknowledgement of this, it could well be that, were certain levels of Principal omitted from the SOL, some orchestras would be penalised purely due to the way that their positions are titled.

It is our belief that the unique set of criteria that a player needs to demonstrate, and the fact that our world-class orchestras are competing in a global labour market, means that orchestral musicians should remain on the Shortage Occupation List.

Position Vacant	**Months vacant:**
Cello no. 2	204
Principal Viola no3	147
Tutti 1st violin no.12	134
Viola no.4	120
Co-Principal Viola (No.2)	88
Section Leader Cello	81
Horns: Principal (6 years)	72
Principal Viola	63
Subleader	60
Principal 2nd Violin	60
2 x Cello tutti positions	60
Tutti Second Violin	53
Tutti viola no.6	52
Principal Cor Anglais	51
Principal Clarinet	51
1st Violin no. 12	50
No.4 trumpet	48
Floater violin	47
Section Principal Cello	44
Sub-Principal Second Violin (No.5)	41
Sub-Principal Second Violin (No.4)	39
Leader	36
3rd Horn	36
Principal Bass	36
No 3 Bass	36
No 4 1st Violin	36
Tutti 1st Violin	36
Bassoon 2	36
Tutti 1st Violin x 2	36
Co-Principal Bass	36
Tutti Bass x 2	36
Co-Principal Oboe	36

Co-Leader	36
Principal Viola	36
Principal Double Bass	36
Tutti Bass	36
Co-Principal Trumpet	36
Sub-leader Cello	36
Principal Viola	36
Co-Principal Oboe	34
Leader	33
Tutti viola x 2	33
Joint Leader	33
4th Horn	31
Principal clarinet	30
Co-Principal Viola	29
Principal Bassoon	29
Associate Principal Trumpet	28
Co-Principal Cello (No.2)	27
Principal Double Bass	27
Sub-Principal No5 First Violin	26
Leader	25
2nd Flute	24
Piccolo	24
Tutti Viola	24
Tutti 2nd violin	24
Tutti 2nd violin	24
Principal Bassoon	24
2 x Tutti 2nds	24
2 x Tutti Violin	24
Tutti second violin	24
SL 2nd Violin	24
Tutti viola no.10	23
Principal viola	23
No 4 Cello	23
Sub-Principal Flute/Piccolo	23
Co-Principal Bassoon	22
No 4 1st Violin	20
Bass Clarinet	20
Principal Tuba	20
2nd Double Bass	19
2nd Violin Tutti	18
Principal Harp	18
Tutti viola	18
Co principal Viola	18
Section Principal Percussion	17
Associate Leader	17
1st Violin Tutti	17
Tutti Viola	17
Tutti violin	16

2nd trumpet	16
Sub Principal Cello no.5	16
Tutti Double Bass no.8	16
Sub-Principal Bassoon	16
Tutti Second Violin	15
2nd Bassoon	15
Sub-Principal 1st Violin no.5	15
Section Principal Horn	15
Assistant Principal Viola	15
Associate Principal Clarinet	15
Tutti Viola	15
Principal Cello	15
Principal oboe 50%	14
Principal Contrabassoon	14
Principal Bassoon	14
Co-Principal Timpani	14
Principal Timpani	13
Sub principal cello	13
No 2 second violin	12
Oboe 2	12
Tutti 1sts x 2	12
1st Violins: Leader	12
No.4 first violin	12
Sub principal second violin	12
No. 4 Viola	12
Leader (40%)	11
Tutti viola	11
Associate Principal Viola	11
No.4 First violin	11
No.6 First violin	11
No.2 1st Violin	10
Tutti First Violin	10
1st Violin no. 5	10
Joint Principal Horn	10
SL Trumpet	9
Principal Trumpet	9
Tutti Second Violin	8
Principal Clarinet	8
Assistant Principal 2nd Violin, No.3	8
2 x Tutti Viola	8
Principal Timpani	7
Tutti Second Violin	6
Tutti Double Bass	6
3rd Horn	6
Tutti 2nd Violin	6
Co-Principal Bassoon	6
Associate Leader	5
2nd Clarinet	5

Principal / Co-Principal Double Bass	5
Bassoon 1	5
2nd Flute	5
Tutti First Violin	4
Principal Cello no3	4
Principal Piccolo	4
Sub-Principal Bassoon/Contra	4
Sub-Leader	4
Trumpets: 2nd Trumpet (4 months)	4
Trombones: Principal (4 months)	4
Principal Cello	3
Principal 2nd violin	3
Tutti Violins x 4	3
Concertmaster	3
Sub Principal Cello no.4	3
Section Principal Clarinet	3
Section Principal Horn	3
Co-Principal Cello	3
2nd Clarinet	3
Sub-Principal Flute	3
Tutti Cello	3
Bass Trombone	3
Principal Cello (40%)	2
No.3 First violin	2
No.4 Second violin	2
Tutti 2nd violin (50%)	1
Principal Trumpet	1
Principal Viola	1
Principal Horn	1
Section Principal Trumpet	1
Co principal second violin	1
1st Violin no. 7	1
Joint Principal Horn	1

Association of Consultant Architects

Response to Shortage Occupation List (SOL) / Immigration White Paper

The ACA has been in existence for over 40 years representing private sector architects practices in the UK. Over this period our members have employed over many thousands of overseas candidates at Tier 2 level workers e.g. architects and architectural assistants in early to mid-level careers as well as senior posts.

Our members range from large multi-disciplinary organisations to medium sized and small organisations (SMEs).

Many of our members have been nominated as part of the sponsor licensing process under the Points Based System (PBS) administered by the UK Border Agency. Our active members' in the Sponsorship Management System (SMS) has benefitted them in assigning Confirmation of Acceptance for Studies/ Certificates of Sponsorship to sponsor migrants under PBS. We have reviewed the Consultation Paper but since we are ourselves not direct employers of architects, our comments are advisory, based on our members experience and with some strongly held views expressed.

Our feedback from the architectural labour market perspective is as follows:
1. Abolition of the labour market test is long overdue and a very positive move.
2. Lowering the skills threshold to ‘A’ level standard is a positive move.
3. Architects spend 1-2 years vocational experience between degree and post graduate education, which is a requirement for professional qualification. The maximum 12 month transitional time for lower skilled workers would work conveniently for year-out architectural students, as could the subsequent 12-month cooling off period if the student wanted to take 2 years off.
4. We would support the extension on visas to post graduate students for three years, not less for practical reasons.
5. The idea that the route for lower skilled workers will be restricted to certain low risk countries is rather worrying and in our view, discriminatory and unnecessary in the architectural sector.
6. Currently, work visas are awarded for three years and can be renewed on a discretionary basis. This means that a worker could settle in to employment, change employers if necessary, settle in a residence and become a genuine asset to our members’ practices as opposed to being simply “short-term labour”. The proposed one-year visas are impractical and a serious dis-incentive.
7. Prescribed salaries under PBS for specific experience levels are useful to our members in ensuring appropriate minimum salaries for employees.
8. Licensing of SME’s has been a relatively costly and slow procedure. Consideration should be given to reducing costs and streamlining the licensing membership procedure.
9. The design sector in the UK is respected internationally and has significant growth potential in the future. In many cases, the motivation for employing foreign workers in the architectural sector facilitates export of our services globally. In accepting commissions abroad, we require local knowledge and foreign language skills, which in most cases are invaluable.
10. Immigrant labour is generally very highly motivated, because architecture is primarily a creative skill.

Association of Labour Providers

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January 10th, 2018

Call for evidence: Shortage occupation list review 2018

Association of Labour Providers –Evidence Submission

The Association of Labour Providers (ALP)

ALP (www.labourproviders.org.uk) is a trade association supporting organisations that supply the workforce to the consumer goods supply chain across the food processing, horticultural and wider manufacturing, industrial, warehousing and distribution sectors. ALP has approximately 350 labour providers that voluntarily choose to be members of the Association on payment of an annual subscription and commitment to abide by the membership regulations. ALP promotes compliant and responsible recruitment practices.

ALP member organisations supply approximately 70% of the temporary contingent workforce into the food growing and manufacturing supply chain. Many of these workers progress to form the permanent workforce for the industry. All organisations that supply labour into these sectors must Gangmasters and Labour Abuse Authority licensed.

ALP members predominantly provide unskilled workers but also source and supply specialist skilled and semi-skilled workers to the food industry. Market pressures mean that unskilled work is either at, or very close to, national minimum wage (NMW). Few indigenous British workers are willing to work at or near NMW in such roles. For many years, these irregular low-paid jobs have been largely filled by migrant workers, able to earn more than they can in their home country. Depending on region EU workers make up between 70 and 100% of workers supplied by labour providers into the food industry with a national average of between 90-95%, the remainder being British nationals and those migrants from non-EU countries that have been given right of residence in the UK.

The UK is by no means unique in depending on temporary migrant labour, especially in horticulture, as this is a common feature across all developed economies - US, Canada, Australia, Spain, Poland, Greece and so on. This reliance on temporary migrant labour is principally due to the nature of the work being irregular, seasonal and away from urban centres and so not desirable to the resident labour force.

Labour supply has significantly tightened in recent years due to falling EU unemployment levels and rising standards of living in traditional EU labour sourcing countries. ALP has developed and provides to labour providers and the wider food supply chain:

- Specialist, detailed, pragmatic toolkits on how to better source and retain workers;
- Pragmatic skills workshops on sourcing and retaining workers;
- Webinars and events to extend knowledge around labour shortage issues, immigration policy, EU Settlement Scheme and other key issues.
-

Scope of MAC Review

In June 2018, the Government commissioned the Migration Advisory Committee (MAC) to carry out a full review of the composition of the Shortage Occupation List (SOL). The SOL comprises occupations and job titles held to be in shortage either across the UK, or in Scotland only, where it would be sensible to fill through non-EEA migration. Job titles on the SOL are not required to undertake the Resident Labour Market Test or meet the five-year salary threshold for settlement. To be eligible for the SOL occupations and job titles must:

- show demonstrable national shortages that cannot be filled from within the domestic labour market;
- be skilled to the required level set by the Home Office; and
- demonstrate that it is sensible to seek to fill vacancies with migrant labour from outside of the EEA.

The MAC is adopting a new approach to its call for evidence and engagement with stakeholders. The MAC will focus on specific job titles rather than broader occupations and requires evidence that supports this approach. The call for evidence was issued on 9th November 2018 and closes on 6th January.

On 19th December, the Immigration White Paper was issued. The MAC also issued an email on this date advising that government had asked it to:

- compile a separate SOL for Northern Ireland and consider doing so for Wales and to review the current Shortage Occupation List (SOL), and

- look at the future system for occupations at RQF levels 3-5. So, we are still making recommendations for the SOL in the current system of RQF6+ and gathering evidence on RQF3-5 for the future system.

However, the MAC in its call for evidence at point 1.8 states, “The MAC considers it worthwhile to get a better understanding of the scale of potential shortages across the whole of the UK labour market and at all skill levels. **The MAC is therefore inviting evidence from all occupations and job titles at RQF 1 and above to ascertain what national shortages there are within the UK at present.** It is possible that we will only end up making recommendations about the current shortage list which comprises of jobs skilled at RQF level 6 and above.”

Key ALP Submission Points

1. The short timescale for call for evidence submissions has not allowed sufficient time for detailed evidence collection.

2. ALP’s submission concerns RQF1-3 roles, as requested in the call for evidence.

3. Government should instruct MAC to gather evidence annually of shortage occupations across all RFQ levels and occupational sectors. Shortage of key roles at all skill levels can constrain and at worse bring to a halt essential sectors such as care and food production.

4. The food supply chain feeds the nation. It is an essential industry. ‘If you can’t feed a country, you haven’t got a country’ Jay Rayner.

5. Evidence contained in this submission demonstrates that the greatest workforce shortages in the food supply chain are across the RFQ 1-3 levels.

6. UK food production depends on securing an adequate supply of labour to harvest, process, pack and distribute our produce. An increasing number of farm and food factory businesses report that they are finding it hard to hire enough workers. Food growers and manufacturers are reporting real impacts on their businesses caused by labour shortages – from increased costs through wage enhancements and overtime working to relocating and scaling down operations.

7. The EFRA Committee report Feeding the nation: labour constraints published on April 27th 2017 stated that: “It is apparent that the statistics used by the Government are unable to provide a proper indication of agriculture’s labour needs. These statistics must be reviewed by the end of 2017 to give the sector confidence in the adequacy of the official data on which employment and immigration policies will be based after the UK leaves the EU.”

   The ALP has on many occasions called upon the Defra Access to Labour team to work with industry representatives to produce and publish official food supply chain skills and labour data, including temporary, seasonal and agency workers in order that all parties are working to one agreed set of statistics.

   ALP is pleased to confirm that Defra is now starting to coordinate this activity with key trade associations.

8. This Defra led activity should produce:

   - A common list of RFQ1-6 roles from the Standard Occupational Classification 2010 across the food supply chain that all parties work to;

   - An agreed, evidence based, set of data identifying shortage levels across these roles to inform the Migration Advisory Committee on whose recommendations future employment and immigration policies will be based.

   - A national action plan to address these skill and occupational shortages in accordance with immigration and industrial strategy policy

Shortage Occupation Roles

Key shortage occupation roles are:

- Food processing and packing operators
- Fish processors
- Meat processors, butchers and boners
- Mushroom processors

- Horticultural field workers and pickers
- Warehouse operatives
- Tractor and field machinery operators
- HGV drivers

Labour Supply – The Current position

The UK unemployment rate is 4.1%, remaining at or around the lowest level we have seen since 1975, 43 years ago.

The EU28 unemployment rate is 6.7%, down from 7.3% in November 2017, and 8.3% in November 2016. EU unemployment is at historic low levels.

The key labour sourcing countries for UK labour, Bulgaria and Romania have falling jobless rates well below the EU28 average at 5.4% and 4% respectively.

Europe's top economies are competitors for EU migrant workers. Of these, the country with the largest GDP, Germany has a jobless rate at 3.3%.

ALP Labour Provider Survey Results

Throughout 2018, ALP conducted surveys of its labour provider members to identify trends and patterns in labour supply. ALP conducted a survey at the end of September to cover experiences during the Summer peak. There were responses from 139 companies and the key survey findings were as follows:

1. 83% of labour providers were unable to meet their food industry clients' labour demands during the Summer. In the previous 3 months, labour providers said:

We met all our clients' demand for workers	17%
We short supplied our clients by 0-10% of their demand for workers	53%
We short supplied our clients by 10-20% of their demand for workers	19%
We short supplied our clients by 20-30% of their demand for workers	7%
We short supplied our clients by 30-40% of their demand for workers	1%
We short supplied our clients by 40-50% of their demand for workers	1%
We short supplied our clients by over 50% of their demand for workers	1%

This was worse than in the same period in September 2017 when 70% of labour providers were unable to meet their food industry clients' labour demands.

2. 66% of labour providers reported a decline in the number of workers applying to work in the food supply chain for the 2018 Summer compared to the same period in 2017 as opposed to only 24% who reported an increase.

3. 71% of labour providers reported a decline in the quality of workers applying to work in the food supply chain for the 2018 Summer compared to the same period in 2017 as opposed to only 1% who reported an improvement.

4. The great proportion of lower skilled workers supplied to work in the food supply chain are non-UK EU nationals: Labour providers stated the proportion of EU workers supplied:

- Less than 50% - 22%
- 50-75% - 31%
- 75-90% - 22%
- 90-100% - 24%

5. Labour providers expect a significant percentage of current lower skilled EU nationals to permanently leave the UK between now and the end of 2020:

- Less than 10% - 4%
- 10-20% - 35%
- 20-40% - 32%
- 40-66% - 23%
- Over 66% - 7%

6. 92% of labour providers stated that they are having to do things differently to source labour as follows:

Activity	%
We have had to invest more money and resources into sourcing workers	67%
Clients have had to increase wage rates to attract workers	45%
Existing workers have had to work extra hours and overtime	51%
Clients have improved their general treatment of agency workers to make them feel welcome and valued	35%
Clients have introduced guaranteed hours contracts for agency workers	14%
Clients have offered other bonuses and incentives for agency workers to stay	25%
Clients have paid for/subsidised transport to work costs during assignments	15%
Clients have paid for/subsidised accommodation costs for agency workers	11%
We have not had to do anything differently	8%

ALP Food Supply Chain Survey Results

In consultation with UK supermarkets, the ALP conducted a survey of food growers and manufacturers in January 2018 and there were 195 responses. The key survey findings with regards to labour supply were as follows:

1. Food and Beverage Manufacturers – What is the current position of your site with regards to supply of labour and skills?

70% reported to be struggling or in crisis with regard to lower and unskilled workers. One in five are in crisis.

Skill Level	We're fine	Just OK	We're struggling	We're in crisis
Highly-skilled: Degree level and above e.g. Engineers, Directors etc. (National Qualification Framework 6 and above)	38%	34%	26%	2%
Skilled: Requiring a degree & experience e.g. Production / Operations / HR Managers, (NQF level 6)	33%	44%	22%	1%
Semi-skilled: Requiring experience & training e.g. Skilled trades (NQF 3-4)	15%	45%	36%	4%
Lower-skilled Permanent: Requiring some training/experience e.g. Process operative, skilled field worker (NQF 2)	13%	17%	60%	10%
Lower skilled temporary / agency / seasonal	10%	17%	58%	16%
Unskilled: Requiring minimal training/experience, e.g. Elementary roles, picking, packing etc. (below NQF 2)	12%	22%	47%	19%
Unskilled temporary / agency / seasonal	16%	15%	48%	20%

2. Agriculture and Horticulture businesses – What is the current position of your site with regards to supply of labour and skills.

60% are experiencing shortages in low and unskilled roles with one in eight reporting that they are in crisis.

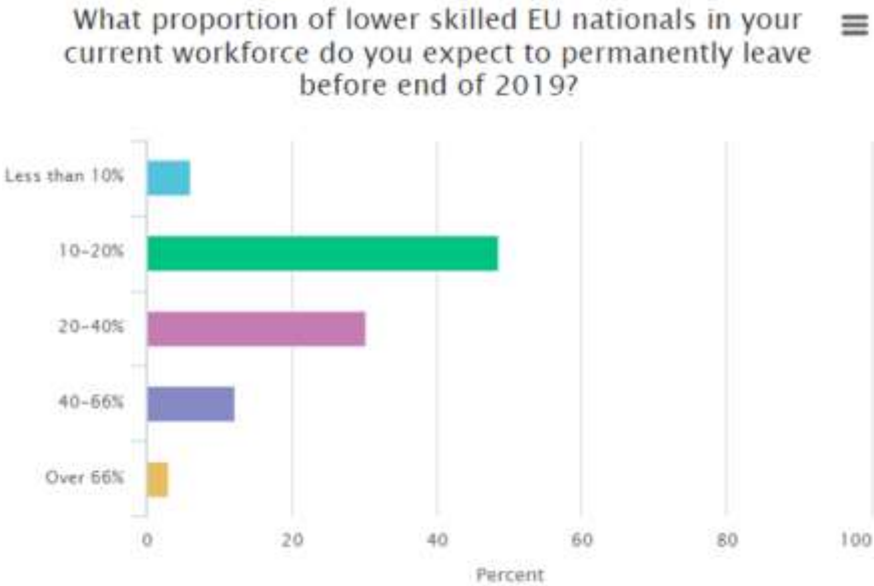
Skill Level	We're fine	Just OK	We're struggling	We're in crisis
Highly-skilled: Degree level and above e.g. Engineers, Directors etc. (National Qualification Framework 6 and above)	57%	32%	9%	1%
Skilled: Requiring a degree & experience e.g. Production / Operations / HR Managers, (NQF level 6)	49%	41%	8%	1%
Semi-skilled: Requiring experience & training e.g. Skilled trades (NQF 3-4)	24%	55%	19%	3%
Lower-skilled Permanent: Requiring some training/experience e.g. Process operative, skilled field worker (NQF 2)	14%	38%	42%	5%
Lower skilled temporary / agency / seasonal	14%	28%	46%	13%
Unskilled: Requiring minimal training/experience, e.g. Elementary roles, picking, packing etc. (below NQF 2)	12%	24%	52%	12%
Unskilled temporary / agency / seasonal	12%	28%	46%	14%

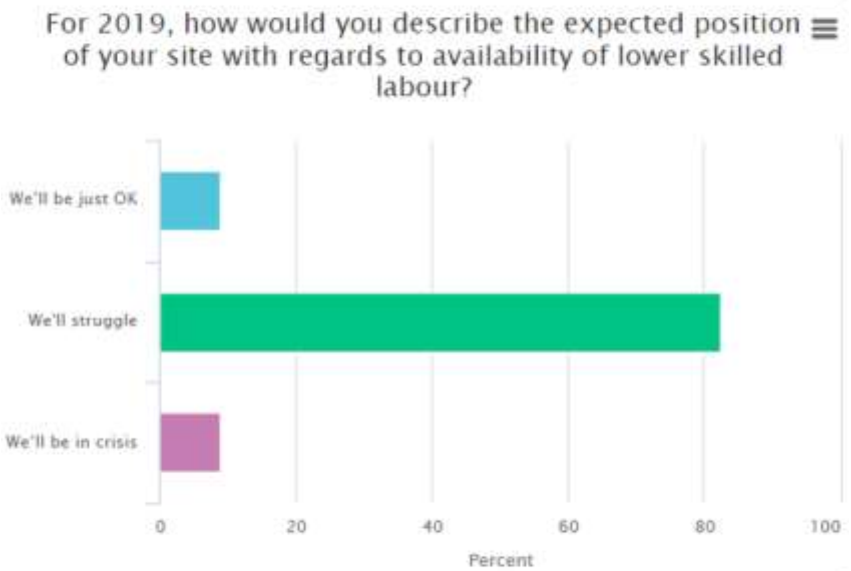
3. All Food Growers and Manufacturers – Which of these are you actively adopting in response to the labour and skills shortage (all that apply):

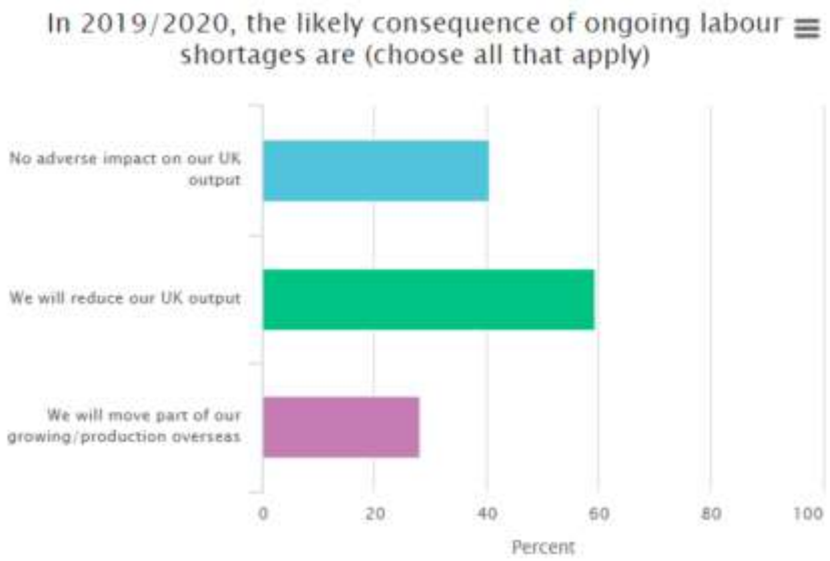
Increasing wages and benefits to attract and retain more staff	66%
Improved worker sourcing and retention policies	68%

Increasing hours worked and overtime of existing staff	41%
Automating to reduce reliance on skills and labour	61%
Looking to source or relocate overseas	8%
Scaling down our operation in light of labour cost/shortages	13%
Our business is becoming unviable	6%

A live poll of Food Growers and Manufacturers during a webinar in October 2018 provided the following further understandings:






In 2019/2020, the likely consequence of ongoing labour shortages are (choose all that apply)
No adverse impact on our UK output
We will reduce our UK output
We will move part of our growing/production overseas
0
20
40
60
80
100
Percent

--- Ends ---

Association of the British Pharmaceutical Industry

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abpi
Bringing medicines to *life*

Professor Alan Manning
Home Office
2 Marsham Street
London
SW1P 4DF

18th December 2018

Dear Professor Manning,

The Association of the British Pharmaceutical Industry (ABPI) is the trade association of the innovative research-based biopharmaceutical companies, large, medium and small, leading an exciting new era of biosciences in the UK. Our members are undertaking the majority of research and development in the global medicines pipeline, ensuring that the UK remains at the forefront of helping patients prevent and overcome disease.

We have submitted a formal response to the Migration Advisory Committee's (MAC) call for evidence on the review of Shortage Occupation List, drawing on empirical evidence from our 2018 ABPI skills gap survey. Please find enclosed an embargoed copy of the report accompanying the survey.

I wanted to write to you in addition to our submission to draw out the specific policies the pharmaceutical industry would like to highlight to the MAC as areas which could help close the skills gaps and help achieve the ambitions set out in the Government's Life Sciences Industrial Strategy.

An immigration system in the UK that works for life sciences is one that recognises the innate global talent needed to drive highly innovative sectors and, therefore, one that is open to high skilled scientists and professionals in life sciences worldwide. **It is also one which adapts to the speed at which skills emerge and builds in flexibility to allow the UK to move quickly into new areas.**

The life sciences sector in the UK is a major global hub for scientific research, development and commercialisation of new medicines. The biopharmaceutical industry alone employs 63,000 people and is recognised by the Office for National Statistics as one of the most productive sectors in the UK. The industry was an early adopter of apprenticeships as a valuable method of growing the skills base, and this year we reported apprenticeships hitting a 4-year high in pharmaceutical industry. We continue to invest and build on our successes in apprenticeships, we are mindful that apprenticeships and other domestic education and training policies alone will not bridge the skills gaps we face. A flexible immigration system is also needed.

<u>Updating shortage occupations more regularly</u>

The shortage occupation list must become more nimble if it is to apply to all migrants from outside the UK. This nimbleness will require more regular reviews of the list and faster processing of visas for shortage occupations.

Our biannual skills survey identified new areas of need in our 2018 skills survey compared to our 2016 survey. Shortage skills in immunology and genomics have emerged quicker than it takes to undertake existing training in these areas. This is an example the speed at which skills shortages appear in highly innovative sectors such as ours, you will find many more in the report.

<u>Using job titles rather than occupations is not suitable for global businesses</u>

The strength of the life sciences industry in the UK is in large part due to the very diverse range of global companies operating here. This **diversity of company cultures means that similar and even identical jobs will have very different titles across different companies.** For example, almost identical technician roles (also referred to as associate roles) in research, laboratory and clinical areas can have a variety of different titles depending on the company culture and structure. Jobs titles will often be set at global level and not changed for local markets, as employees often move internally and therefore it is more important that there is internal company equivalence of job titles rather than market specific equivalence. I am sure that the life sciences sector is not the only one where this practice occurs, therefore, **we strongly recommend that the MAC takes a pragmatic approach in moving from occupations to job titles**, by ensuring that recommendations are "indicative" and that detailed criteria of the role be set out against which to map across an existing system, such as SOC codes. This will ensure that the purpose of changing this policy is properly realised without any unintended consequences due to internal company practices.

The ABPI has been working closely with the Government, Government agencies and the NHS on ensuring that, whatever type of Brexit we have, we ensure that the forthcoming policy environment supports patient safety and a thriving life sciences sector in the UK.

I hope that this background information is useful to you. I would be delighted to arrange a briefing for you and your team on our skills survey and the global life sciences sector in the UK if you wish.

Yours sincerely,

Mike Thompson

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Association of Translation Companies

Association of Translation Companies
DEFINING STANDARDS OF EXCELLENCE

The future of critical language services in the UK

Introduction

The Association of Translation Companies (ATC) is calling on the Government to safeguard British industry's and the UK public sector's access to the linguistic skills of our translators and interpreters, and to ensure that the route to these skilled roles remains accessible post-Brexit.

To ensure the UK's continued access to skilled and qualified translators and interpreters, the ATC calls for

- "translator" and "interpreter" to be included in the Shortage Occupation List;
- minimum salaries for these roles to be fixed at the current SOC classification levels; and
- for these professions to gain exemption from the Immigration Skills Charge

In a post-Brexit Britain, language services will play an increasingly crucial role in enabling UK businesses' export strategies whilst remaining highly significant in facilitating multilingual communication within British public services.

This report highlights the current and expected shortages of translators and interpreters, expands on the role of language services within the public sector, and presents the wider economic case for languages. It discusses the impact of Brexit on these professions and the ATC's response to the Government's White Paper on Immigration, and finally proposes a way forward through the recognition of these professions as critical in ensuring the UK's continued access to language services.

Language services are essential for international commerce. British exporters make use of a wide range of translation and interpreting services to bring their products and services to foreign markets successfully, ultimately contributing to the UK's competitiveness in international markets.

In our linguistically diverse society, translation and interpreting services also underpin the fair and equitable treatment of speakers of more than 300 different languages. The services of the UK's 1,200 language service companies ensure that the justice system, police and the national health service have access to the information they need, when they need it, and whichever language they need it in.

By its very nature, the language services industry needs mother tongue speakers of a wide range of different languages to provide the highest quality translation and interpreting services, with linguists recruited from outside the UK. Whilst native British linguists can supply some of the required language skills, there is a critical need to safeguard language service companies' access to mother tongue linguists required in the years ahead.

A Skilled Profession

Translation conveys meanings and messages, not just words, taking into account cultural differences between source and target languages in written format. It's spoken counterpart, interpreting, renders spoken or signed messages into another language, preserving the tone and meaning of the original content. Across the whole world, on a daily basis, qualified professional translators and interpreters handle a vast range of tasks, from face-to-face interpreting in a court or hospital setting to translating complex financial documentation, and everything in between.

Translator and interpreter qualifications -RQF

The Office of National Statistics' Standard Occupational Classification (SOC) places translators and interpreters under code 3412: *Authors, writers and translators*, at RQF level 4. Yet in the UK, the main professional qualifications, as indicated above, are rated at a minimum of RQF 6; the disparity in the classification evaluation is apparent.

This classification level does not adequately reflect the increasingly skilled roles of professional translators and interpreters in the public and commercial sectors.

Their work requires a high degree of competence, linguistic skills, knowledge of varied domains and text or interpreting types, proficiency in translation and interpreting techniques and technologies, and an ability to work in an extremely stressful, demanding, fast-paced professional environment.

UK degrees in translation and interpreting

Universities in the UK offer a total of 85 master's degree courses in translation or interpreting, classified under the formal Regulated Qualifications Framework (RQF) level 7.[i] Many of these universities also offer BA degrees in translation and languages at RQF level 6.

CIOL (Chartered Institute of Linguist)

Complementing the various BA or MA degree courses in translation and interpreting in the UK, CIOL Qualifications sets and awards professional qualifications regulated by Ofqual and recognised, and in many cases required, by UK government departments. These include the RQF Level 7 Diploma in Translation and two interpreting Diplomas, the DPSI (Diploma in Public Service Interpreting) and the DPI (Diploma in Police Interpreting) at RQF Level 6.ii

Chief Executive of the CIOL Ann Carlisle comments, “As the UK's only professional body for all linguists, working with language practitioners around the world, we see every day the importance of protecting this essential resource for the country post-Brexit. We know that critical health and legal services in the UK, as well as the country's economic trade, depend heavily on our members to deliver their own professional services. These professionals, by definition, originate not just in the UK but from around the world and we cannot stand back and watch such an important pipeline of specialist expertise falter as a result of immigration legislation.”

National Register of Public Service Interpreters

The UK’s National Register of Public Service Interpreters (NRPSI) is an independent voluntary regulator of professional interpreters specialising in public service. NRPSI maintains a public register of professional, qualified and accountable interpreters, whose qualification requirements are set to RQF level 6 or higher for all registered public service interpreters.[iii]

The need for mother tongue speakers

At the core of both translation and interpreting is a very high proficiency in both the linguist’s source and target languages. Whilst some services in a number of language combinations can be provided by native British linguists, the continued decline of language learning in the UK increases the need of skilled linguists recruited from outside the UK.

The UK’s language industry recruits qualified and competent mother tongue linguists of languages other than English, as the translation profession typically requires working into one’s mother tongue only. While native English-speaking translators work into English from a number of source languages, translators with native tongues other than English translate principally into their mother tongue.
The UK is a hugely diverse, multicultural society. In interpreting, the sheer number of language combinations the UK’s public service needs access to, however, is well beyond the scope, variety and volume of work that native British interpreters are able to provide. The interpreting profession has an equal need of mother tongue speakers to cover this diverse range of languages, even if it, through its immediate communicational needs, works bi-directionally, into and out of the interpreter’s mother tongue.

Skills in shortage

A survey conducted by the Association of Translation Companies amongst a representative cross-section of UK language industry companies clearly indicates that these critical skills are already in shortage, with over two thirds of companies expecting their recruitment difficulties to worsen post-Brexit.

Of the language service companies surveyed, 68% have experienced difficulties in recruiting suitable workers for translator, interpreter or other roles requiring languages. Overwhelmingly, the main stated reasons for recruitment difficulties for these roles are:

- Low number of applicants with the required language skills at 75%
- Low number of applicants with the qualifications that are required for the job at 51%
- Low number of applicants generally at 37%

For the past 12 months, 66% of the respondents report an increase in the length of time required to fill a role. Most respondents report a number of activities already in place to reduce recruitment difficulties, among others, using different channels for advertising vacancies and increasing investment on training of existing staff.

Skills shortage findings

These survey findings from language services companies across the UK point to an increasing shortage of qualified translation and interpreting professionals. This is compounded by a significant proportion of the linguists already in the country now seriously considering emigration, which is borne out by the Institute of Translation and Interpreting's (ITI) Pulse Survey of their members revealing that 16% of ITI members, primarily translators and interpreters, have been considering, or are actually moving to another country as a result of Brexit.[iv]

A survey carried out by thebigword[v], the UK's largest provider of public service translation and interpreting, indicates that 62% of linguists currently undertaking translation or interpreting assignments are UK-based EU nationals, and while the majority of them intend to stay in the UK, over half could continue to do the same work outside of the UK if they were to leave. This, coupled up with thebigword's figures on an attrition rate of 12% for these linguists, indicates that, long-term, skills lost through attrition will need to be replaced by translators and interpreters from outside of the UK. In this, the language services industry seems to mirror national trends, with net migration from the EU to the UK having reportedly fallen 70% since the Brexit vote.[vi]

For translator vacancies traditionally filled by native English graduates, the accelerating decline in foreign language learning in the UK is already filtering into the industry. A rapidly decreasing number of MA degree level students translating from German into English has over the past two years been felt at language service companies drawing a blank in recruitment.

According to recent BBC analysis, foreign language learning is at its lowest level in UK secondary schools since the turn of the millennium, with French and German falling the most. This will inevitably continue to have a severe knock-on effect on native British translators available to the language services industry in the years to come.[vii]

Providing a public service

Translation and interpreting permeate the UK's public services, with language services companies facilitating multilingual communication for both the users and the providers of public services, helping to make the British justice system, police, health services, and more, function effectively in often challenging situations.

More than 300 languages are spoken in the UK today, and in some boroughs, such as Tower Hamlets in London, over 30% of the population use a language other than English as their main language.[viii]

The public sector's translation and interpreting requirements are served primarily by framework contracts with language service companies, who fulfil these contracts with the aid of translators and interpreters working with a large number of language pairs and specialisations, in a wide range of settings. Typically, public service translators and interpreters need to be UK security-cleared to work with confidential assignments.

Most interpreting assignments are carried out face-to-face, on-site, which adds a layer of geographical complexity to the potential availability of interpreters at a certain location, in a given language pair, often at short notice due to tight time requirements of the Police and Criminal Evidence Act, for example.

Crown Commercial Service

As the main supply route for all public-sector customers including NHS trusts, local councils, charities and government departments, the Crown Commercial Service provides interpreting, translation and transcription services across 250 languages and dialects for all public sectors, through contracts with language service companies.[ix]

Ministry of Justice

Ministry of Justice framework contract commissioning bodies range from all law enforcement agencies in England and Wales, the Crown Prosecution services, to operators of private prisons. The primary translation and interpreting framework contract, currently held by thebigword, covers 41 standard languages, 7 special services (such as video remote interpreting), and 152 rare languages.[x]

A case in point: Transnational Organised Crime and Translation

Recent research on the effects of transnational organised crime has revealed how an increasingly diverse linguistic landscape is forcing police officers to investigate and combat organised crime networks whose members communicate across multiple languages.[xi]

It is clear the police have a pronounced need for translators and interpreters to enable them to investigate serious crimes such as trafficking in drugs, counterfeit medicines and people, or child sexual exploitation. This involves significant challenges, including cost, number of languages, quality and the limited supply of qualified linguists.

In the Transnational Organised Crime and Translation (TOCAT) project, researchers, the police and translation providers have made an unprecedented effort to work together to understand and face up to these challenges.

Lead researcher on the project, Professor Jo Drugan of the University of East Anglia, found that police, the Home Office and other government agencies already face severe challenges in investigating, prosecuting and preventing serious crimes due to the lack of suitable linguists. “In sensitive contexts like police raids, the need is urgent and the potential consequences if we get it wrong are grave. We should learn from previous terrible mistakes, such as the failure to translate urgent warnings in time to prevent the 9/11 attacks. If the police can’t source qualified linguists, the impact on all our safety and security is a real concern.”

Economic case for languages

In the commercial sector, there is an overwhelming body of research and survey evidence supporting the economic case for languages, language learning, language capabilities in business, translation and interpreting, with a clear link to increased global competitiveness.

International business communication in the target market’s own language is necessary to bring results, but often challenging for companies newly engaged in exporting activities. Language service companies play a pivotal role in facilitating UK companies’ export strategies in countries and markets where trading in English simply isn’t an option.

The Department of International Trade’s Exporting is Great campaign showcases export success stories and provides a wealth of resources to UK businesses looking to kickstart their export activities as part of the priority to build a global Britain and Northern Ireland. Translation of websites earns a specific mention.[xii]

The DIT’s national survey of registered businesses 2017 measures UK businesses’ self-reported exporting behaviours, plans and attitudes, alongside insights into their perceptions around barriers to exporting. One of the main knowledge barriers reported by 59% of respondents amongst the £500k+ business population was found to be understanding overseas clients in terms of their language or culture.[xiii]

In many cases, UK companies trade internationally in multiple markets, with a high dependence on language support. The Institute of Directors’ ‘Going Global Trends in

Trade' showed a notably low number of internationally active IoD members (10%) selling to just one market, even when the EU was explicitly treated as one market for the purposes of the survey. In contrast, 30% of the respondents sell to over 11 markets.[xiv]

The IoD survey also reveals that 18% of respondents are concerned about the language barrier and/or unfamiliarity with informal/cultural business practices abroad.

The British Council's Languages for the Future report (2013 & 2017) considers the outlook for the supply and demand for language competence in the years ahead and looks at the linguistic dimension of a variety of economic, geopolitical, cultural and educational factors. The report argues that, in a new era of cooperation with Europe and with the rest of the world, investment in upgrading the UK's ability to understand and engage with people internationally is critical.[xv]

An earlier SME survey by the British Academy's Born Global project revealed that, in 2014, 83% of SMEs do not use languages other than English, but 52% of all SMEs agreed that additional foreign languages would be helpful to extend business opportunities in the future.[xvi]

Further research initiated and co-funded by the Association of Translation Companies is underway in the form of a PhD project on the role of languages in the internationalisation of UK SMEs, which aims to establish the impact of languages in facilitating SME growth through exports and the role of languages in business-to-business marketing and customer-company relationships. The project is due for completion in 2020.

The evidence is clear: languages and language services will continue to play a significant role in the UK's future as a global trading nation.

Impact of Brexit on the profession

Without protection, Brexit and the subsequent implementation of a visa scheme will have a notable impact on the profession.

EU nationals represent a significant proportion of the translator and interpreter population in the UK, as the below figures from a linguist survey carried out by the UK's largest provider of public service translation and interpreting services, thebigword, demonstrate.

What's equally significant is that the linguists working on assignments for thebigword are almost exclusively based in the UK, which further proves the need for in-country linguists, especially for the public service.

According to the survey:

- 62% of translators and interpreters are EU nationals (not British)
- 34% are British
- Only 2% are non-EU nationals
- Only 2% work outside of the UK

Companies responding to the ATC's skills shortage survey further report wide-ranging impacts of job shortages to their business, and many note an immediate effect on services, as summarised in the comments below.

"We are turning down work due to lack of suitably qualified and skilled resources and also not seeking to grow despite the massive opportunities that are out there on the market."

"Increased recruitment costs, increased costs using subcontractors to fulfil work"

"Brexit is forcing many people to consider whether they want to come to the UK at all and this really cuts down the recruitment pool. It is vital that people can come to the UK for internships at translation companies and that we are then able to offer them jobs easily and with the minimum of paperwork."

The results of both surveys have been appended to the end of this report.

Response to white paper on Immigration

The Government's White Paper on Immigration outlines the future of immigration through an extension of the existing Tier 2 visa scheme.[xvii]

Its expected effect on many sectors relying on recruitment from outside of the UK has been widely reported and discussed, and the language services sector will without doubt also be challenged.

The language services industry, public and commercial, by its very nature has and will continue to have a need for skilled and qualified native speakers of different languages; i.e. linguists recruited from their own countries both across the EU and the rest of the world.

Over and above the existing and expected skills shortages of translators and interpreters in the UK, the two main obstacles to recruitment for language service companies are the proposed salary threshold and the overall cost of sponsorship for non-UK citizens.

Industry salaries

The proposed minimum salary threshold of £30,000 is significantly higher than typical entry and mid-range salary levels for translators and interpreters employed in-house at UK-based language service companies. A salary threshold of £30,000 alone will effectively curtail almost all recruitment in this sector.
Albeit highly skilled professions, translation and interpreting are not highly compensated. In the current SOC classification 3412, the salary rate for a new entrant is listed as £18,600 and for an experienced worker £22,800.

The ATC's skills shortage survey indicates that salary rates in the current SOC classification are very close to the actual salaries offered by UK language service companies:

- 76% offer a salary between £18,600 and £22,800 for fresh graduates
- 72% offer a salary between £22,800 and £30,000 to employees with more than three years of experience
- Only a single respondent company offers a salary above £30,000

Cost of sponsorship

The ATC's Language Industry Survey 2017 reveals that the vast majority of the UK's 1,200 language service companies are small- and medium-sized enterprises.[xviii] The fees currently in force for the Tier 2 visa scheme are unattainable for most, especially considering that for positions at these salary levels, the employers would in all likelihood carry the fees for both the employer and employee sides in one form or another.

The current and expanded Tier 2 visa scheme includes a £1,000-a-year Immigration Skills Charge (ISC), intended to encourage employers to fill open vacancies primarily from within the UK. However, in the case of language service companies, subjecting this charge to the recruitment for positions that cannot be recruited from within the UK is already and will continue to be a major challenge to UK language service companies in years to come.

In addition to the charges, applying for and maintaining a complex visa licence would deter all but the most determined SMEs, few of whom have trained HR professionals on payroll. In this, the ATC applauds the Government's intentions of introducing a transactional system for those who do not need a licence or have a small number of vacancies to fill.

Parallels to other sectors

There are clear parallels to the challenges posed by such a high salary threshold in most industries.

The Confederation of British Industry (CBI) has clearly indicated that a salary threshold set at this level would prevent access to vital overseas labour and skills, all the way from the South West of England to the North East of Scotland.[xix]

For the teaching profession, and the teaching of modern foreign languages in particular, the impact of Brexit on education will be significant.

The proposed salary threshold is higher than many teacher salaries and schools will potentially have to pay higher wages if they have to fill gaps by recruiting EU workers at a time when budgets are already seriously tight. This will add pressure on the provision of modern foreign language teaching because many of the recruits from EU countries will be teaching these subjects.[xx]

A way forward

In summary, the Association of Translation Companies is calling for translators and interpreters to be recognised as a critical cog in the UK's multilingual future, and asks the Government to ensure that language service companies will continue to be able to recruit the non-English mother tongue translators and interpreters they require, post-Brexit.

Language service companies help grow the UK economy by promoting British industry abroad.

Language service companies serve the public sector by enabling it to fulfil its statutory requirements effectively.

The language service industry's impact on the prospects of the UK's international trade and the support the industry lends to the UK's multicultural society cannot be understated.

Translators and interpreters are in a completely unique position within the UK labour market. The language services industry needs mother tongue speakers for a wide range of different languages to provide translation and interpreting services. These linguists need to be recruited from outside the UK.

The industry intrinsically requires migrants, and its existing and expected skills shortages cannot be offset through domestic training but require separate recognition and consideration from all other professions.

To ensure the UK's continued access to skilled and qualified linguists in the years to come, the ATC calls for

- "translator" and "interpreter" to be included in the Shortage Occupation List;
- minimum salaries for these roles to be fixed at the current SOC classification levels; and
- for these professions to gain exemption from the Immigration Skills Charge.

Association of Translation Companies

As the language service sector's leading professional body, the ATC prides itself on a forward-thinking stance dedicated to maintaining the highest industry standards while supporting its members to thrive and grow in the competitive global economy.

From its beginnings as a small group of leading British translation companies in 1976, the ATC has grown to expand its horizons to become a worldwide association at the forefront of the industry. The Association's activities are guided by its council and elected officers and its stated objectives.

ATC is also a founding member of the European Union of Association of Translation Companies – a pan-European grouping of translation company associations.

One of the oldest translation associations in the world, the ATC has been involved in significant changes in the sector and continues to provide leading advice and support including working with legislators concerning matters affecting the industry.

It has been instrumental in the development of the worldwide ISO standard for the provision of translation services, and actively promotes ISO standards throughout the profession.

An annual survey on the UK language services industry by the ATC puts the number of language service companies at 1,200 nationally, employing 12,000 staff, with an estimated revenue worth of £1.15bn per annum.

BEIS

Migration Advisory Committee (MAC) full review of the Shortage Occupation List

Summary

1. The Department for Business, Energy and Industrial Strategy (BEIS) welcomes the opportunity to provide input to the Migration Advisory Committee's review of the Shortage Occupation List (SOL). This response provides the MAC with some suggestions about the way the SOL is updated and for future reviews. It also includes a list of occupations BEIS would like to recommend including or retaining on the SOL and also what is being done to mitigate shortages within those occupations.

2. The Government's Industrial Strategy sets out a long-term plan to boost the productivity and earning power of people throughout the UK. The world of work is changing. Technology is transforming the jobs market and the way we work. This, combined with an ageing workforce and our exit from the EU, means that the Government and businesses must invest in our workforce. We recognise that we need to embed a culture of life-long learning, so as to give people the opportunity to adapt, learn new skills and grow their earning power throughout their working lives.

3. There are several reasons why skills shortages occur. Wages may be sticky and not able move freely up and down with changes in labour supply or it may take time for employees to acquire the skills the market needs.

4. Whilst BEIS supports the MAC's position that the SOL should only be a short-term solution for dealing with skills shortages, businesses have told us that access to skilled workers is critically important for recruiting the often-niche skills that migrants fill and which are frequently not available in the UK. Retraining and upskilling the domestic workforce and investing in automation can help overcome skills shortages, but these often require long lead in times.

5. Given the potential role that the SOL could play in the UK's future immigration system post EU-Exit. **We believe that the SOL should be reviewed again before the future immigration system is implemented**, to ensure sectors and businesses do not experience an increase in skills shortages.

Methodology

5. We welcome the MAC's update to their methodological approach to identifying shortage occupations in January 2017 in line with advancements in data, such as Burning Glass which analyses job advertisements off the web. Whilst not perfect we believe that this type of data offers the prospect of being more reliable and available both in real time and at a finer and more granular level than previous data sources such as the Employer Skills Survey. We hope that the MAC will continue to monitor and revise their methodology in line with new and more sophisticated data sources.

6. Currently the SOL is only updated when the MAC is commissioned by the Government to carry out a review of the list. We are concerned that this leads to the SOL not keeping pace with the changing and flexible needs of the UK labour market. Businesses have told us that this causes additional delays to recruitment if they first have to comply with the Resident Labour Market Test or if the Tier 2 cap has already been met. Australia, for example, carries out a bi-annual review of their SOL to ensure that they continue to meet labour market needs. **We would encourage the MAC and Home Office to work together to consider how to make the SOL more dynamic, so that regular reviews are carried out without requiring a specific commission from the Government.**

7. We support the MAC's approach of combining quantitative indicators with intelligence from businesses and other qualitative sources to provide granular data on specific job titles that might be included in the SoL. However, businesses have told us that there is often a perceived lack of transparency around how much weight is given to the quantitative and qualitative evidence. We have heard examples where sectors have struggled to get occupations onto the list where they are experiencing a national shortage. **We would encourage the MAC to communicate the outcomes of its reviews, particularly to sectors and businesses that have been unsuccessful in putting forward occupations to be included or retained on the list.**

8. BEIS understands that the current approach to the SOL relies on evidence for national rather than regional shortages. There may be instances where a single project in a particular location is enough to cause a national shortage. For example, the Nuclear Skills Strategy Group (NSSG) state that Hinkley Point C will require a workforce that peaks on site at 5,600 people and will incorporate at least 25,000 roles. The current population of steel fixers in the UK is 2,700 and at the peak of construction, Hinkley Point C is expected to need 1,700 steel fixers. If there is full employment of steel fixers in the UK then any increase in wages to

attract workers will have a limited effect. **We would encourage the MAC to reflect on large scale regional projects to see where businesses may not be able to recruit nationally.**

BEIS recommended occupations to include or retain

Ensuring an effective supply of labour is key to delivering the Industrial Strategy, Sector Deals and Government priorities, such as house building. BEIS has identified priority sectors and occupations to include or retain on the SOL that align with the Government's objectives outlined above.

Nuclear sector

The nuclear sector deal ensures that the UK's nuclear sector remains cost competitive with other forms of low-carbon technologies to support our clean growth strategy and grand challenge. Investment in the sector has the potential to create high-value and skilled employment.

The nuclear industry is characterised by an ageing workforce and the need to develop skills for new nuclear technologies merged with legacy generation and decommissioning operations. Combined with the increasing competition the UK faces from internal and external sources, this means that the number of shortages within the sector is increasing. Of the list of nuclear occupations below, there are two professions which are already on the SOL but within the scope of other sectors. The engineering professional's category (2129) currently covers electricity transmission and distribution, aerospace, decommissioning and water management. The Civil Engineers category (2121) currently only covers construction and the oil and gas industry.

There are a range of steps the sector is taking to match training programmes and partnerships with relevant skills shortages e.g. Nuclear Trailblazing Apprenticeships. However, training in the nuclear sector takes a significant amount of time. The sector has reported that to train and stabilise the supply and demand of the domestic workforce could take between 5-10 years. Much of the experience needed to fill these occupational shortages requires on the job experience. The domestic workforce will only have the opportunities to upskill and retrain within the sector if other qualified nuclear workers are available to assist in this process.

2124 – Control and Instrumentation Engineers

RQF 4-8
Median Salary (ONS)[1] £38,170

[1] Median salary for all occupations can be found: Table 14.7a Annual pay - Gross (£) - For all employee jobs: United Kingdom, 2018
https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datalist?:uri=employmentandlabourmarket/peopleinwork/earningsandworkinghours/datalist&filter=datasets&page=2

Electronics engineers undertake research and design, direct construction and manage the operation and maintenance of electronic monitors, communications systems, microwave systems, and other electronic equipment.[2]

The industry does offer in-house training, but as this occupation requires a combination of both engineering experience and specific authoring skills, the skills are difficult to achieve other than through experience. In order to ensure the domestic workforce receive adequate experience this occupation should be considered for the SOL to assist with the training and upskilling of UK workers.

2129 – Safety Case Authors

RQF 6-8
Median Salary (ONS) £44,437

There has been major growth in demand for controlled processes, exploiting new technologies. There have been focused efforts by Nuclear Graduate programmes and partnerships with universities to reduce an anticipated shortage. The industry has also explored ‘returner’ programmes, for those who have left the sector and may want to return. As with other nuclear occupations, the sector envisages the use of the SOL for this occupation for the next 5-10 years. The experiential training pipeline is long, it could take 10 years for the sector to become stable.

Nuclear Generation Plant Operators

RQF 3-5
Median Salary (ONS) £44,437

Due to the changes in reactor technologies, the number of advanced gas-cooled reactors is decreasing. The timescale for light water replacements is not sufficiently defined for the market to respond, leading to a national shortage in this occupation. There are currently programmes in place to transfer workers from coal and other industries into nuclear. The nuclear apprenticeship programmes, alongside STEM and reskilling promotional activities, are also aiming to reduce the shortage.

3113 - Commissioning Engineers

RQF 3-6
Median Salary (ONS) £44,437

This occupation description requires workers to have a long, experienced lead-in time with nuclear specific knowledge throughout various stages of a nuclear project. The most relevant knowledge for new reactors is currently held abroad, where new technologies are already being used. Knowledge transfer will be the key aim when employing foreign workers in this occupation, however this will take time to ensure the complex and safety critical environment is retained. Nuclear Trailblazers are working

[2] https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/data/SingleClass.html?soc=2124

with the National College for Nuclear (NCFN) on appropriate curriculum and career pathways to ensure new graduates have the correct skills and knowledge. The sector predicts it will take 10 years to ensure stability of occupational shortages and steady operational roll out.

3565 – Regulation Site Inspectors

RQF 5-7
Median Salary (ONS) £28,056

As with nuclear generation plant operators, this shortage is due to changing technologies and the uncertainty of timing on replacement operations. The Office for Nuclear Regulation (ONR) has developed and embraced the Nuclear Graduates scheme as well as secondment programmes. The sector acknowledges that there is still more to do to reduce the national shortage however, as with other nuclear occupations, experience can only be learnt on site and the gap is largest among mid-level career professionals with experience.

2424 – Project Planning and Control Manager

RQF 5-6
Median Salary (ONS) £46,913

Competing large-scale infrastructure projects, combined with the requirement to be familiar with critical individual aspects of the nuclear project have increased the shortage of project planning and control managers. This is particularly important when considering the complex safety aspects of each project. Trailblazers have developed a Sellafield Project Management Academy to develop and train workers in the nuclear sector. There are also reskilling programmes available for at risk employees. The mid-career, experienced applicant remains the largest shortage. This retraining is likely to take 4-5 years and the occupation would need to remain on the SOL for this time to ensure construction jobs can reach demand when production in projects peaks.

2123 – Electrical Engineers

RQF 3-6
Median Salary (ONS) £48,458

Electrical engineers are currently on the SOL for the oil and gas and aerospace industries. However, the nuclear sector also has a high demand for these relevant professional skills. These include distinguishing disciplines in power and high voltage. Due to the concentrated demand of infrastructure projects this makes the maintenance of an available pool of skilled labour difficult. There have been focused efforts by the Nuclear Graduates programme, and partnerships with universities are strong in this area. There are also apprenticeship pathways and returner programmes available. This available training, and the anticipated peak in production means that the occupation should likely remain on the SOL for 4-5 years.

2423 – Emergency Planning Staff

RQF 3-6
Median Salary (ONS) £38,752

This occupation requires niche expertise that has become more scarce to some extent with plant decommissioning. However new plants will see a need for this occupation increase significantly. Currently the relevant expertise is held abroad where new technologies are being used, and it would likely take 5-10 years to ensure the experience-based training is successful. There have been Trailblazer opportunities, and options are being explored as to how to increase numbers into the nuclear sector.

2462 – Quality Assurance Engineers

RQF 4-6
Median Salary (ONS) £41,795

The increase in civil nuclear engineering, around 100 a year, will generate a concentrated demand for nuclear specific 'Quality Assurance' skills, for which the training pipeline is limited. While nuclear new builds are well supported by government and industry developers, the labour market requires workers to have significant detailed knowledge. This involves training and experience time and would require the occupation to remain on the list for 4-5 years. During this time construction is expected to reach a peak in workforce demand. There are pathways offered through Trailblazer apprenticeships and transferal programmes.

2111 – Chemists

RQF 6+
Median Salary (ONS) £33,248

Nuclear chemists represent a niche and increasingly scarce skill set as legacy power stations are decommissioned. New build reactors will increase the demand again but with different technologies. As with other specialised occupations, the labour market requires workers to have a significant level of detailed understanding only gained through experience. Stabilising this occupational shortage would take 5-10 years due to the amount of experience needed in this role. There are efforts to mitigate the shortage via Nuclear Graduate programmes, STEM engagement activities and womens' returner schemes. There has been some discussion on increasing the number of doctoral students in this area however funding for PhDs is an issue.

2121 – Civil Engineers

RQF 4-6
Median Salary (ONS) £40,642

This occupation is already on the shortage list but currently only applicable for engineers in the construction and oil and gas industries. The rate of change of demand as the 'bow wave' of New Nuclear Build impact is increasing demand for engineers and specialists (spray concetrors, tunnels). Delays to these programmes due to lack of workforce could be expensive. The nuclear sector is working with the Construction Industry Training Board and Engineer Construction Training Board to increase the number of apprenticeships, school programmes, and partnerships. There are a number of infrastructure projects competing for these skills, and employees need to be very transient and mobile. The need for individual contractors is short term, so does prevent an investment risk for companies.

Life Sciences sector

The Government and the life sciences sector have agreed a deal to ensure that the UK remains at the forefront of innovation in this sector. Ensuring the supply of global talent in a key priority. [3]

There is a general shortage of STEM skills in the UK economy and the perception of low pay and lack of prestige in technician and technical support roles may be a barrier to attracting more people from the UK. In 2016, the Life Science sector employed 233,000 workers with an employment growth of 2.5% from 2015 to 2016.[4] The STEM skills indicator[5] reveals that nine in ten (89%) STEM businesses have found it difficult to hire staff with the required skills in the last 12 months, leading to a current shortfall of over 173,000 workers.

The sector has been taking action to reduce skills shortages. The Wellcome Sanger Institute has recently launched a free online course in bioinformatics in partnership with FutureLearn, the leading social learning platform.[6] The European Bioinformatics Institute - based on the Wellcome Genome Campus, Cambridge runs a range of world-leading training courses.[7] Anglia Ruskin University has teamed up with the Sanger Institute to develop a data science degree apprenticeship course. This course is designed to plug the gap in bioinformatics training — after winning a grant from the Higher Education Funding Council for England (HEFCE) Degree Apprenticeship Development Fund.

The Technician Commitment[8] is a sector-wide initiative led by the Science Council, supported by the Gatsby Foundation to help address key challenges facing technical staff working in research.

Five target areas have been identified, which universities and institutions will work to improve to safeguard vital technical skills. The commitment will ensure greater

[3] https://www.gov.uk/government/publications/life-sciences-industrial-strategy
[4] Life Sciences Sector Report – Parliament UK
5 Research conducted by PCP Market Research among a nationally representative sample of HRs and senior decision makers at 400 businesses in STEM industries (excluding micro-businesses) across the UK, between 20th and 30th April 2018.
[6] https://coursesandconferences.wellcomegenomecampus.org/new-online-course-introduces-bioinformatics-to-address-skills-gap/
[7] https://www.ebi.ac.uk/
[8] http://technicians.org.uk/techniciancommitment/

visibility, recognition, career development and sustainability for technicians across all disciplines.

Apprenticeship and training frameworks and schemes exist – but these take around 3-5 years to complete. The rapid pace of change within the industry can easily render such programmes obsolete, especially in expanding innovation areas such as cell therapy, regenerative medicine and biotechnologies. Education and training struggles to keep pace with technological change, especially as companies are reluctant to invest in training/apprenticeships before emergent technologies are established.

BEIS have highlighted specific occupations in the within the life science sector to be included or retained on the SOL. Whilst skills shortages for Programmers and Software Development professionals are cross-sectoral, it is particularly prominent in the life science sector as they cannot compete with salaries in the finance and creative industry sector.

2425 – Bio-informatician (retain)

RQF 7+
Median Salary (ONS) £46,072

Bioinformatics specialists are computer and data professionals who work with biotechnology and other biological research areas.

The rapid growth of new technologies to sequence and characterise biological molecules has create exponential growth in biological data, all of which needs appropriate storage and analysis by bioinformaticians to answer these vital biological questions.

Bioinformatics is a relatively new discipline, but demand is expected to rapidly rise as biopharmaceutical companies are increasingly shifting their emphasis from chemical to genomics focused drug development. With Anglia Ruskin University suggesting that the sector is set to grow by around 56,000 jobs a year[9], supply is struggling to keep up with demand.

Recruitment of bioinformaticians is particularly challenging and has been further impacted by the Tier 2 visa caps.[10] Currently 23% of bioinformaticians at the world-leading Wellcome Sanger Institute (Genomics), located just outside of Cambridge are non-UK EEA citizens and 21% are from the rest of the world. Degrees in bioinformatics are starting to yield graduates but as many of these are from overseas (many STEM MSc courses are 50% overseas) the migration system will need to enable us to retain them.

[9] https://www.anglia.ac.uk/blogs/tackling-the-skills-gap-in-bioinformatics
[10] http://data.parliament.uk/writtenevidence/committeeevidence.svc/evidencedocument/science-and-technology-committee/an-immigration-system-that-works-for-science-and-innovation/written/84316.html

Bio-informaticians were added to the SOL under what is now 2119, with a minimum (experienced entrant) salary level of £30k. SOC 2010 reclassified them under 2425 (actuaries, economists and statisticians), with minimum (experienced entrant) salary £35,700. The 2425 descriptors do not match the role of the bio-informatician: 2425 is not at PhD level as it is exclusively focused on analysing statistical information (omitting all biology skills). This means with the higher minimum salary requirement, research bodies are not benefiting from these roles being on the SOL as many are paid under £35700. Hence SOC 2119 is still used but this means bioinformaticians may be subject to Tier 2 caps (no PhD nor SOL roles were affected by the cap when there were refusals Dec 2017-July 2018) and must earn £30k unless new entrants.

Businesses have told us that data science (bio or otherwise) is poorly catered for in the SOC codes as their descriptions do not recognise the intersections between domain specific knowledge (say biology, engineering) and data science. This is a huge developing area for research.

2136 – Programmers and Software Development Professionals (retain)

RQF 6+
Median Salary (ONS) £41,453; although expect to be lower in the life science sector

This is a highly skilled occupation and most people working in it have completed a degree, foundation degree or BTEC HNC/ HND, usually in an IT-related subject or a numerate discipline such as maths or physics.

The digital economy is growing exponentially, leading to a national and international shortage of software developers across all sectors. Software developers are critical in the life science sector, for example the Sanger Institute use them to design the tools needed to use and analyse the vast quantity of data we collect and generate from our DNA sequencing activities.[11]

Rapid technological change across sectors has meant that demand has outstripped supply. Life science companies, many of which are pay academic salaries, are competing with employers from other sectors such as finance and the creative industries who can attract workers through higher salaries.

3111 – Laboratory Technician

RQF 3-4+
Median Salary (ONS) £19,401

Laboratory technicians carry out routine laboratory tests and checks and perform a variety of technical support functions requiring the application of established or prescribed procedures and techniques to assist scientists with their research,

11

development, analysis and testing, and to verify the physical, chemical and other characteristics of materials and products.

Technical support roles are wide ranging. Those at the lower end of the skills spectrum can be found or trained in the UK. But there are also roles where years of experience are required, and often these may be very niche skills with only a few qualified people in the world. If someone skilled in a particular niche technique is needed, which may have taken 5+ years to acquire, then they will have to be sourced from wherever in the world they are. Cutting-edge skills by definition are in short supply and it may be that all the candidates are in one lab in an overseas city or used to work there.

Currently there are over 1.5 million technicians working in all sectors in the UK with 60% of the technician workforce set to retire in the next 5 years. The Gatsby Foundation forecasts that 700,000 more technicians will be needed in the next decade to meet the demand from industry.[12]

Construction sector

The Government is committed to delivering 300,000 homes a year by the mid-2020s.

The construction industry faces skills shortages in multiple areas, with the Construction Industry Training Board (CITB) reporting shortages in areas such as steel fixers, concreters and scaffolders. As the UK is currently at near full employment levels, there has been difficulty in attracting workers, with many infrastructure projects competing for skilled workers. These employees tend to be transient and mobile, and the requirement for individual contractors is short-term, which further increases difficulty in recruiting.

The CITB's Construction Skills Network forecasts that the construction industry will need to fill 158,000 jobs between now and 2022. This network also forecasts that employment will grow in most regions from 2018 to 2023. All regions are likely to have an increased demand for new workers over the next five years, with the South West, South East and Greater London showing the largest changes in total employment.

Workers from outside the UK currently make up 15% of the total workforce, which rises to over 50% in London. Perceptions that non-UK workers are employed as a cheaper form of labour are not borne out by the available evidence. Employers take on non-UK workers for a range of reasons, most prominently that they are available and have the skills needed.

The Construction Industry Training Board and the Engineering Construction Training Board have been working to address these shortages by developing apprenticeships, school/college leavers programmes, and by partnering with colleges. Apprenticeships and Further Education courses combined could provide 17,000 new entrants to construction annually and 26,000 workers annually by 2030.

[12] http://www.gatsby.org.uk/education/focus-areas/stem-skills-in-the-workforce

The industry is also in the process of modernising the way it works, introducing modern methods such as offsite construction and BIM. This will create a range of high-skilled roles in the sector. However, even significantly increased adoption of Modern Methods of Construction (MMC) will not remove construction's substantial need for low- and medium-skilled labour.

The sector is working on retaining the current workforce. In construction, workers often retire earlier when compared to the wider economy. By investing in extending working lives, it is estimated that early retirement could be reduced by 2% per year.

There is also demand for construction workers on civil nuclear infrastructure projects, where skills are niche and less present in the UK labour market. For example, nuclear specific techniques and added safety requirements are not always sufficient for a finite number of projects.

For the recommended occupations, the sector predict that they would need to be on the SOL for around 4-5 years, when construction is expected to reach a peak in workforce demand.

5311 – Steel Fixers

RQF 3+
Median Salary (ONS) £27,485
See nuclear section on forecast skill needs for this occupation.

8142 – Concreters

RQF 2+
Median Salary (ONS) £29,511

EDF Energy have stated that concreters are likely to make up 10% of the workforce on new nuclear build projects. Analysis recently undertaken by ConstructionSkills, based on Ofqual certificates gained over the past five years, indicates that concreters may account for 2% of building envelope specialists. On this basis, concreters in the UK numbered around 1,900 in 2010, the last year for which they have data.

8141 – Scaffolders

RQF 2+
Median Salary (ONS) £34,199

Job holders in this group erect and dismantle scaffolding and working platforms, set up lifting equipment and ships rigging, maintain and repair steeples, industrial chimneys and other tall structures and install, maintain and repair ropes, wires and cables.[13]

[13] https://onsdigital.github.io/dp-classification-tools/standard-occupational-classification/data/SingleClass.html?soc=8141

The Construction News Barometer has stated that industry is concerned over skills and resource shortages, with 97% of their survey respondents stating that they are apprehensive about the lack of skills and staff over the next 12 months.

The Federation of Master Builders has stated that small house builders predict that skills shortages in the building industry will hamper housing delivery and will eventually overtake access to finance as a bigger barrier to building new homes.[14]

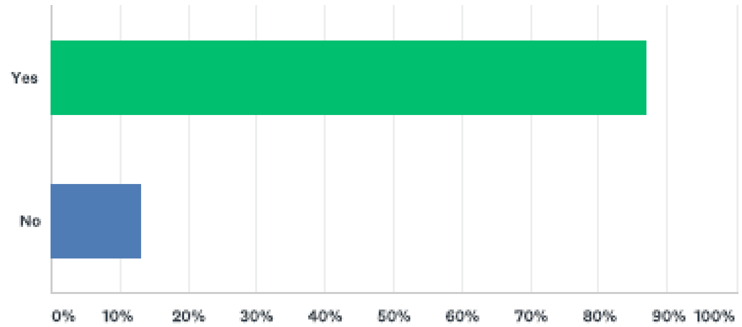
[14] http://www.scaffolding-association.org/skills-shortage-will-hamper-housing-delivery-fmb-research-reveals

Breast Cancer Care and Breast Cancer Now

Shortage occupation list - share your views

Q1 Are there job shortages in your hospital which could affect breast cancer patients?

Answered: 53 Skipped: 0



ANSWER CHOICES	RESPONSES	
Yes	86.79%	46
No	13.21%	7
TOTAL		53

#	IF YES, PLEASE SPECIFY WHICH JOBS ARE IN SHORTAGE	DATE
1	No Metastatic Breast care nurse	12/14/2018 8:00 AM
2	radiologists , pathologists, secondary breast care specialist nurses, palliative care nurses	12/13/2018 10:24 AM
3	We require more breast nurse specialist hours, are very short on radiologists, oncologists, junior doctors and have enough work to need another consultant surgeon.	12/12/2018 2:41 PM
4	breast care nurses clinic staff	12/12/2018 2:32 PM
5	oncology and metastatic patients not always seeing a BCN at their apts Breast screening not covered by a BCN	12/11/2018 4:44 PM
6	Breast Care nurse soecialists	12/10/2018 10:40 PM
7	secondary nurse post	12/10/2018 1:32 PM
8	Breast Care CNS Metastatic CNS General ward RN's (surgery & oncology)	12/10/2018 12:52 PM
9	advanced practitioner retiring, no replacement	12/10/2018 11:45 AM
10	Cover for breast care nurse	12/10/2018 11:10 AM
11	Breast care nurses	12/10/2018 10:27 AM
12	Specialist Radiologist General nursing staff for inpatients	12/10/2018 7:50 AM
13	More demands made such as treatment summaries, care plans, 2 week waits-1 week wait! Government targets, without any extra staff. No metastatic nurse in post.	12/9/2018 10:06 AM
14	Ward nurses	12/8/2018 10:42 AM
15	Chemotherapy nurses Clinical nurse specialists	12/7/2018 4:49 PM
16	Nurses Therapeutic Radiographers	12/7/2018 11:50 AM
17	Radiology & pathology	12/7/2018 11:38 AM
18	CNS & Drs below consultant	12/7/2018 10:37 AM
19	Chemotherapy staff, Surgical teams	12/7/2018 9:37 AM
20	Metastatic breast care nurses	12/7/2018 8:31 AM
21	Radiologists	12/6/2018 11:21 PM

22	Secondary breast care nurse	12/6/2018 9:41 PM
23	I am the only Breast Care Nurse and work part time so when I am away, there is no other BCN to cover.	12/6/2018 7:45 PM
24	Ward nursing staff.	12/6/2018 5:33 PM
25	metastatic nurses	12/6/2018 5:15 PM
26	No identified job vacancy but we have put a business case forward for a metastatic breast care nurse which has been declined.	12/6/2018 4:26 PM
27	Radiologists, radiographers (mammographers) Clinical Nurse Specialists in Breast Care	12/6/2018 4:09 PM
28	chemotherapy nurses, admic staff in treatment/clinic department. Huge breast unit with no manager	12/6/2018 3:46 PM
29	radiologists. Breast care nurse has just resigned due to having to work across two sites and affecting patient care which is devastating as she was a fantastic skilled nurse intending to stay in her role for the duration of her career	12/6/2018 3:18 PM
30	Clinic staff, ward staff, clerical staff, plastic surgeons specialising in breast reconstruction	12/6/2018 3:06 PM
31	breast care nurses, research nurses, clinic staff, secretaries	12/6/2018 2:52 PM
32	metastatic breast cancer nurse clerical support for breast cns	12/6/2018 2:26 PM
33	radiographers radiologists	12/6/2018 2:25 PM
34	breast Surgeons Radiologists mammographers	12/6/2018 2:08 PM
35	staff nurses, HCA's	12/6/2018 2:05 PM
36	Consultant radiologists consultant radiographers Consultant medical oncologists	12/6/2018 2:03 PM
37	Breast CNS's Radiologists Histopathologists Nurses	12/6/2018 2:00 PM
38	recruitment in Day surgery and pre-assessment	12/6/2018 1:59 PM
39	Most speacialities	12/6/2018 1:59 PM
40	No secondary breast nurse	12/6/2018 1:54 PM
41	RGN on the wards. Consultant radiologists with an interest in breast cancer.	12/6/2018 1:18 PM
42	The hospital has 150 nursing vacancies Including medical and surgical wards and chemo suite	12/6/2018 1:17 PM
43	Not enough cover for oncology clinics & one stop clinics without team working extra	12/6/2018 12:56 PM
44	Nurses, Pathologists, Radiologists	12/6/2018 12:42 PM
45	Clinical Nurse specialist	12/6/2018 12:28 PM
46	Radiologists, radiographers, CNSs	12/6/2018 12:23 PM
47	Breast care nurse, mammographer	12/6/2018 12:18 PM

Q2 If yes, what do you think are the main reasons for these job shortages in your hospital?

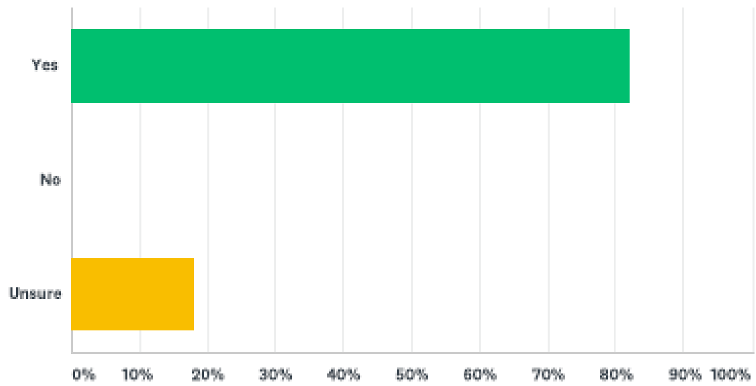
Answered: 47 Skipped: 6

#	RESPONSES	DATE
1	lack of funding	12/14/2018 8:00 AM
2	Apathy to nursing roles. Lack of understanding of importance of these roles National lack of radiologists and pathologists	12/13/2018 10:24 AM
3	Increase in workload and trouble recruiting to the Trust.	12/12/2018 2:41 PM
4	not replacing staff who leave	12/12/2018 2:32 PM
5	2 BCN's retired and came back part time and these hours have not been covered The BCNs team was already understaffed, we have not covered breast screening for years	12/11/2018 4:44 PM
6	Trust being in debt and short sightedness re need	12/10/2018 10:40 PM
7	funding / business case - finding the time to write the business case shared pathways between breast and oncology which are different directorates so agreeing to who funds the post will be difficult having the relevant information on our information systems on numbers diagnosed to back up the need for this nurse is difficult as IT systems do not interact with each other .	12/10/2018 1:32 PM
8	lack of funding	12/10/2018 12:52 PM
9	Funding	12/10/2018 11:45 AM
10	Funding	12/10/2018 11:10 AM
11	Lack of finance and succession planning to fund further roles	12/10/2018 10:27 AM
12	I assume there are not the numbers of appropriately trained staff available nationally.	12/10/2018 7:50 AM
13	Extra demands without extra resources	12/9/2018 10:06 AM
14	Area of hospital and nurse not wanting to do shift work	12/8/2018 10:42 AM
15	No funding, high cost area, Low nursing salaries and lack of career progression	12/7/2018 4:49 PM
16	Difficulty in recruiting	12/7/2018 11:50 AM
17	Uncertainty & difficult to recruit nationally into these positions	12/7/2018 11:38 AM
18	Very poor hospital management - too much micro managing by people with little knowledge go health care	12/7/2018 10:37 AM
19	Long hours, not enough positions to make a reasonable work expectation	12/7/2018 9:37 AM
20	inability for executives to realise the differing needs metastatic patients have.	12/7/2018 8:31 AM
21	No radiologists in uk	12/6/2018 11:21 PM
22	Lack of funding for this area	12/6/2018 9:41 PM
23	General shortage of specialist nurses.	12/6/2018 7:45 PM
24	Lack of nurses to fill vacancies.	12/6/2018 5:33 PM
25	fiances	12/6/2018 5:15 PM
26	no funding for secondary breast care nurse	12/6/2018 4:26 PM
27	Hospital in financial special measures which makes recruitment difficult. Aging specialist workforce (over 60% of mammographers are over 50) No obvious career development into specialist nursing roles.	12/6/2018 4:09 PM
28	lack of money, training issues for chemo staff middle mismanagement don't have an understanding of clinical cancer care	12/6/2018 3:46 PM
29	lack of skilled people, poor leadership.	12/6/2018 3:18 PM
30	Expertise, levels of stress on short staffed areas	12/6/2018 3:06 PM

31	1. management trying to save money by not replacing staff who have left. 2. staff leaving as they are disillusioned with the service and management 3. lack of suitable people to undertake the roles 4. increased numbers of referrals but no increase in numbers of 'staff on the ground' eg BCNs	12/6/2018 2:52 PM
32	general paucity of candidates	12/6/2018 2:25 PM
33	n/a	12/6/2018 2:18 PM
34	not enough professionals interested in breast work	12/6/2018 2:08 PM
35	Lack of funding, low motivation within teams.	12/6/2018 2:05 PM
36	Finances and shortage of qualified professionals.	12/6/2018 2:03 PM
37	Many: Brexit Area of deprivation Reduced number of nurses training (uni fees)	12/6/2018 2:00 PM
38	pressures on demands on the current service	12/6/2018 1:59 PM
39	Pressure on staff, financial cuts.	12/6/2018 1:59 PM
40	funding	12/6/2018 1:54 PM
41	A national shortage of nurses which reflects the bad planning on the part of past governments. We could all see how many nurses were due to retire and there were too few training places to replace them.	12/6/2018 1:18 PM
42	Unable to recruit nurses due to BREXIT, immigration and poor pay and morale. Also reduced nhs budgets have meant that there is a freeze on recruitment and lots of unfilled vacancies	12/6/2018 1:17 PM
43	Staffing has not increased but patient numbers have	12/6/2018 12:56 PM
44	Ability to attract excellent calibre recruits to our Trust and shortages nationally of correctly qualified professionals	12/6/2018 12:42 PM
45	Lack of nurses with relevant experience to apply for Band 7 roles	12/6/2018 12:28 PM
46	National shortage or Radiologists and radiographers. Cost saving of CNS posts	12/6/2018 12:23 PM
47	staff not being trained, no time to train, low wages	12/6/2018 12:18 PM

Q3 Are there wider job shortages in the NHS?

Answered: 50 Skipped: 3



ANSWER CHOICES	RESPONSES	
Yes	82.00%	41
No	0.00%	0
Unsure	18.00%	9
TOTAL		50

Q4 If yes, what do you think are the main reasons for these wider job shortages in the NHS?

Answered: 47 Skipped: 6

#	RESPONSES	DATE
1	Difficulty in recruiting nurses	12/14/2018 8:00 AM
2	Lack of funding and poor forsight	12/13/2018 10:24 AM
3	Poor workforce planning of old is now bringing difficulties to the current staff.	12/12/2018 2:41 PM
4	lot of people left and not replaced. lot of people retiring	12/12/2018 2:32 PM
5	lack of qualified/experienced nurses coming through into our speciality	12/11/2018 4:44 PM
6	unfilled post- unable to recruit	12/11/2018 10:35 AM
7	As above	12/10/2018 10:40 PM
8	if there are shortages then this is usually down to people being over worked and leaving the profession	12/10/2018 1:32 PM
9	no investment in staff	12/10/2018 12:52 PM
10	funding. Too much admin staff and policy chasing.	12/10/2018 11:45 AM
11	Dissatisfaction, many staff leaving to work in other sectors	12/10/2018 11:10 AM
12	Numerous, poor pay, brexit, burnout, early retirement opportunities, lack of bursary for student nurses etc	12/10/2018 10:27 AM
13	Although I believe most people still go into these careers as a vocation, they have become increasingly stressful due to lack of resource and are a less attractive proposition than in previous years. The systematic cutting of services and pay in recent years, together with rising public expectation and criticism of the public sector and its employees has been a huge challenge for even the most devoted NHS staff.	12/10/2018 7:50 AM
14	Students no longer attracted to nursing-pay is poor, hours are long, stress increased, lack of nursing bursary.	12/9/2018 10:06 AM
15	As above	12/8/2018 10:42 AM
16	lack of funding, short term planning and investment in service development	12/7/2018 4:49 PM
17	Poor pay , difficulty in recruitment	12/7/2018 11:50 AM
18	No longer seen as a career option, low salary, unsocial hours, low morale	12/7/2018 11:38 AM
19	Poor use of resources - poor management - inappropriate targets - change in attitudes, culture and standards	12/7/2018 10:37 AM
20	As above	12/7/2018 9:37 AM
21	Staff retention	12/7/2018 8:31 AM
22	Not enough training	12/6/2018 11:21 PM
23	pay not kept up with cost of living. Way to many managers and matrons, not enough ward, speciality and clinic nurses. Lack of appreciation for job and skills. Staff do not feel supported or valued.	12/6/2018 9:41 PM
24	Shortage of nurses generally.	12/6/2018 7:45 PM
25	Lack of doctors and nurses being trained. Not all nurses should have to have a degree.	12/6/2018 5:33 PM
26	lack of radiologists and pathologists nationally identified	12/6/2018 4:26 PM
27	Trust in financial special measures so staff turn over has increased and recruitment processes are slow in order to save money. Recruitment also difficult as lack of investment in services due to underfunding which means the roles do not attract the best candidates	12/6/2018 4:09 PM
28	poor morale, working conditions and pay.	12/6/2018 3:46 PM
29	Not enough nurses out there	12/6/2018 3:06 PM

30	a lot of areas are short	12/6/2018 2:52 PM
31	Stopping nurse bursaries	12/6/2018 2:18 PM
32	not enough doctors and radiographers being trained.	12/6/2018 2:08 PM
33	Reduction in the number of people applying for training due to bursary's being cut and the introduction of tuition fees. Large number of people at retirement age, no new nurses to fill the gaps. Increase in living costs and salaries not reflecting this.	12/6/2018 2:05 PM
34	Reduction in the number of individuals being trained in the first place.	12/6/2018 2:03 PM
35	All of the above	12/6/2018 2:00 PM
36	Salaries. Conditions of work/role/hours etc	12/6/2018 1:59 PM
37	Poor pay for nursing staff, abusive patients,	12/6/2018 1:59 PM
38	funding and priority given to targets	12/6/2018 1:54 PM
39	Bad planning plus nursing pay capped for so may years.	12/6/2018 1:18 PM
40	As noted before; stretched budgets, freeze on recruitment, less nurses coming through. Breast radiology vacancies due to retirement. Poor morale	12/6/2018 1:17 PM
41	Poor wages & working conditions	12/6/2018 12:56 PM
42	NHS not attracting high calibre staff	12/6/2018 12:42 PM
43	NHS doesn't support nurses enough. Not enough financial support and professional development. Environment of blame also.	12/6/2018 12:40 PM
44	Lack of bursaries for student nurses Failure to appoint replacement staff Low pay = not attracting new staff	12/6/2018 12:40 PM
45	Lack of available funding, lack of acknowledgement that there are not enough nurses to provide good quality care	12/6/2018 12:28 PM
46	Increased demand/ no of patients and complexity of treatment and care and lack of funding to match this increase from government, retiring population of staff, lack of bursaries to recruit new nurses, increased pressure and lack of strategy to recruit staff into profession	12/6/2018 12:23 PM
47	Staff not being trained, no time to train, low wages	12/6/2018 12:18 PM

Q5 What measures have been taken to reduce these job shortages in your hospital and/or the NHS?

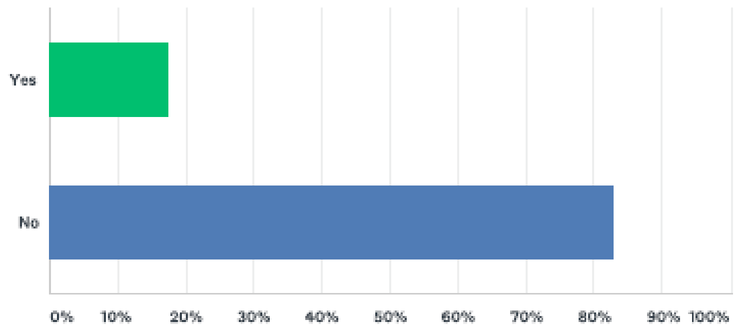
Answered: 48 Skipped: 5

#	RESPONSES	DATE
1	Nurses from overseas recruited Recruitment days advertised	12/14/2018 8:00 AM
2	None that I can see	12/13/2018 10:24 AM
3	Open days for recruitment. Specialist nurses are expected to help on wards over busy periods which is unacceptable to the service we provide.	12/12/2018 2:41 PM
4	not much. saves money in managements eyes	12/12/2018 2:32 PM
5	our lead BCN is fighting for our team not to lose these hours supported by our surgeons	12/11/2018 4:44 PM
6	Cash incentives for those that recruit friends	12/10/2018 10:40 PM
7	jobs are advertised in a timely manner our matron asks our opinion on what candidates they should be seeking	12/10/2018 1:32 PM
8	unsure	12/10/2018 12:52 PM
9	None that I know of	12/10/2018 11:45 AM
10	none	12/10/2018 11:10 AM
11	Don't know, a strategy is not communicated	12/10/2018 10:27 AM
12	Encouraging qualified staff abroad to come to the UK and work. Departments within the hospital organising 'open days' to show what they do and encourage recruitment to their area.	12/10/2018 7:50 AM
13	Registered nurses being looked for from abroard. Hospital overspent so little spare money for agency.	12/9/2018 10:06 AM
14	Recruit more student nurses of different ages	12/8/2018 10:42 AM
15	recruitment campaigns	12/7/2018 4:49 PM
16	Advertising is continuous, using bank staff /agency	12/7/2018 11:50 AM
17	Supportive MDT and SSG. Business case to employ more staff into these areas	12/7/2018 11:38 AM
18	None - I am new in post - I cannot get a parking permit though the car park is less than full, there was no uniform for me, no telephone and no computer and I work 8 hours in a cupboard. What surprises me is that there are not more vacancies - nurses are treated with great disrespect	12/7/2018 10:37 AM
19	none that can be seen on the shop floor	12/7/2018 9:37 AM
20	unsure	12/7/2018 8:31 AM
21	Locums	12/6/2018 11:21 PM
22	Trying to take specialty nurses to help out on wards that are short, performing duties normally done by HCA's	12/6/2018 9:41 PM
23	Putting adverts out for Specialist Nurses and dual role Specialist Nurses, ie, breast and oncology.	12/6/2018 7:45 PM
24	Overseas recruitment. Making specialist nurses cover on the wards. Resulting in suboptimal cancer care at specialist level. Patients need this level of support at diagnosis and throughout treatment. Specialist nurses working on wards as auxiliaries is totally inappropriate and short sighted my managers who do not value specialist skills that are invaluable to patients.	12/6/2018 5:33 PM
25	Look at work load and skill mix	12/6/2018 4:26 PM
26	None – the remaining staff just work harder at an unsustainable rate and are unable to give a level of care they are happy with.	12/6/2018 4:09 PM
27	nurses form the Philippines but staff shortages in the cancer setting are not being addressed	12/6/2018 3:46 PM
28	recruiting people with some skills to train	12/6/2018 3:18 PM
29	Tried incentives, different ways to access nursing courses, nursing apprenticeships etc	12/6/2018 3:06 PM

30	as little as possible as management want to save money, they inappropriately reduce level of staff (eg band 6 to band 5) to both save money and attract more staff.	12/6/2018 2:52 PM
31	Active recruitment campaigns	12/6/2018 2:25 PM
32	incentives	12/6/2018 2:18 PM
33	Advertising in journals and hospital website	12/6/2018 2:08 PM
34	Offering flexible working hours. Incentives to recruit staff	12/6/2018 2:05 PM
35	Apprentice nurse posts. Not sure of any other measures	12/6/2018 2:03 PM
36	World-wide recruitment measures Too little too late	12/6/2018 2:00 PM
37	recruitment days	12/6/2018 1:59 PM
38	Overseas recruitment.	12/6/2018 1:59 PM
39	none	12/6/2018 1:54 PM
40	Advertising qualified posts here and abroad. increasing the number of training posts.	12/6/2018 1:18 PM
41	The hospital has 150 nursing vacancies and is calling all cancer cns to work one shift a month on the ward to ease winter pressures. This impacts on the support that they can provide their Breast cancer patients at diagnosis and through out treatment. HNA clinics are being cancelled to accommodate this.	12/6/2018 1:17 PM
42	Unsure	12/6/2018 12:56 PM
43	Trust actively working to change culture and be progressive and outstanding, no longer in special measures	12/6/2018 12:42 PM
44	Unsure	12/6/2018 12:40 PM
45	Open days and campaigns to try and recruit	12/6/2018 12:40 PM
46	None, more for less is the mantra	12/6/2018 12:28 PM
47	Overseas recruitment drive	12/6/2018 12:23 PM
48	None	12/6/2018 12:18 PM

Q6 Have these measures worked?

Answered: 46 Skipped: 7



ANSWER CHOICES	RESPONSES	
Yes	17.39%	8
No	82.61%	38
TOTAL		46

Q7 If not, why?

Answered: 32 Skipped: 21

#	RESPONSES	DATE
1	unable to fill all current vacancies	12/14/2018 8:00 AM
2	Not being actioned	12/13/2018 10:24 AM
3	Vacancies are still not filled and the Trust has been in special measures for a few years, so perhaps not enticing people to apply.	12/12/2018 2:41 PM
4	still waiting for a decision	12/11/2018 4:44 PM
5	Too many vacancies	12/10/2018 10:40 PM
6	staffing shortages remain	12/10/2018 12:52 PM
7	BREXIT	12/10/2018 7:50 AM
8	Nurses still not really attracted to England especially with the uncertainty of Brexit.	12/9/2018 10:06 AM
9	to some degree	12/7/2018 4:49 PM
10	Lack of funding to sustain	12/7/2018 11:50 AM
11	Still ongoing and Trusts are merging in the future	12/7/2018 11:38 AM
12	Because no measures have been put in place to improve things – the overriding attitude is – if you don't like it you know where the door is - and many many senior staff particularly nurses have left the trust - and management are delighted because they are replaced by cheaper staff if at all. Down banding is rife.	12/7/2018 10:37 AM
13	lack of transparent communication from the top	12/7/2018 9:37 AM
14	no support for staff	12/7/2018 8:31 AM
15	Not enough locums	12/6/2018 11:21 PM
16	Specialist services then fail and staff very devalued and deflated.	12/6/2018 9:41 PM
17	Not sure but they are long shifts and most evenings.	12/6/2018 7:45 PM
18	Not long term solution. Need to train more nurses and doctors. Just fire fighting.	12/6/2018 5:33 PM
19	No measures in place really	12/6/2018 4:09 PM
20	another nurse resigned due to , I believe, poor management culture	12/6/2018 3:18 PM
21	To an extent, but people tend to leave once their training is complete	12/6/2018 3:06 PM
22	1. from a BCN view - inexperienced staff employed who have to be overseen all time and lack experience which results in reduced capacity 2. still get inappropriate people applying 3. ineffective high level management	12/6/2018 2:52 PM
23	not sure if there are nurses who want to move to Cornwall	12/6/2018 2:18 PM
24	Don't know but more advertising is needed. Maybe professionals already in work don't want to or cannot move areas	12/6/2018 2:08 PM
25	The first cohort of trainees are still in training so cannot see the impact as yet.	12/6/2018 2:03 PM
26	Still ongoing shortages.	12/6/2018 1:59 PM
27	unsure	12/6/2018 1:54 PM
28	We are small district general hospital in North Wales competing with big cities like Liverpool and London.	12/6/2018 1:18 PM
29	Cns staff have not worked on wards for many years in many cases and have declined to work as staff nurses as they feel they would be unsafe and risking their pub. The trust has therefore insisted they work as healthcare assistants meaning they are paying band 7 nurses to perform a band 2 role.	12/6/2018 1:17 PM
30	early days/starting to	12/6/2018 12:42 PM
31	Same reasons as above	12/6/2018 12:40 PM

Shortage occupation list - share your views

32	No measures in place	12/6/2018 12:28 PM

Breast Cancer Care's response to the Migration Advisory Committee's consultation on their review of the Shortage Occupation List

January 2019

What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)? (Not to exceed 500 words).

We surveyed our Nursing Network[1] which is open to healthcare professionals who spend 50% or more of their time working directly with breast cancer patients and received 53 responses. 87% reported shortages in their hospital affecting breast cancer patients. Our response focusses on nursing although respondents noted a shortage of radiologists, radiographers, pathologists, surgeons, oncologists, and admin and managerial staff.

Every year around 55,000 people are diagnosed with (invasive) breast cancer in the UK,[2] with incidence rates increasing by 25% in women since the early 1990s.[3] As more effective treatments are developed and survival rates improve[4], more people are living with and beyond breast cancer. The cancer workforce is not growing sufficiently to keep pace with this increase in demand for services.

Access to a Clinical Nurse Specialist (CNS) is regularly reported as the most important indicator of a positive experience of cancer which is why NHS England set the target that by 2020 all cancer patients should have access to a CNS or other keyworker.[5] Despite this, almost three quarters (72%) of NHS Trusts and Health Boards across England, Scotland and Wales do not provide a dedicated nurse for people living with incurable breast cancer,[6] whilst 95% of people with primary breast cancer in England do have access to a CNS.[7]

In our survey, 81% of those who commented reported nursing shortages in their hospital including CNSs and those working in palliative care, chemotherapy, medical and surgical wards.

Reasons for shortages cited by respondents included:

- Ageing workforce - 45% of breast cancer nurses are aged 50 and above.[8]
- Less trainee nurses to replace those retiring - applications for nursing courses fell by 32% following the announcement of the bursary removal in 2016.[9]
- Difficulty retaining and recruiting staff due to poor working conditions including low salary, long unsociable hours, and unreasonable workload.
- Poor retention of staff and shortage of specialist nurses due to lack of training and development; nurses often do not have time to train due to their high workload and the budget for nursing Continual Professional Development (CPD) was cut by 60% to just £83.49million in 2017/18, down from £205million in 2015/16.[10]
- The uncertainty of Brexit deterring international nurses – it's predicted that the current shortage of nurses will increase by 5,000-10,000 based on the impact of UK's withdrawal from the EU.[11]

- Poor management - The All Party Parliamentary Group on Breast Cancer heard that 'financial constraints have led to shortages in some areas, particularly for services where senior management may not appreciate the benefits that a CNS can bring and perceive these roles as expensive.'[12]

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research. (Not to exceed 500 words).

A third of those who commented in response to our survey were unaware of any measures taken by their hospital to reduce job shortages affecting breast cancer patients.

25% of respondents said that their hospital runs recruitment campaigns including open days to try to recruit new staff, with varying success. Some respondents also said that their hospital offers incentives to those who recruit friends.

Respondents noted the use of bank or agency staff – approximately 80% of the 40,000 nursing vacancies in the NHS are being filled by a combination of bank (64%) and agency staff (36%).[13] The use of agency staff is neither sustainable nor cost-effective; for every extra hour worked by temporary staff, NHS trusts pay an average of 61% more than the hourly pay of a newly qualified registered nurse in full-time employment.[14]

Many respondents noted that these nursing shortages across the NHS have led to an inefficient use of specialist nurses e.g. for tasks normally performed by healthcare assistants, or to cover shortages in other wards, 'resulting in suboptimal cancer care at specialist level'. One respondent said that 'the remaining staff just work harder at an unsustainable rate and are unable to give a level of care they are happy with.'

19% of those who commented said that their hospital relies on international recruitment to address domestic shortages. Macmillan's census of cancer nurses in England in 2017 found that where nationality was reported, 5% of specialist cancer nurses, 14% of chemotherapy nurses, and 3% of specialist palliative care nurses working in cancer are from outside the UK.[8] Therefore, it is imperative that nurses remain on the Shortage Occupation List if cancer patients are to receive the vital treatment and support they need. This is especially important as the starting salary for a nurse is £23,000,[15] meaning that international nurses will not be able to meet the proposed £30,000 five-year salary threshold for settlement set out in the Government's Immigration White Paper.

Other measures included improving working conditions and a culture to retain staff e.g. offering flexible working hours and increasing the number of training posts.

Have these measures worked, if not why? (Not to exceed 500 words).

83% of respondents to our survey feel that measures taken to reduce shortages in their hospital or the NHS have not worked. Again, many respondents noted their hospital's inaction in addressing the shortages. Of those that were aware of measures to reduce shortages, many could not yet see their impact.

Breast cancer patients represent the largest cancer patient group in the UK, with approximately 691,000 people[16]. This is predicted to rise to 840,000 in 2020.[17] It is clear that current measures taken to reduce nursing shortages will not be able to cope with this ever-increasing demand.

Secondary breast cancer, also known as metastatic, advanced or stage four breast cancer, occurs when breast cancer cells have spread from the breast to other parts of the body.

such as the bones, lungs, liver or brain. Secondary breast cancer is not curable but it can be treated.

Our research shows that the current level of specialist nursing available to support people with secondary breast cancer is well below the level of need. Our findings reveal that 72% of NHS Trusts and Health Boards across England, Scotland and Wales do not provide a dedicated nurse for people living with incurable breast cancer.[6]

In our survey, some respondents highlighted the fact that there was a lack of nurses with relevant experience to take up some of the vacant CNS roles. For virtually all specialist cancer nurse posts, some specialist training is necessary including specialist cancer qualifications, advanced communication skills and teaching qualifications.[8] Over the past two years, the budget for nursing CPD was cut by 60% to just £83.49million down from £205million. This has had a direct impact on access to training for those who might wish to become a secondary breast cancer CNS, meaning the workforce lacks the necessary skills to support these patients.

We were pleased that HEE committed to increase this funding for nurses, following recommendations from the Health Select Committee in January 2018 that it reverse cuts to nurses' CPD budgets. We welcomed the subsequent announcement to increase the CPD budget by 17% compared to 2017 but this increase does not fully reverse the cuts experienced and we await clarification on further plans and timescales in phase 2 of the HEE's cancer workforce plan.

Furthermore, our survey findings show that nurses are overworked so may be unable to devote the time necessary for specialist training and continual development.

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[1] Breast Cancer Care 'Shortage Occupation List – share your views' survey 2018. Sent to Breast Cancer Care's Nursing Network which is open to healthcare professionals who spend 50% or more of their time working directly with breast cancer patients.

[2] Cumulative total of each UK country invasive breast cancer cases in 2015 (55,122)

[3] Cancer Research UK incidence numbers from 2013-2015, only invasive breast cancer (doesn't include DCIS)

[4] Cancer Research UK survival numbers from 2010-2011, only invasive breast cancer (doesn't include DCIS)

[5] Independent Cancer Taskforce (2015) 'Achieving world class cancer outcomes: A strategy for England 2015-20.' Available at: https://www.cancerresearchuk.org/sites/default/files/achieving_world-class_cancer_outcomes_-_a_strategy_for_england_2015-2020.pdf

[6] Breast Cancer Care (2018) Secondary support package: Evidence report. Available at: https://www.breastcancercare.org.uk/sites/default/files/secondary_support_package_evidence_reportoct2018.pdf

[7] National Cancer Patient Experience Survey (2017) available at: http://www.ncpes.co.uk/index.php/reports/2016-reports

[8] Macmillan Cancer Support (2017) 'Cancer Workforce in England: A census of cancer, palliative and chemotherapy specialty nurses and support workers in England in 2017.' Available at: https://www.macmillan.org.uk/_images/cancer-workforce-in-england-census-of-cancer-palliative-and-chemotheraphy-speciality-nurses-and-support-workers-2017_tcm9-325727.pdf

[9] UCAS, 2018 cycle applicant figures - June 2018. Available at: https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/2018-cycle-applicant-figures-june-deadline

[10] Royal College of Nursing (November 2018) Fund our future nurses. Available at: https://www.rcn.org.uk/professional-development/publications/pub-007348#detailTab

[11] National Institute of Economic & Social Research (November 2018) 'Brexit and the Health and Social Care Workforce in the UK' Available at: https://www.niesr.ac.uk/publications/brexit-and-health-social-care-workforce-uk

[12] All Party Parliamentary Group on Breast Cancer (2018) 'A mixed picture: an inquiry into geographical inequalities and breast cancer'. Available at: https://breastcancernow.org/sites/default/files/public/appgbc_a_mixed_picture.pdf

[13]NHS Improvement 'Performance of the NHS provider sector for the quarter ended 30 September 2018.' Available at: https://improvement.nhs.uk/documents/3520/Performance_of_the_NHS_provider_sector_for_the_month_ended_30_Sept_18_FINAL.pdf

[14] The Open University (2018) 'Tackling the nursing shortage.' Available at: http://www.open.ac.uk/business/apprenticeships/blog/tackling-the-nursing-shortage-May-2018

[15] The starting salary for a Band 5 nurse on 2018/2019 NHS Agenda for Change pay scales can be found here: https://www.nhsemployers.org/your-workforce/pay-and-reward/agenda-for-change/pay-scales/annual

[16] Macmillan Cancer Support (2017) 'The Rich Picture with Cancer.' Available at: https://www.macmillan.org.uk/_images/Breast-Cancer_tcm9-282779.pdf

[17] Maddams J et al (2012) Projections of cancer prevalence. British Journal of Cancer, 107 (7). 1195-1202

British Association for Community Child Health

Evidence to support including community paediatrics (aka Community Child Health, a subspecialty of Paediatrics) on the Shortage Occupation List

Dr C Ni Bhrolchain, BACCH Workforce Officer

Executive summary

- **Evidence presented below shows that Community Child Health (CCH) services are currently unable to always meet their statutory and NHS obligations**
- **Workforce figures all point to a serious shortfall in the staff needed to meet demand.**
- **Evidence also suggests that UK recruitment will not be sufficient to meet demand for the foreseeable future.**
- **Based on the evidence presented we recommend that all CCH grades should be on the Shortage Occupation List to improve immediate recruitment, as we may be able to attract suitably qualified applicants for vacant posts from outside the UK/EU.**

Pressure on CCH services

Demand has increased in most aspects of CCH over the last 10 years. Increased recognition and treatment of key conditions e.g. ADHD, Autism Spectrum Disorder (ASD) and increasing numbers of children and young people (CYP) entering local authority care and being referred for child protection assessments has put pressure on services and affected access to timely care [1].

Impact on patients

- A BACCH/RCPCH survey in 2016 [2] showed:
  - In 42.5% of services CYP wait over 18 weeks for a first appointment for ASD. Referral to treatment (RTT) times of 35.5 weeks on average, breach the 18 week RTT rule.
  - The average RTT time for ADHD is 29.9 weeks also breaching the 18 week RTT rule.
  - Only 11.4% of services can always see ADHD patients for follow up appointments when they are due. 60% can do so no more than half the time, raising issues of medication safety.
  - Fewer than half (43%) of services can see 90% or more of newly looked after children (children in care) within the required 4 weeks, risking children failing to receive the care they need swiftly at an intensely traumatic time in their lives and breaching statutory requirements.
- NHS Digital figures show that children and young people with neurodevelopmental disorders (mostly ADHD and ASD) have the longest waits for assessments compared with others with mental health issues [3].

- All-Party Parliamentary Groups on ADHD and ASD have been formed to highlight concerns about delays in diagnosis for these groups of children.
- Delays with Special Educational Needs and Disability assessments are also being highlighted in the press [4].

These figures show that CCH services are currently unable to always meet their statutory and NHS obligations

Decline in staff numbers

Alongside increased demand, the number of community paediatricians in the UK has declined significantly. In 2015 (the most recent RCPCH census figs), there were 1299 WTE doctors working in community paediatrics, 265 (17%) fewer than in 10 years previously in 2005 (Fig 1).

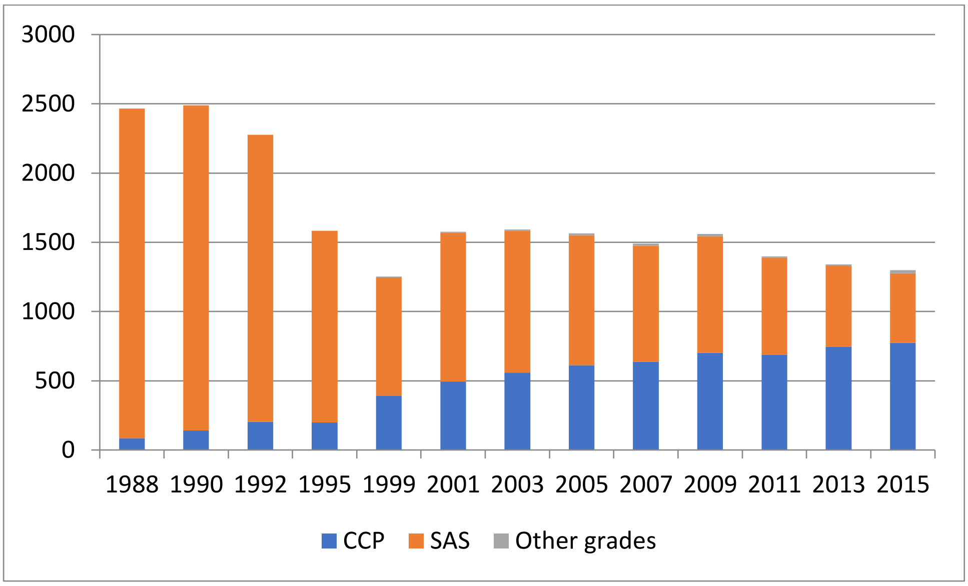

Fig 1. RCPCH census figs for career grade community paediatricians.

The RCPCH estimates that ‘an increase in the order of 25% in the size of career grade (community) paediatric workforce is required to meet … demand’ [2], an increase of about 77 new consultant per year for the next 5 years [5].

The RCPCH has also reported that only 9.6% of paediatric trainees are awarded a CCT in CCH, whereas 18.5% of existing consultants work in CCH (Table 1) [5].

CCT survey 2016	In post (%)	CCTs awarded (%)
CCH	18.5	9.6
Other subspecialties	37.4	34.2
General paediatrics	42.5	56

Table 1. Number of CCTs and consultants in general paediatrics, CCH and other subspecialties.

In 2018, the number of advertisements for consultant community paediatricians was estimated to be about 150 (C Ni Bhrolchain audit 2018). Only 25 or so CCTs being awarded each year.

These figures all point to a serious shortfall in the staff needed to meet demand.

Why not UK recruitment?

UK medical recruitment

The number of CCTs awarded in CCH is increasing but is still well below what is needed to meet demand.

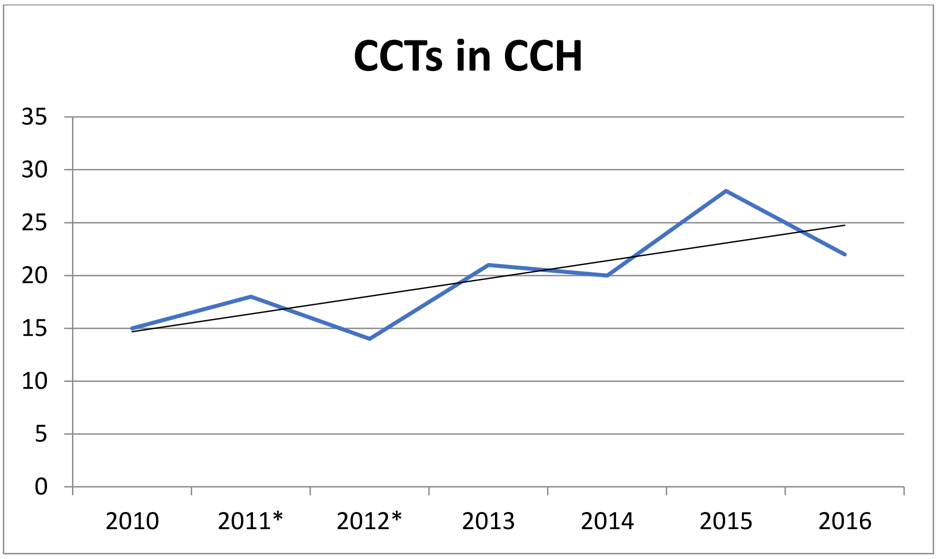

Fig 2. CCTs awarded in CCH (Numbers from RCPCH CCT holder surveys)

We are aware that some trainees with a CCT in general paediatrics take up posts in CCH, despite not being fully trained in CCH. Trusts are likely to be making this decision to avoid leaving posts vacant, but it raises issues of patient safety and the quality of care. There is training capacity to train more community paediatricians but these training posts are not currently being taken up.

We also believe that the closure of the associate specialist grade has made SAS posts less attractive, as the specialty doctor contract does not reflect the skills and experience of many SAS doctors. We are aware that some Trusts are already advertising AS posts as 'Trust' posts, with bespoke terms and conditions to circumvent this problem. The Association therefore supports moves by the Royal Colleges to re-open this grade to new applicants but there are as yet no firm plans to do so.

There are few CESR applications by community paediatricians than in other areas of paediatrics (RCPCH personal communication). The requirement for recent experience in general and neonatal paediatrics precludes many UK SAS community paediatricians from applying for Certification through Equivalence, as they may not have practised in these areas for many years. However applications from non-UK applicants can apply for CESR in CCH alone with slightly less stringent requirements in other areas of paediatrics, which could increase recruitment.

What about skill mix?

Community paediatrics has been slower to appoint clinical nurse specialists and advance nurse practitioners compared with other paediatric teams e.g. diabetes, epilepsy, cystic fibrosis. The reasons for this are unclear. While the Covering All Bases report shows this is now changing [6], there are no recognised courses for advanced nurse practice in CCH and services are having to innovate locally. Therefore this is unlikely to deal with the immediate staffing shortages, though a training scheme needs to be developed for the longer term.

Nurse skill mix in ADHD	4
Pharmacist skill mix in ADHD	1
LAC initial health assessments (note legality)	1
Advanced Nurse Practitioner in CCH	1
Total	7

Fig 3. Skill mix examples in CCH [6].

This suggests that UK recruitment will not be sufficient to meet demand for the foreseeable future.

What is BACCH doing?

BACCH has recognised this problem for some time and has been working with the RCPCH to assess and develop strategies to deal with the situation. It has recently appointed a Workforce Officer and intends to develop a workforce strategy alongside other bodies.

Conclusion

While the fall in staff numbers has been predominantly in SAS grades, with a rise in consultants, the rise has not compensated for the fall in SAS grades. The SAS grade is already identified as a shortage occupation. While we are working to increase UK recruitment, there are barriers to achieving this in the immediate future. CCH as a subspecialty does not exist in many European countries, limiting recruitment from EEA countries. However CCH does exist in countries outside the EEA like Australia.

Based on the evidence presented we recommend that all CCH grades should be on the shortage list to improve immediate recruitment as we may be able to attract suitably qualified applicants for vacant posts from outside the UK/EU.

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The British Association for Community Child Health (BACCH) is the professional organisation representing the 1200 community paediatricians in the UK and is affiliated to the RCPCH. Our members work mostly in non-acute settings and are the main providers of paediatric medical services in childhood disability, safeguarding, adoption and looked after children, also contributing significantly in child mental health (especially autism and ADHD) and in child public health. Our members provide much of the statutory medical advice for special educational needs, Adoption and Fostering and Safeguarding including court reports.

British Association of Landscape Industries (BALI)

GO Landscape

building real careers

BALI Questionnaire for Go Landscape

Which sector of landscaping does your company predominantly come under?	
Answer Options	**Response Percent**
Commercial	**32.1%**
Private Domestic	**32.1%**
Grounds Maintenance	**26.4%**
Design	**1.9%**
Other (please specify)	**7.5%**

What best describes the nature of your business?	
Answer Options	**Response Percent**
Predominantly hard landscaping	**2.0%**
Predominantly soft landscaping	**14.0%**
Both hard and soft landscaping	**50.0%**
Maintenance	**24.0%**
Design	**0.0%**
Other (please specify)	**10.0%**

In what area is your company's biggest skills shortage?	
Answer Options	**Response Percent**
Hard Landscaping	42.0%
Soft Landscaping	18.0%
Maintenance	22.0%
Design	4.0%
Other (please specify)	14.0%

As an employer / manager would you be likely to contact your nearest land based training college for recruitment?	
Answer Options	**Response Percent**
Yes	34.0%
Possibly	48.0%
Unlikely	14.0%
No	4.0%

How likely are you to employ a landscape graduate over the next 12 months?	
Answer Options	**Response Percent**
Almost certainly	14.0%
Possibly	60.0%
Unlikely	24.0%
Not at all	2.0%

Would you be more likely to employ a graduate with a CSCS card achieved at college?	
Answer Options	**Response Percent**
Yes, definitely	56.0%
Possibly	28.0%
No, it's not required for my business	16.0%

How important is skilled brickwork to your business?	
Answer Options	**Response Percent**
Essential	6.0%
Quite important	38.0%
Not very important	36.0%
Not applicable	20.0%

How important is skilled paving to your business?	
Answer Options	**Response Percent**
Essential	40.0%
Quite important	32.0%
Not very important	18.0%
Not applicable	10.0%
Quite important, but not essential	0.0%

How important is skilled stonework to your business?	
Answer Options	**Response Percent**
Essential	14.0%
Quite important	44.0%
Not very important	28.0%
Not applicable	14.0%
Quite important, but not essential	0.0%

How important is skilled decking / carpentry to your business?	
Answer Options	**Response Percent**
Essential	26.0%
Quite important	46.0%
Not very important	20.0%
Not applicable	8.0%

How important is surveying / setting out skills to your business?	
Answer Options	**Response Percent**
Essential	38.0%
Quite important	50.0%
Not very important	8.0%
Not applicable	4.0%

How important are skilled excavator / dumper operators to your business?	
Answer Options	**Response Percent**
Essential	48.0%
Quite important	36.0%
Not very important	12.0%
Not applicable	4.0%

How important are skilled maintenance machinery operators to your business?	
Answer Options	**Response Percent**
Essential	54.0%
Quite important	28.0%
Not very important	14.0%
Not applicable	4.0%

How important is good lawn care / turf management to your business?	
Answer Options	**Response Percent**
Essential	46.0%
Quite important	42.0%
Not very important	10.0%
Not required at all	2.0%

How important is good plant knowledge to your business?	
Answer Options	**Response Percent**
Essential	50.0%
Quite important	44.0%
Not very important	6.0%
Not required at all	0.0%

How many plants would you expect an employee to be able to identify, to regard them as having good plant knowledge?	
Answer Options	**Response Percent**
50 to 100	38.0%
100 to 300	42.0%
300 to 500	14.0%
500 +	4.0%
Not applicable	2.0%

How important is good soil science knowledge to your business?	
Answer Options	**Response Percent**
Essential	16.0%
Quite important	50.0%
Not very important	34.0%
Not required at all	0.0%

How important is a good knowledge of nursery production methods to your business?	
Answer Options	**Response Percent**
Essential	4.0%
Quite important	24.0%
Not very important	60.0%
Not required at all	12.0%

How important is good drainage knowledge and installation skills to your business?	
Answer Options	**Response Percent**
Essential	22.0%
Quite important	54.0%
Not very important	24.0%
Not required at all	0.0%

How important are good planting skills to your business (including mature tree planting)?	
Answer Options	**Response Percent**
Essential	56.0%
Quite important	36.0%
Not very important	8.0%
Not required at all	0.0%

How important is the use of chemicals in your business?	
Answer Options	**Response Percent**
Essential	34.0%
Quite important	52.0%
Not very important	14.0%
Not required at all	0.0%

How important is design knowledge to your business?	
Answer Options	**Response Percent**
Essential	12.0%
Quite important	48.0%
Not very important	34.0%
Not required at all	6.0%

How often do you contact your nearest land based training college to find out about the courses they are running?	
Answer Options	**Response Percent**
Frequently (more than once a year)	22.4%
Once every year or two	34.7%
Rarely (maybe once every 3-4 years)	34.7%
Never	8.2%

Shortage Occupation List 2018: call for evidence

The British Beer & Pub Association is the UK's leading organisation representing the brewing and pub sector.

Our members account for over 90 per cent of the beer brewed in the UK and own almost half of Britain's pubs.

Executive Summary

• The BBPA are calling for jobs under the 'food preparation' umbrella – Chefs, Chef de Partie, Kitchen Porter – to be included in the shortage occupation list
• The hospitality sector is already struggling to recruit chefs, with much of the workforce coming from outside of the UK (1 in 4)
• BBPA members already work hard to recruit homegrown talent, through apprenticeships and training, however there are still not enough people choosing food preparation as a career pathway
• BBPA will continue to work hard on a number of campaigns such as Hospitality Works, Pub Chef of the Year, Pub Pros and alongside DCMS on the Tourism Sector Deal, to continue to promote the sector as a valuable career pathway

Introduction

The British Beer & Pub Association is the UK's leading organisation representing the brewing and pub sector. Our members account for over 90 per cent of the beer brewed in the UK and own almost half of Britain's pubs. Across the UK, the sector contributes over £23 billion to the economy on an annual basis, and last year provided £2 billion in investment. The sector also creates 900,000 jobs, and 40% of those employed by the industry are young people. Yet pubs, often operating as individual small businesses, are faced with an increasing number of costs and regulatory burdens that hamper the ability of the sector to reach its full economic potential. Pubs are an extremely important part of the food and drinks sector, which is the single largest contributor to the tourism economy. For tourists, pubs are an important part of the visit to Britain, with over one half of all holiday visits to Britain including a visit to the pub (this can reach three-quarters for some regions of the UK). Food plays a vital role to this, with 52% of pubs having a significant food offering, such as the famous pub lunch to Sunday roasts.

The British pub, however, like the wider hospitality sector, has for many years faced skills shortages, particularly for chefs and assistant chef roles. The industry has been working hard to promote the food preparation career pathway, as well as recruit from overseas to fill these gaps. As the hospitality sector continues to grow however, particularly in terms of casual dining, these gaps will only continue to widen. The BBPA is calling for ‘chef’, ‘chef de partie’ and ‘kitchen porter’ to be included in the shortage occupation list, to ensure pubs and other hospitality outlets can continue to operate.

In order to understand the importance of migrants to the beer and pub sector, the BBPA surveyed its members on the issue in 2016. Current employment data – split by UK, EU Citizen and non-EU was collected. The survey also enquired into skills shortages, upcoming labour challenges as well as views and key asks on Brexit. 21 companies in total provided data, and companies ranged from small independently owned breweries to large national pub companies. The survey also covered the whole of the UK with responses from varying regions. This survey will be referenced throughout this consultation response as ‘Survey A’
More recently, the BBPA has surveyed its members on their workforce composition, apprenticeships and wider workforce issues. This survey will also be referenced throughout the consultation response as ‘Survey B’.

Consultation Question Responses

Please indicate from which of these industries are you providing evidence?
Accommodation and Hospitality
Provide details individual job titles you/your members have found hard to fill in the boxes below
Chef – Chef - 5434
Chef de Partie – 5434
Kitchen Porters, Porter, kitchen - 9272
What are the main reasons for job shortages?
The hospitality sector has experienced enormous growth in recent years, and as a result competition for chefs has dramatically increased. In particular, the expansion of the casual dining sector has contributed to this, and as a result has meant that the issues of chef shortages are even more prevalent for pubs. To meet this demand, the number of chefs should have significantly increased. Whilst there has been significant effort to attract more talent from schools and colleges, the sector has also had to heavily rely on staff from overseas to fill this employment gap.

Recruitment is a constant issue for the pub sector due to the extremely high turnover of staff, with members reporting turnover rates of 75-110%, with the average length of service in their business 0-1 years. In Survey B, our members note that vacancies in the “skilled trade: food preparation” are a necessary part of the business, but are difficult to fill. This is a consistent response for all BBPA members.

As part of Survey A, BBPA pub operators highlighted the number of kitchen staff in their company, the percentage which are from outside of the UK, and the number of chefs needed over the next few years to fill job shortages. Below are two examples:

Pub operator 1:
1,280 kitchen staff, of which 55% are non-UK
56 chef vacancies
need 800-900 kitchen staff per annum over next few years

Pub operator 2:
119 kitchen staff (30% EU nationals)
will need a further 300 chefs over next few years

In addition to this, job shortages are accentuated due to seasonal demands. The nature of the hospitality sector means that during certain periods, consumers visit hospitality outlets more frequently, notably summer and Christmas. It is essential that this sector has enough chefs to meet consumer demand, and currently many of our members rely on EU workers to meet this demand. One member noted that during summer, the ratio of EU employees to UK employees is much higher in the height of summer and without them they would “likely have to close some of our pubs!”.

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

Overseas employment for the sector

One of the main methods which our members use to reduce shortages in the sector is to hire overseas workers. The BBPA survey highlighted the necessity of non-UK nationals working in the industry, with more than 1 in 4 kitchen staff from outside of the UK. There is also regional variation, with companies located in London and South East reporting over 50% of kitchen staff being from outside the UK.

ONS data indicates the proportion of EU nationals in the food and beverage service industry, which has been increasing steadily since 2010 from 95,000 to 150,000 by 2016; a 58% increase.

Table 1: Number of workers in food and beverage service industry, by nationality group (ONS Annual Population Survey) UK	**EU27**		**RoW**
2016	1,088 (81%)	150 (11%)	105 (8%)
2013	1,021 (82%)	115 (9%)	108 (9%)
2010	955 (81%)	95 (8%)	123 (10%)

In recent months, members have reported to the BBPA that they have already felt a change in the ability to recruit overseas staff, due to the uncertainty around Brexit, amplifying staff shortages even more as EU nationals are more precautious about moving to the UK.

The concern around the future of overseas recruiting is even more prevalent for both the leased and tenanted pub sector and independent pub operators. With over 80 percent of pubs operating as small businesses who generally have not had exposure to the existing system, they would find this system a major barrier to employing non-UK nationals. The nature of hospitality work can often mean a high level of turnover, further adding to the burdensome nature of the current regime.

Apprenticeships

As part of Survey B, the BBPA questioned its members of how they are utilising the Apprenticeship Levy as well as on wider work training and apprenticeships. BBPA members work hard to recruit local talent, and have over the past 3 years increased their spending on training and apprenticeships. The majority of BBPA members already offer apprenticeships at levels 2, 3 and 4, with some planning on offering apprenticeships at levels 5, 6 and 7 in the future.

However, whilst our members have reported increased spending in these areas, they note that barriers stopping them from spending all of their Apprenticeship Levy include limited demand from external applicants, as well as from existing workforce.

Tourism sector deal

The BBPA continues to work with Government to increase both recruitment and retention in the hospitality sector. We were delighted to hear that DCMS have committed in principle to a Tourism Sector Deal, ensuring the sector is a career for life, keeping the UK as the most accessible tourism industry in the world. Alongside this, the BBPA is working with other leading trade bodies in the sector to develop both recruitment and retention campaigns for the sector to complement any Tourism Sector Deal.

Wider campaigns

BBPA has worked with other organisations and trade bodies in the hospitality sector to support campaigns to promote careers within the industry. These have ranged from the Hospitality Works campaign alongside DWP, UKHospitality and Springboard, to the BBPA's annual Parliamentary Pub Chef of the Year and Young Pub Chef of the Year, which both recognise pub chefs for their work and showcase the crucial role food plays in pubs.

BBPA also works closely with Stride Learning, an organisation which promotes working in a pub as a career in schools, an initiative which many BBPA members are signed up to. The scheme is a six session programme, connecting local publicans to schools in the area, creating a pipeline for future talent whilst building employability skills.

The BBPA and its members recently visited the Clink Charity, which looks to reduce reoffending through the training and rehabilitation of prisoners. The charity is located in a number of prisons across the country, and looks to reskill prisoners through a five step programme, as well as offer support and mentoring once they are released. This programme works to reduce reoffending rates by training prisoners and placing its graduates into employment in the hospitality and horticulture industries upon release.

The BBPA and the wider hospitality sector will continue to drive forward various initiatives to support the recruitment of homegrown talent wherever possible, however with an already heavy reliance on workers from outside of the UK, we feel that it is a necessity to safeguard the industry for the future, particularly for after the UK leaves the EU, to ensure that the industry can continue to expand. This can only be achieved if the food preparation roles stated above are included on the Shortage Occupation List.

Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?
We do not have any evidence to support this.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based system in the past 12 months, stating the job titles.
We do not have any evidence to support this.

If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.
(Additional papers to be attached with response)

If you have any other information that might be useful for our call for evidence please use the space below to explain.

Ireland, who suffer similar issues of recruiting chefs, have recognised this as an issue and as a result relaxed rules on work permits for foreign chefs. See here for more detail.

British Film Institute

Access to global talent in the Visual Effects and Animation sector

A RESPONSE TO THE IMMIGRATION WHITE PAPER AND THE MAC SHORTAGE OCCUPATION LIST REVIEW
ISSUE 1 - JANUARY 2019

Introduction & Context

This document is a composite of the UK Screen Alliance/Animation UK response to the Migration Advisory Committee's (MAC) call for evidence on the Shortage Occupation List (SOL) and our initial thoughts on the Immigration White Paper in preparation for the promised consultations. It is also an opportunity to provide overall context and commentary on the business landscape and workforce challenges facing the UK's Visual Effects and Animation industries.

During the relatively short consultation period for the MAC SOL review, the Immigration White Paper was published and provided further context but additional uncertainty around the function of the SOL in the post-Brexit future. The timing has been less than ideal. The close proximity of the White Paper publication to the Christmas break and the SOL review deadline early in the New Year has inhibited our opportunity to consult in depth with our membership in the way we would wish to. It has also been challenging to assess the implications of the Immigration Bill on the SOL, in the brief time available.

We therefore ask that the MAC remain open to further comments beyond the deadline on the SOL review. We are certainly willing to provide further clarification if required.

Our answers to the MAC SOL review contained within were also submitted using the online form.

We note that the Immigration White Paper provides for a one-year period of consultations on certain aspects of the policy proposals although the framework for this has not yet been published.

The evidence presented here is drawn from consultations with UK Screen Alliance and Animation UK members over the last 12 months. Firstly, we regularly collect workforce statistics in our annual survey, which was last conducted in July 2018. This has been supplemented by an additional data gathering in November, when a questionnaire was sent to the recruitment specialists in the companies that recruit the largest proportion of EEA recruits.

About UK Screen Alliance and Animation UK

UK Screen Alliance is the trade association that represents Visual Effects (VFX), TV & Film Studios, Post Production and Animation in the UK. It is the membership organisation for over 80 leading employers in this sector and its primary purpose is advocacy for its member companies and the wider screen industries.

UK Screen Alliance was formed in 2016 when two long-established organisations, the UK Screen Association, (founded in 2003) and Animation UK (founded in 2008) joined together to pursue mutually agreed goals on behalf of their members. The UK Screen Association members come from a lateral layer of service providers to the film, TV and commercials sectors; whereas the Animation UK membership consists of an industry vertical comprising independent entertainment companies specialising in production, distribution, development, financing and brand development of childrens' and family properties. These two constituencies intersect across many common interests, particularly those of workforce, migration & visas, skills development and talent pipeline from schools through college and university into jobs and apprenticeships and of continuing professional development.

For a detailed profile of the UK's VFX and Animation industries, please see Annex 4
For a list of all UK Screen Alliance and Animation UK member companies, please see Annex

Acknowledgements

We would like to thank all our UK Screen Alliance and Animation UK members who provided opinion, feedback and data for this report.
Special thanks go to our working group representatives: Jessica Diver (DNEG) Valentina Pace (Framestore) Whitney Townsley (ILM UK) Tory Wire (Union VFX) Paula Newport (Aardman Animations) Pauline Hamilton (BlueZoo) Kirsty Strathearn-Burrows (MPC) Sashka Jankovska (Cinesite) Jill Wallace (Axis Studios)

Industry Reaction

"It is essential for UK based businesses to be able to attract and retain highly skilled talent, including graduates from across Europe, in order to remain competitive in an increasingly globalised industry. Furthermore, we have a skills shortage in the UK and the talent pipeline, particularly at University level, is lagging behind."
Sean Costelloe, MD at The Mill and UK Screen Alliance board member

"Jellyfish Pictures' staff is made up of 40% EU nationals, which is typical for our industry. For the UK to remain globally competitive in an industry such as visual effects and animation, we need quick, easy access to the very best talent internationally without financial penalties."
Phil Dobree - CEO, Jellyfish Pictures and UK Screen Alliance board member

"There is no doubt we would find certain grades difficult to fill if we couldn't easily access European talent and in the short-form work we do, the ability to bring in talent from Europe at short notice for short periods can sometimes be critical to hitting delivery dates. Anything that reduces our ability to draw on that European talent pool simply makes us less competitive. "
Dave Sproxton - Co-Founder and Executive Chairman, Aardman Animations and member of the Animation UK Council

"The potential cost is horrific. It will have a major impact on competitiveness across our industry, as we collectively hire the best graduates in Europe. Now other member states will build clusters and dilute the UK's global centre of excellence. "
Fiona Walkenshaw, Global MD of Film at Framestore and UK Screen Alliance board member

"Pro-Brexit politicians continually talk of there being no need for extra cost and extra bureaucracy after we leave the EU, but the change in visa cost and the extra application work is a clear example this is not true, adding unnecessary burden to business in very uncertain times."
Oli Hyatt, MD of Bluezoo and UK Screen Alliance board member

"If this proposal is an indication of what might happen in a post-Brexit world it is very concerning as currently 25% of our team are non-UK citizens and here under the EU freedom of movement of workers policy. London's well-deserved reputation for world-leading VFX excellence is built on having access to the best talent the world has to offer. Any policy changes of this ilk will inevitably lead to London becoming far less competitive in this global industry."
Adam Gascoyne - Co-founder of Union VFX

"VFX in addition to the technology and wider Creative Industries, are an export growth sector. As an industry, we are committed to skills development and have a proven track record in doing this. Foreign talent has a critical role to play in skills development, as on the job training is invaluable in developing talent within our business. Here at Double Negative our British VFX artists learn, and develop their skills, from the brightest and best in the world. We are concerned that any changes to Tier 2 visa costs and its scope will impact this."
Alex Hope - MD of Double Negative

Executive Summary

• One third of the UK's VFX workforce is from the EEA[1] One fifth of the UK's Animation workforce is from the EEA[2] In some successful companies the concentration of EEA workers is as high as 50%. The introduction of visas for skilled workers from the EEA will have a severe impact on VFX and animation companies, making them significantly less competitive in the global market.

1 UK Screen Alliance workforce survey 2018
2 UK Screen Alliance workforce survey 2018
3 Oscars 2019 shortlist for Best VFX contains 10 films with UK interest – see list in Annex 2

Figure 1 - Nationality of VFX and Animation workers within seniority bands in UK Screen Alliance Workforce Survey 2018

• There is a global shortage of skilled Visual Effects (VFX) and animation workers in an industry sector that has expanded rapidly over the past 20 years
• The UK's VFX and animation industries are highly regarded and compete successfully in a global marketplace. London is one of the world's top creative hubs for VFX and UK based companies have won Academy Awards (Oscars) for their work.[3] In terms of quality, inventiveness, technique and humour, UK animation is also world class. Our characters have become part of the national heritage, entertaining and educating generations of young people in the UK and internationally. The animation sector has huge cultural impact and it also has the potential to have significantly greater economic impact.
• Technological advances have enabled VFX to become an essential tool for filmmakers, enabling new ways of story-telling and is key to the success of many high-grossing movie titles. Computer-generated imagery makes the impossible appear possible on-screen. However, VFX is not just about creating monsters, spaceships or spectacular action sequences. There are many invisible effects created to maintain the suspension of belief for historical storylines or allowing UK filming locations to double for other parts of the world.
• Animation and VFX have a large overlap in terms of skills and job roles. It is estimated that 85% of creative roles in VFX, utilise animation skills. These same skills are also used extensively by the games industry.
• Both Animation and VFX generate significant GVA for the UK economy and attract inward investment, mainly from the USA, incentivised by the UK's screen sector tax credits. Of the amounts claimed via the tax credits, VFX amounts to 13% of the film relief and 5.6% of the HETV relief.
• The VFX industry generated £878.2[4] million GVA in 2016 from tax credit related work but the report estimated that a total of £1.043[5] billion GVA was generated by the industry when non-tax credit work was factored in. The animation industry generated £163.3 million GVA in 2016 from tax credit related work but it is estimated that a total of £355 million GVA was generated by the industry when non-tax credit work is added.[6]
• Direct employment in the VFX industry was 8,140 in 2016, but this activity supported 17,940 jobs when induced, indirect and spillover employment was factored in. Direct employment in the animation industry was 1,320 in 2016, but with the addition of induced, indirect and spillover employment this activity supported 7,120 jobs.
• The VFX and animation workforces have grown considerably throughout the World. It is not unusual for an individual film production to employ more 3,500 cast and crew on a single project of which more than 1,000 will be VFX workers.[7]
• VFX and animation projects are delivered by large teams of interacting specialists. If businesses cannot access the required number of specialist workers for a particular role within those teams, the whole project workflow suffers.
• Most VFX and animation workers have degree level qualifications, although for roles relying on creativity, an impressive visual portfolio is essential and may override formal qualification at a particular level. Level 4 apprenticeships created and offered by industry, now provide a non-degree entry route into the industry for selected roles.
• The UK's universities have been unable to keep up with demand and whilst they output reasonable numbers of UK graduates, unfortunately many do not meet the high standards

required to compete at an international level. It is quality and quantity that is required. European universities and film schools are often cited by employers as producing more work-ready graduates than UK universities[8]. They require minimal on-the-job training before they can slot into teams and work at the high standards required.

4 BFI Screen Business report 2018
5 BFI Screen Business report 2018
6 BFI Screen Business report 2018
7 https://stephenfollows.com/how-many-people-work-on-a-hollywood-film/
8 UK Screen Alliance survey 2017

• The industry is working with Higher and Further Education, embracing apprenticeships and shaping T-Levels to improve the quality of home-grown talent, but this will take time; more than 10 years. See Annex 5 for the considerable interventions being made by the UK's VFX and animation sector to improve the talent pipeline.
• The UK benefits from the knowledge transfer gained by employing globally renowned talent. Working shoulder-to-shoulder in teams lead by the world's best, raises the UK's skills base.
• The UK's VFX and animation companies recruit on the basis of skill rather than nationality.
• UK workers and EEA workers in the same grades are paid the same salaries. They are not used as a source of cheap imported labour. In fact, some EEA workers may be paid slightly more as Sterling is a less attractive currency to be paid in since the referendum in June 2016.
• Tier 2 (General) and Tier 5 (Creative and Sporting) visas are currently used to bring in non-EEA workers at Mid, Senior and Elite levels. Visas for junior levels are not currently considered viable because of cost and these skills can be sourced currently without the cost of a visa from Europe.
• Significant quantities of skilled EEA migrant workers can be found at all experience levels within VFX and animation companies.
• The ending of Free Movement of Labour following Brexit will raise considerable challenges to ensuring continued growth if VFX and animation businesses cannot have affordable access to the global pool of talent necessary to compete at the highest level.
• The requirement for EEA skilled workers to have visas will add significant cost. Namely, the cost of the visa, the Immigration Skills Charge, the Immigration Health Surcharge, additional overheads for administration and compliance, and the salary inflation that will be caused by minimum salary thresholds. See the next section for an analysis of the economic impact.
• **There are 17 roles in VFX and animation that are on the current Shortage Occupation List (SOL). These are still in shortage and should remain on the SOL**
• It is likely that more roles will suffer shortages of suitable applicants if EEA migration is also controlled by Tier 2 visas and therefore may need to be added to the SOL.
• In a rapidly changing technological industry, roles that previously did not exist will need to be added to the SOL.

Table 1 -The 17 roles currently used in VFX and animation on the existing Shortage Occupation List

Shortage Occupation List		**2015/16 Minimum Salary**		
SOC Code	**Description**	**New Entrant**	**Experienced Worker**	**VFX Roles Included**
2135	IT Business analysts, architects and systems designers	25,800	33,000	Systems Engineer
2136	Programmers and software development professionals	24,000	31,100	Software Developer

Shader Writer
(Games Designer)

3411	Artists	20,800	21,500	Animator
3416	Arts officers producers and directors	24,600	30,500	2D Supervisor
3D Supervisor				
CG Supervisor				
Producer				
Production Manager				
Technical Director				
VFX Supervisor				
3421	Graphic Designers	20,800	21,200	Compositing Artist,
Matte Painter				
Modeller				
Rigger				
Stereo Artist				
Texture Artist				

- The Immigration White Paper proposes to abolish the annual quota of 20,700 restricted visas. We welcome this proposal as it could significantly speed up the visa process, most notably by making the application process continuous and not reliant on meeting the deadline of a monthly panel to allocate restricted certificates. This of course assumes that the HMVI will sufficiently increase their resources to cope with visa applications for EEA citizens.
- The Immigration White Paper proposes to abolish the Resident Labour Market Test (RLMT) The RLMT for non-SOL roles in VFX and animation was seen as pointless delay and created significant work rejecting applications that were entirely unsuitable (many submitted merely to satisfy the applicant’s social security mandate), so we welcome this proposal.

• The Immigration White Paper neutralises the main advantages of job roles being on the SOL. Namely there will be no need for the priority given in the monthly Tier 2 allocation for SOL roles if there is no annual quota. Nor will exemption from the Resident Labour Market Test for SOL roles be an advantage if the requirement to perform an RLMT is abolished.

• Therefore, our response to the SOL Call for Evidence is made on the assumption that the SOL will remain relevant as follows:

1. If the Withdrawal Agreement with the EU is voted through Parliament, we assume that the SOL will remain relevant for non-EEA immigration during the Implementation Period prior to the ending of Free Movement of Labour and the introduction of the forthcoming Immigration Bill and a new visa system.

2. Tier 2 Visa application costs for roles on the SOL are lower than for other roles

3. The salary threshold for applying for UK settlement is lower for those immigrants in Shortage Occupation List roles

4. We make our own recommendations that would strengthen the relevance of the SOL.

a. Salary levels are a poor proxy for skill levels. A blanket minimum salary threshold of £30,000 for skilled worker visas would seriously impact sectors such as the Creative Industries, where the median salaries are lower than more highly remunerated sectors such as financial services. Setting appropriate minimum rates for roles on the SOL could allow sectoral differences to be taken into account and ensure that the visa system is based on the skills that the UK needs. However this may be overly bureaucratic, and a simpler solution would be to set an overall minimum salary requirement equivalent to the Living Wage, which would alleviate the danger of widespread post-Brexit skills shortages across many industrial sectors, not just VFX and Animation.

b. It seems perverse that the Immigration Skills Charge (ISC) is levied on Tier 2 visas for roles on the SOL. Whilst the ISC was meant to channel funds to fill skills gaps, there is no evidence that the government has targeted this revenue for that purpose. There is also no evidence that the ISC has been effective in inhibiting companies from recruiting non-EEA migrants, as their number has increased since its introduction. The very fact that a role is on the Shortage Occupation List acknowledges that employment of migrant workers will be necessary to fulfil demand. To use the ISC to penalise companies for recruiting essential overseas talent is therefore counter-productive, as it syphons money away from company training budgets that could be used to develop home-grown talent. We ask that roles that are on the Shortage Occupation List are made exempt from the Immigration Skills Charge.

UK Screen Alliance recommendations for the Shortage Occupation List

• We ask that the 17 roles that are relevant to VFX and Animation on the current Shortage Occupation List (SOL) are retained on the reviewed List. They remain in shortage and after Brexit this shortage is likely to increase.

• We ask that a further 11 roles are added to the SOL as they are already difficult to recruit into using UK workers alone and these shortages will exacerbate following Brexit. See Table 2 for a full list of roles which we consider are in shortage.

• The VFX and animation roles that are retained or added to the UK SOL, should also be applicable in Scotland which has its own SOL.

• Roles on the Shortage Occupation List should be exempt from the Immigration Skills Charge

• The proposed minimum salary threshold of £30,000 for Skilled Worker Visas is too high and should be set in line with the Living Wage. (~£20k in London and ~£16k elsewhere)

• However, should that not be possible, appropriate minimum rates should be set for SOL roles. To enable this:-

o We ask that the rules for the Point Based System9 regarding the Appropriate Salary Attribute for the 20 points necessary to qualify for a visa should be amended from “£30,000 or the appropriate rate for the job, whichever is the higher” to read “£30,000 or the appropriate rate for the job, whichever is the lowest”, thereby allowing any appropriate minimum rates set below the £30,000 overall threshold to come into play.

o Appropriate rates for minimum salaries for Tier 2 visas should be set at the job role level rather than at the level of the SOC code, thereby allowing greater granularity and sectoral differences to be taken into account.

o UK Screen Alliance has the most comprehensive and current dataset regarding salaries in VFX and Animation and would be willing to act as a Competent Body to set or advise on appropriate minimum rates for this sub-sector.

9 Tier 2 of the Points Based System Version 31 - https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/755390/tier-2-v31.0.pdf

Table 2- Recommended update to Shortage Occupation List roles **Job Title**	**ONS job title**	**ONS SOC**	**SOL**
VFX Supervisor	Arts officers producers and directors	3416	Current
2D Supervisor	Arts officers producers and directors	3416	Current
3D Supervisor	Arts officers producers and directors	3416	Current
CG Supervisor	Arts officers producers and directors	3416	Current
VFX Producer	Arts officers producers and directors	3416	Current
VFX Production Manager	Arts officers producers and directors	3416	Current
Technical Director (includes specialisms – Effects TD, Crowd TD, Creature TD, Lighting TD, Pipeline TD and Generalist TD)	Arts officers producers and directors	3416	Current
Animator	Artists	3411	Current
Compositing Artist	Graphic designers	3421	Current
Matte Painter	Graphic designers	3421	Current
Modeller	Graphic designers	3421	Current
Rigger (Animation)	Graphic designers	3421	Current
Stereo Artist	Graphic designers	3421	Current
Texture Artist	Graphic designers	3421	Current
Systems Engineer	IT business analysts, architects and systems designers	2135	Current
Software Developer	Programmers and software development professionals	2136	Current
Shader Writer	Programmers and software development professionals	2136	Current
Creative Director	Arts officers producers and directors	3416	Request
Concept Artist	Artists	3411	Request
Storyboard Artist	Artist	3411	Request

Technical Artist	Artists	3411	Request
Layout Artist	Artists	3411	Request
Previsualisation Artist	Artists	3411	Request10
VFX Editor	Photographers, audio visual and broadcasting operators	3417	Request
Production Coordinator	Arts officers producers and directors	3416	Request
Assistant Technical Director	Arts officers producers and directors	3416	Request
VFX Trainer	Arts officers producers and directors	3416	Request
Render Supervisor	Programmers and software development professionals	2136	Request

See Annex 1 for detailed job descriptions, salary ranges and workforce data of the above job roles.

10 Request to add Previs Artist in its own right. Currently sponsored under the Animator job role.

VFX and Animation economic contribution to the UK

Visual Effects (VFX) and Animation are vital components of the UK's successful film, TV and commercials industries, which are in turn key components of the economically important and growing Creative Industries sector. The Creative Industries are one of five areas prioritised for an early sector deal in the government's Industrial Strategy.

The UK's VFX sector is predominantly a service industry, where the largest clients are based in the USA. It is heavily concentrated (> 90%) in central London which is home to 5 of the largest VFX companies in the world. This is the globally most significant cluster of award-winning VFX companies which competes successfully with rival hubs in Vancouver, Montreal, Los Angeles, New York and mainland Europe.

The animation industry is geographically more widespread with companies across the UK and notable studios in Bristol, Cardiff, Manchester, Belfast and Scotland.

VFX is not just an important service to film and High-End TV (HETV). Many of the VFX houses that service film and TV also service the advertising market along with several specialist commercials VFX houses. Some animation companies also provide services to the commercials sector.

Animation companies often generate valuable intellectual property through their own productions, which can lead to lucrative merchandising deals for toys, games and books etc based around the characters. Animation companies may also engage in service work for other content creators.

In 2018, The British Film Institute published “Screen Business”11, which detailed the economic contribution of the screen sectors supported by the tax credits and proved the effectiveness of the tax credits in providing a net return for the UK. Tax credits are available for Film, High End TV Drama, Animation and Children’s TV. They are paid as a rebate to producers and incentivise UK and overseas clients to bring significant inward investment film and high-end TV projects to the UK.

Direct employment in the animation industry was 1,320 in 2016, but this activity supported 7,120 jobs when induced, indirect and spillover employment was factored in. Animation generated £163.3 million GVA in 2016 from tax credit related work but the report estimated that a total of £355 million GVA was generated by the industry when non-tax credit work was factored in.

The VFX industry does not have a tax credit of its own but still leverages the benefits of the screen sector tax credits. VFX revenues make up 13% of the Film Tax Credit and 5.6% of the High-End TV Tax Credit. Direct employment in the VFX industry was 8,140 in 2016, but this activity supported 17,940 jobs when induced, indirect and spillover employment was factored in.

The VFX industry generated £878.2 million GVA in 2016 from tax credit related work but the BFI report estimated that a total of £1.043 billion GVA was generated by the industry when non-tax credit work was factored in. UK Screen Alliance considers that this is an underestimate as the limited remit of the BFI and the scope of the report did not allow a full investigation of the spillover benefits of VFX work for advertising, which are thought to considerable as the whole point of the production of advertising content is to create spillover impacts.

11 BFI Screen Business Report 2018 https://www.bfi.org.uk/sites/bfi.org.uk/files/downloads/screen-business-full-report-2018-10-08.pdf

Economic impact of introducing visas for EEA skilled migrants in VFX and animation

The remuneration levels in VFX and the creative industries in general are lower than say the financial services sector. A blunt instrument like Tier 2 does not account for these sectoral differences and to apply the same threshold requirements to all skilled migration will greatly disadvantage the creative industries in securing the fresh high potential talent from the EEA necessary to deliver continued growth.

7% of the combined animation and VFX workforce are from the EEA and are remunerated below the current £30,000 Tier 2 threshold.12

The salary inflation necessary to remunerate these EEA workers at the Tier 2 threshold would add approximately 1% to payroll costs. We note that it will not be necessary to apply for a skilled worker visa if the EEA worker is already present in the UK and therefore the salary threshold will not apply to existing EEA workers. However, this could mean that after Brexit that new entrant workers from the EEA would need to be paid more than workers with a few years’ experience. Applying such wage increases to new EEA workers alone would very likely risk industrial unrest. Wages for all skilled workers would have to be increased to maintain parity between EEA and UK workers in similar roles and all skilled workers in pay grades immediately above £30,000 would also need to receive increased salaries to maintain pay differentials.

In addition, there is to be an imminent increase in the Immigration Health Surcharge (IHS) from £200 to £400 per year for visa holders. VFX and animation workers from the EEA are tax and NIC payers and therefore already contribute to the NHS, just like their UK-born colleagues The IHS is also levied on dependents so this becomes a great disincentive to experienced senior skilled migrant workers who may wish to bring their families with them.

We estimate that these factors would add 3% to 5% to the payroll costs, which would seriously impact margins and make the UK a less competitive place in which to do business.

These escalating overheads are set against a general background of increasing employment costs in the UK. The Immigration Skills Charge was introduced on the same day as the Apprenticeship Levy13 and workplace pension charges are increasing year-on-year.14 All-in-all the UK is becoming a less attractive place to do business in for both employers and employees.

In contrast to some areas of the film and TV industry where freelancing is the norm, 43% of the VFX (Film & TV) workforce have permanent contracts with the remaining 57% having fixed term contracts ranging from a few weeks up to 2 years.15

It would be imprudent of any company to operate with high levels of permanent employees when the workload is subject to significant change as projects finish and new projects start. Gaps between projects are common and therefore engaging workers on fixed term contracts to match project duration is vital in order to retain overall profitability. Where possible companies extend contracts to allocate workers to new projects, but often the timing is not ideal, and it is not possible to carry the overhead of large numbers of workers who are not allocated to current revenue earning projects. This is easier to manage for larger companies where there may be as many as a dozen overlapping projects happening at any one time, some with 12 months or more lead time, which allows a greater level of predictability to workforce requirements.

12 UK Screen Alliance bespoke analysis of 2018 workforce survey dataset

13 Companies in the UK Screen Alliance survey sample contribute £1.1 million per year to the Apprenticeship Levy

14 For the 2018/19 tax year the minimum workplace pension contribution is 5% with at least 2% from the employer rising in 2019/20 to a minimum 8% with at least 3% from the employer

15 UK Screen Alliance workforce survey 2018

Our survey suggests that 26% of the total workforce were hired within the previous year. This includes new entrants as well as crewing-up with experienced artists.

We estimate that there are around 750 new hires of EEA citizens each year in VFX and animation. This is about 34% of total annual recruitment.

Data about the intentions of existing EEA workers towards obtaining “settled” status in the UK is scarce. We acknowledge that a proportion of them will already have been employed in the UK for at least the 5 years necessary to qualify and many more may wish to remain in the UK beyond Brexit and any transitional period, to build up the required 5 years.

It is difficult to predict how many of the yearly 750 new EEA hires in future will have “UK settled” or “pre-settled” status, although an estimate by one VFX company suggests that 60%16 of their EEA employees may wish to apply to the settlement scheme rather than return to their country origin at the end of their contracts.

Currently we know that 32% of EEA citizens employed in VFX and animation have permanent contracts, so it is safe to assume that most of these will apply for settled status. A further 19% of EEA workers have fixed term contracts lasting longer than 1 year. In animation 21% of EEA citizens have permanent contracts. We estimate that in 2021, 25% of our recruitment will be EEA citizens with UK settled or pre-settled status and 13% will be out-of-country EEA recruits. However, we do not expect this ratio to remain static. Every year after 2021, there will be fewer available EEA entry level recruits that are eligible for settled or pre-settled status and therefore the number of out-of-country hires will increase. It seems unlikely that similar quality UK home-grown recruits will be available in sufficient numbers to fill the shortfall.

Since April 2017, employers recruiting non-EEA skilled workers via the Tier 2 route have had to pay the Immigration Skills Charge of £1,000 per year. The Immigration White Paper proposes that the Immigration Skills Charge should also be applied to EEA citizens using the new skilled worker visa route.

In a worst-case scenario, this could add about £1.5 million to recruitment costs, assuming the visa applications were for the industry norm of two years with the option to extend.

16 Single anecdote from one company – may not be representative of the whole industry

Regional Impacts

Whilst the animation industry is geographically more diverse, VFX is predominantly based in London, but is also established in major cities like Cardiff, Glasgow, Manchester, Bristol and Bournemouth.

Our Nations and Regions members have not reported any specific local shortages that are not already evident at UK-wide level. This is not surprising as VFX and animation roles are in global shortage.

The VFX and animation roles that are retained or added to the SOL, should be mirrored on the separate SOL for Scotland.

The imposition of minimum salary threshold for EEA visas will have a disproportionately negative effect on non-London businesses as their existing salary levels are lower than in the capital. Any minimum salary threshold or appropriate SOL rate should allow for a “reverse London weighting” for roles based outside of London.

UK Screen Alliance survey evidence

UK Screen Alliance conducts an annual workforce survey and in July 2018 this gathered information on almost 5,172 workers from 23 companies in the VFX and animation industries.

A further survey was conducted in November 2018, specifically looking at recruitment during 2018. Information was gathered from 7 companies covering a total workforce of 3,974.

The total estimated directly employed workforces are 8,140 in VFX and 1,320 in animation.17 Our workforce survey sample therefore covers 54% of the combined total workforce population. We therefore consider it to be comprehensive.

We have attempted to extrapolate from the numbers in the survey to give a breakdown of the numbers in selected sub grouping of the full population. For details of the methodology of both surveys see Annex 3

An international workforce

The visual effects and animation industries are truly cosmopolitan with employees from more than 70 nations. There are sizable contingents from the EU5 nations of France, Germany, Spain and Italy.

Table 3 - The composition of the VFX and animation workforce by nationality:

• UK 60%

• France 5%

• Italy 5%

• Spain 4%

• Germany 2%

• India 2%

• USA 2%

• Canada 1%

• New Zealand 1%

• Australia 1%

• Ireland 1%

• Others (<=1% each) 16%

17 BFI Screen Business report 2018

Table 4- Right to work in UK status (VFX for Film, TV and advertising)	**% in survey**	**Employees in sample**	**Estimated Number directly employed in Industry**
UK Citizen	**59%**	2,370	4,811
EEA Citizen	**31%**	1,242	1,987
Rest of the World	**10%**	389	428
Total employees		4,001	7,22618
Tier 2 visa holders	**5%**	206	226
Tier 5 visa holders	**1%**	66	73
Indefinite Leave to Remain	**1%**	56	61
Dependent visas	**1%**	33	36

Note that the concentration of EEA citizens in VFX for Film and TV excluding advertising is even greater at 34%. This is the sector that generates 13% of the value of the film tax credits and 5,6% of the HETV tax credit.

Table 5 - Right to work in UK status (Animation)	**% in survey**	**Employees in sample**	**Estimated Number directly employed in Industry**
UK Citizen	**71%**	721	1,283
EEA Citizen	**20%**	199	378
Rest of the World	**9%**	88	106
Total employees		1,008	1,767

Tier 2 visa holders	**4%**	41
Tier 5 visa holders	**2%**	18
Indefinite Leave to Remain	**~0%**	4
Dependent visas	**1%**	8

Employment contract status

Permanent employment is the most prevalent type of contract in VFX, in contrast to many other sectors of the creative industries, and even within VFX there is a variation between those specialising in advertising and those specialising in film or TV projects. Permanent employment is less prevalent in the animation sector. Whilst many of these workers would consider themselves to be freelance; they are in fact employees who pay PAYE and NICs.

In addition, we know that 32% of EEA citizens employed in VFX and animation have permanent contracts. A further 19% of EEA workers have fixed term contracts lasting longer than 1 year. In animation 21% of EEA citizens have permanent contracts and a further 30% also have fixed term contracts longer than 1 year.

18 We acknowledge that our estimate is lower than the BFI Screen Business report

Table 6 - Contract Status of workers in VFX and Animation	**VFX (Film/TV)**	**VFX (Adv)**	**Animation**
Contract Type			
Permanent	43%	85%	33%
Fixed less than 6 months	22%	6%	7%
Fixed Between 6 months and 1 year	16%	4%	16%
Fixed greater than 1 year	16%	5%	24%
Freelance	2%	~0%	19%
Other	1%	1%	1%

We anticipate that virtually all the EEA citizens with permanent contracts will apply for settled or pre-settled status.

Analysis of recruitment in 2018

UK Screen Alliance conducted a recruitment survey in November 2018. This gathered information from 7 large companies about their new hires during 2018. We then developed a model to extrapolate that to the whole VFX and animation sector. See Annex 3 for the methodology.

There were an estimated 2,194 new hires in 2018 which is 23% of the workforce. There were an estimated 1,224 vacancies at 1st December 2018.

Table 7 - Estimated recruitment 2018

	UK	**EU** (ex UK & IE)	**EEA**	**Ireland**	**Non-EEA**	**TOTAL**
New hires	1,236	739	15	20	184	2,194
% of total	56%	34%	1%	1%	8%	

Table 8 - Estimated vacancies at Dec 2018

	Large companies	**Mid-sized companies**	**Small companies**	**TOTAL**
Number of Vacancies	613	227	384	1,224

Table 9 on the following pages shows a full breakdown of the survey by job role.

Key to Table 9: Recruitment Difficulty scale is 5 being most difficult to 1 being no difficulty.

✓ Role on Shortage Occupation List

☹ Role on Shortage Occupation List but median is below £30k minimum salary threshold

🖐 Requested role to be added to Shortage Occupation List

Table 9 - VFX and Animation Recruitment				2018 Survey – mostly large companies										Estimate for 40 mid-size companies							Estimate for small companies							Estimated total recruitment						
									Non-EEA																									
Job Title	SOC	SOL	Recruitment Difficulty	Vacancies 12/2018	UK	EU (ex. UK and IE)	EEA	Ireland	Tier 2 (Gen) Visa	Tier 5 (YMS) Visa	Tier 5 (SBC) Visa	Other non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL
TOTALS				613	886	629	15	20	96	14	39	23	1532	227	187	58	0	0	12	257	384	353	52	0	0	0	405	1224	1236	739	15	20	184	2194
% of total recruitment					45%	41%	1%	1%	6%	1%	3%	2%																	56%	34%	1%	1%	8%	
VFX Supervisor	3416	✓	4	2	7			1	1		2	1	12	1	2					2								3	9			1	4	14
Head of Department			4	1	5								5		1					1								2	6					6
3D Sequence Supervisor			4	1	2					1			3		1					1								1	3				1	4
3D Supervisor	3416	✓	4	6	2	2						1	5	2	1					1								8	3	2			1	6
CG Supervisor	3416	✓	[illegible]	3	8	8		1	4				22	1	2	1				3								4	10	10		1	4	25
Animator - Lead/Senior	3411	✓	4	43	13	10	1	2	22		7	1	56	16	3	1			3	7	27	7	1				8	86	23	12	1	2	33	71
Animator - Mid	3411	✓	3	98	16	42	1		12		9	1	81	37	4	4			2	10	62	8	4				12	198	28	52	1		24	105
Animator - Junior	3411	☹	3	52	51	41	4	1					97	20	13	4				17	33	27	6				31	105	91	49	4	1		145
Generalist TD - Lead/Senior	3416	✓	4		3	2			1				6		1					1		2					2		6	2			1	9
Generalist TD - Mid	3416	✓	3	1	7	7			4			1	19		2	1			1	4	1	4	1				5	2	13	9			6	28
Generalist TD - Junior	3416	☹	3		2	5	2		1		1		11		1	1				2		1					1		4	6	2		2	14
Effects TD - Lead/Senior	3416	✓	[illegible]	9	5	10		1	5		1	3	25	3	1	1			1	3	6	5	1				4	18	9	22		1	10	32
Effects TD - Mid	3416	✓	4	11	10	12	1		2		2		27	4	3	1				4	7	5	1				6	22	18	14	1		4	37
Effects TD - Junior	3416	☹	3	12	5	24						1	30	5	1	2				3	8	3	2				5	25	9	28			1	38
Lighting TD - Lead/Senior	3416	✓	4	18	5	6		1	1		4		17	7	1	1			1	3	11	3	1				4	36	9	8		1	6	24
Lighting TD - Mid	3416	✓	3	13	7	18			2				27	5	2	2				4	8	4	2				6	26	13	22			2	37
Lighting TD - Junior	3416	☹	3	13	15	28			2				45	5	4	3				7	8	8	3				11	26	27	34			2	63
Pipeline TD - Lead/Senior	3416	✓	[illegible]	2	1	2			2				5	1							1	1					1	4	2	2			2	6
Pipeline TD - Mid	3416	✓	4	4	3	1							4	2	1					1	3	2					2	3	6	1				7
Pipeline TD - Junior	3416	☹	4		3								3		1					1		2					2		6					6
Crowd TD - Lead/Senior	3416	✓	[illegible]	4	2					1			3	2	1					1	3	1					1	3	4				1	5
Crowd TD – Mid	3416	✓	[illegible]	12	1	5			1				7	5		1				1	8	1					1	25	2	6			1	9

Table 9 - VFX and Animation Recruitment (cont)			2018 Survey – mostly large companies											Estimate for 40 mid-size companies							Estimate for small companies							Estimated total recruitment						
									Non-EEA																									
Job Title	SOC	SOL	Recruitment Difficulty	Vacancies 12/2018	UK	EU (ex. UK and IE)	EEA	Ireland	Tier 2 (Gen) Visa	Tier 5 (YM) Visa	Tier 5 (S&C) Visa	Other non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL
Concept Artist - Mid		↩	3			4							4																	4				4
Concept Artist - Junior		↩	2			2							2																	2				2
Texture Artist - Lead/Senior	3421	✓	3	2	1	1			3		1		6	1							1	1					1	4	2	1			4	7
Texture Artist - Mid	3421	✓	2	3	2	3							5	1	1					1	2	1					1	6	4	3				7
Texture Artist - Junior	3421	◎	2			3							3																	3				3
Shader Writer - Lead/Senior	2136	✓	5																															
Shader Writer - Mid	2136	✓	4																															
Shader Writer - Junior	2136	◎	4																															
Previs Artist - Lead/Senior		↩	3	2	1	3							4	1							1	1					1	4	2	3				5
Previs Artist - Mid		↩	3	3	1							1	2	1							2	1					1	6	2				1	3
Previs Artist - Junior		↩	2	1	1	4	1						6								1	1					1	2	2	4	1			7
2D Sequence Supervisor			3																															
2D Supervisor	3416	✓	4	3	3								3	1	1					1								4	4					4
Compositing Artist - Lead/Senior	3421	✓	4	10	32	28			3		2	1	66	4	8	3			1	12	6	16	3				19	20	55	35			7	97
Compositing Artist - Mid	3421	✓	3	15	29	43		3	1		1	1	78	6	8	4				12	9	15	4				19	30	52	51		3	3	109
Compositing Artist - Junior	3421	◎	2	6	10	23	1						34	2	3	2				5	4	5	2				7	12	18	27	1			46
Compositing Artist - Apprentice	3421	✓	1	4										2							3							9						
Roto Prep Artist - Lead/Senior			3	1	1	1							2								1	1					1	2	2	1				3
Roto Prep Artist - Mid			2		2								2		1					1		1					1		4					4
Roto Prep Artist - Junior			1		6	4	1			1			12		2					2		3					3		11	4	1		1	17
Stereo Artist - Lead/Senior	3421	✓	5		2			1					3		1					1		1					1		4			1		5
Stereo Artist - Mid	3421	✓	4		1	1							2									1					1		2	1				3
Stereo Artist - Junior	3421	◎			2	2							4		1					1		1					1		4	2				6
VFX Producer	3416	✓	5	4	11	1		1	1			1	15	2	3					3	3	6					6	9	20	1		1	2	24
Department Manager			3		2	1							3		1					1		1					1		4	1				5

Table 9 - VFX and Animation Recruitment (cont)			2018 Survey – mostly large companies											Estimate for 40 mid-size companies							Estimate for small companies							Estimated total recruitment						
									Non-EEA																									
Job Title	SOC	SOL	Recruitment Difficulty	Vacancies 12/2018	UK	EU (ex. UK and IE)	EEA	Ireland	Tier 2 (Gen) Visa	Tier 5 (YM) Visa	Tier 5 (S&C) Visa	Other non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL
Bidding Producer	3416		5		2	1							3		1					1									3	1				4
Artist/Crew Manager			3		1								1									1					1		2					2
Production Manager / Line Producer	3416	✓	3	6	14	11			7	1	1	3	37	2	4	1			1	6	4	7	1				8	12	25	15			15	51
Production Co-ordinator	3416	↩	2	9	38	23		1		4			66	3	10	2				12	6	20	2				22	18	68	27		1	4	100
Production Assistant			1	1	32	10		2				1	45		8	1				9	1	17	1				18	2	57	12		2	1	72
Software Developer - Senior	2136	✓	5	11	9	4			1				14	4	2					2	7	5					5	22	16	4			1	21
Software Developer - Mid	2136	✓	4	10	4	8			6				18	4	1	1			1	3	6	2	1				3	20	7	10			7	24
Software Developer - Junior	2136	◎	3		6	4						1	11		2					2		3					3		11	4			1	16
Software Tester			5																															
Systems Administrator	2135	↩	4	1	1	2							3								1	1					1	2	2	2				4
Systems Engineer - Senior	2135	✓	4	2	4	1							5	1	1					1	1	2					2	4	7	1				8
Systems Engineer - Mid	2135	✓	4		2								2		1					1		1					1		4					4
Systems Engineer - Junior	2135	◎	3		3	4							7		1					1		2					2		6	4				10
Render Wrangler - Senior			4		1								1									1					1		2					2
Render Wrangler - Mid			3		1								1									1					1		2					2
Render Wrangler - Junior			1		3	2							5		1					1		2					2		6	2				8
Head Runner			1																															
Runner			1	5	63	10		1					74	2	17	1				18	3	33	1				34	10	113	12		1		126
Tech Runner			3	1	13	2		1					16		3					3	1	7					7	2	23	2		1		26
Reception			1	1	3							1	4		1					1	1	2					2	2	6				1	7
Library/Despatch			1		3								3		1					1		2					2		6					6
VR Developer			5			1							1																	1				1
VR TD	3416	✓	5		1								1									1					1		2					2
Interactive Developer			5																															
Designer					8	5							13		2	1				3		4					4		14	6				20

Table 9 - VFX and Animation Recruitment (cont)				2018 Survey – mostly large companies										Estimate for 40 mid-size companies							Estimate for small companies							Estimated total recruitment						
									Non-EEA																									
Job Title	SOC	SOL	Recruitment Difficulty	Vacancies 12/2018	UK	EU (ex. UK and IE)	EEA	Ireland	Tier 2 (Gen) Visa	Tier 5 (YMS) Visa	Tier 5 (SBO) Visa	Other non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL	Vacancies	UK	EU (ex. UK and IE)	EEA	Ireland	Non-EEA	TOTAL
Creative Director	3416	✓			3	1							4		1					1									4	1				5
Motion Capture - Junior			2		1								1									1					1		2					2
Motion Capture -Mid			3			1							1																	1				1
Motion Capture - Lead/Senior			[illegible]						1				1																				1	1
Colourist - Senior					1								1									1					1		2					2
Online Editor - Senior			3	1	5								5		1					1	1	3					3	2	9					9
Online Editor - Mid			3		1								1									1					1		2					2
Online Editor - Junior			3	1																	1							2						
Offline Editor - Senior			1																															
Offline Editor - Junior			1		3	1							4		1					1		2					2		6	1				7
Edit Assistant			1	3	11			1					12	1	3					3	2	6					6	6	20			1		21
Technical Operator					5								5		1					1		3					3		9					9
Layout Artist (2D computer)	3411	✓	4	11	10	18					2		30	4	3	2				5	7	5	2				7	22	18	22			2	42
Layout Artist (2D drawn)	3411	✓	4	1																	1							2						
Animation Series Director					3								3		1					1		2					2		6					6
Production Designer						1							1																	1				1
Storyboard Artist	3411	✓		1	7								7		2					2	1	4					4	2	13					13
Storyboard Assistant			4		1								1									1					1		2					2
Senior Management Roles -n.e.c.			4		8				1				9		2					2		4					4		14				1	15
HR/Recruitment/L&D Roles - n.e.c.			2	3	15	3		1		1			20	1	4					4	2							6	19	3		1	1	24
Facilities & Premises Roles - n.e.c.			2	1	9	4							13		2					2	1							2	11	4				15
Admin & Finance Roles - n.e.c.			2	2	15	1			1			1	18	1	4					4	1	8					8	4	27	1			2	30
Sales & Marketing Roles - n.e.c.			4	1	3								3		1					1	1	2					2	2	6					6
All other roles - n.e.c.				8	40	40		1	2	1		3	87	3	11	4			1	16	5	21	4				25	16	72	48		1	7	128
Graduate/Intern					7	7							14		2	1				3		4	1				5		13	9				22

UK Screen Alliance survey responses from members following publication of the Immigration White Paper

1. If your organisation had to pay the Immigration Skills Charge for all international hires (EEA and non-EEA) on Tier 2 visas, what do you believe the implications might be for your company?

• • *Huge increase in costs would limit number of foreign nationals we could hire and reduce our talent pool.*

• • Significant cost increase and a delay in recruiting for projects

• • *It would be a significant cost to the company if we were to continue to complete the level of projects we currently do in the UK. Ultimately it could have an impact on our ability to complete work in the UK*

• • Huge implications on budgets and strain on recruitment

2. Would you be in favour of abolishing the Immigration Skills Charge for roles that are on the Shortage Occupation List?

• • *Surely if these roles are on the SOL, we would like the people in the country therefore any limitations are unhelpful.*

• • *It seems fair that if a role is recognised as shortage with a minimum salary requirement and associated visa sponsorship and application fees, the company should not have to pay an additional Skills Charge.*

• • *As the roles are on Shortage Occupation List we should not be penalised as a business for the lack of local skills in those areas. We should be able to attract the best talent regardless of whether it is sourced locally or internationally*.

3. Would your company face challenges with short notice engagement of additional workers if you could not immediately bring in people quickly from the EEA due to visa application and processing delays?

- • *Most of our projects require us to recruit very quickly, especially when looking to meet deadlines so any delays in the process will have significant effects*
- • *Due to the nature of our industry, we often need to hire artists with specialised skill-sets to work on projects at short notice, due to short lead times between a project being awarded and the work being started. Often, there is a local shortage of these skills, particularly at short notice, which results in us hiring from the EEA. If we were faced with similar visa processing requirements and delays as we experience when sponsoring migrants from outside the EU, this would be detrimental to our business and could hugely impact the projects we could take on and our ability to complete these in the UK.*
- • *Yes definitely. There are already time delays when applying for Tier 2 visas and extensions. The nature of our work is we need employees to start at short notice and so if this was restricted due to additional visa applications for EEA applicants it would cause issues with keeping business progressing.*
- • *Quick access to EEA labour market is essential in the high paced nature of our hiring requirements*

4. Are you in favour of abolishing the Resident Labour Market Test?

- • *Yes, it is not fit for purpose*
- • *Advertising on Find a Job is counter-productive for us; it's time consuming taking screenshots etc and tracking applicants who are not at all appropriate for the role they've applied for. It is not somewhere we would ever source candidates. It leads to people applying who are not qualified and we have to spend time putting evidence together as to why they have not been considered. We always advertise on our website and this is where people apply.*
- • *The resident labour market test adds extra burden on employers. The rigid timeframes for approval of the application for sponsorship are a source of frustration. It is our approach to always advertise our roles to both UK and international markets. Also, with RLMT you find a number of job seekers apply for roles they are not qualified for as part of their social welfare mandate, so it does not necessarily demonstrate if there are competent local employees for that specific job role.*
- • *At the moment we are relatively unaffected by the RLMT as our key hiring roles are on the shortage occupation list and therefore not subject to this.*

5. Will reducing the educational qualification threshold to Level 3 (A level equivalent) from Level 6 (degree level) make the recruitment of overseas talent any easier?

- • *On the whole no. Most positions need a degree in VFX however it would widen opportunities in our developing apprenticeship schemes.*
- • Reducing educational qualification thresholds will open up a wider talent market for us

6. Is it your company policy to pay the Immigration Health Surcharge on behalf of a visa holder and their dependents? Will this change when IHS doubles to £400?

- • *Yes, we pay the health surcharge and will continue to do so following the rise in cost.*
- • *We are not sure whether we will be looking to change this at the moment however the cost will increase again for us, so we will come to a point where we somehow need to distribute this cost.*
- • *We currently do not pay the IHS fee, but this is under review as we are conscious that it doubling to £400/year could be a deterrent for non-EU nationals coming to the UK*
- • *No we do not pay it. This cost is incurred by the employee as it is transferable through their employments in the UK.*

- • *Yes, but It could change when the increase takes effect.*

7. Do you actively recruit from the EEA by targeted advertising or visiting the EEA for recruitment?

- • *Careers fairs, industry events, University outreach programs*
- • *Yes - extensively. We attend conferences such as FMX, visit schools and colleges several times per year as well as facilitating visits to our studio from EU schools. We also have a large network of EU employees who regularly target friends and colleagues for positions with us which we incentivise through our employee referral programme.*
- • We actively target talent globally, thus including the EEA

8. To what extent do you agree with the following statements:

We employ EEA workers because …	Average Answer
a. there are insufficient good applicants from the UK	*Agree*
b. EEA applicants are better qualified than UK applicants	*Slightly agree*
c. EEA applicants are more work ready than UK applicants	*Agree*
d. EEA applicants are more skilled than UK applicants	*Slightly agree*
e. EEA applicants are more experienced than UK applicants	*Neither agree nor disagree*
f. EEA applicants are more creative than UK applicants	*Slightly agree*
g. EEA applicants have better aptitude than UK applicants	*Slightly agree*
h. EEA applicants have lower pay expectations than UK applicants	*Slightly disagree*
i. we employ the best applicants regardless of their country of origin	*Strongly agree*
j. there are specialists in the EEA that we cannot find in the UK	*Slightly agree*

9. How much do you pay EEA citizens in relation to UK citizens in the same role?
All respondents confirmed that they pay EEA and UK workers exactly the same.

10. How many of the EEA workers that you currently employ are likely to apply for settled or pre-settled status to stay in the UK beyond Brexit?

- • *We have seen a high volume apply for permanent residence already, but it is difficult to determine what will happen with the new settled status scheme depending on the final outcome of Brexit*

***11.* Will it be your company policy to pay any charges associated with achieving settled status for EEA citizens?**

- • We will probably pay this charge for employees but not dependents
- • *It is likely that we will cover the application fee for employees with 2+ years' service with the company, in line with our Settlement policy for non-EU nationals*
- • We will pay the cost of application

12. What plans does your company have to mitigate against potential talent shortages in the UK following Brexit and the imposition of visas for EEA citizens?

• • *Reassure and support our current EU talent as much as possible. Allocate budget for increased visa cost.*

• • *This will depend on the new visa scheme for EU workers and the challenges this puts on our business. We could be faced with high salary thresholds, high visa fees and processing times and restrictions on hiring certain roles or skills levels. We would need to factor visa costs into our budget. Any restrictions on us hiring certain roles or skill levels from the EU would lead us to consider doing the work in another of our locations. Since 30% of our workforce are EU nationals, we rely heavily on our ability to hire from within the EU to fill urgent vacancies in order to complete projects.*

13. What commitment does your company have to developing a home-grown workforce?

• • *Working with universities to upskill UK applicants during their courses. Running our own training academies for recent graduates. Collaborating with Access:VFX to grow engagement with schools and increase the profile of VFX as a career. Apprenticeship programmes.*

• • *We have a huge commitment to ensuring we continue to develop home-grown and local talent; our Talent Acquisition team has a network of schools and Universities that we actively engage with annually and they have a frequent presence at National careers fairs. We offer our industry expertise to the course tutors in reviewing and advising on course content. We spend time with the students coaching them on career opportunities and giving them industry mentorship. We provide apprenticeships and a trailblazer employer for both the VFX apprenticeships. We are a founding partner of the next NextGen FE courses and continue to steer & support input into these routes.*

• • *We are dedicated to growing our talent internally, proving training to Artists in order to develop their skills and create career paths within the company.*

• • *Engagement with Access: VFX programme, talent team outreach programme – work experience. Intern programme, apprenticeships.*

UK Screen Alliance response to MAC Shortage Occupation List review (Annex B)

1. **Please indicate from which of these industries are you providing evidence?** Media and Communications (Film & TV)

2. Please provide details of individual job titles you/your members have found hard to fill

Job Title	**ONS job title**	**ONS SOC**	**SOL**
VFX Supervisor	Arts officers producers and directors	3416	Current
2D Supervisor	Arts officers producers and directors	3416	Current
3D Supervisor	Arts officers producers and directors	3416	Current
CG Supervisor	Arts officers producers and directors	3416	Current
Producer	Arts officers producers and directors	3416	Current
Production Manager	Arts officers producers and directors	3416	Current
Technical Director (includes specialisms – Effects TD, Crowd TD, Creature TD, Lighting TD, Pipeline TD and Generalist TD)	Arts officers producers and directors	3416	Current
Animator	Artists	3411	Current
Compositing Artist	Graphic designers	3421	Current
Matte Painter	Graphic designers	3421	Current
Modeller	Graphic designers	3421	Current
Rigger (Animation)	Graphic designers	3421	Current
Stereo Artist	Graphic designers	3421	Current
Texture Artist	Graphic designers	3421	Current
Systems Engineer	IT business analysts, architects and systems designers	2135	Current
Software Developer	Programmers and software development professionals	2136	Current
Shader Writer	Programmers and software	2136	Current

	development professionals		
Creative Director	Arts officers producers and directors	3416	Request
Storyboard Artist	Artists	3411	Request
Concept Artist	Artists	3411	Request
Technical Artist	Artists	3411	Request
Layout Artist	Artists	3411	Request
Pre-visualisation Artist	Artists	3411	Request[19]
VFX Editor	Photographers, audio visual and broadcasting operators	3417	Request
Production Coordinator	Arts officers producers and directors	3416	Request
Assistant Technical Director	Arts officers producers and directors	3416	Request
VFX Trainer	Arts officers producers and directors	3416	Request
Render Supervisor	Programmers and software development professionals	2136	Request

19 Request to add Previs Artist in its own right. Currently sponsored under the Animator job role

3. What do you think are the main reasons for job shortages above and /or wider shortages in the sector?

There is a global shortage of skilled VFX and animation workers in an industry sector that has expanded rapidly during the past 20 years. These are niche roles and there is considerable competition for the best recruits by other territories in North America and Europe. Technological advances have opened up many new possibilities for filmmaking and now significantly high numbers of VFX artists are utilised to create photo-realistic effects to enhance the required narrative in ways that were not hitherto possible. This in turn has driven audience expectations in that each new film is expected to “top” the previous offerings.

The UK’s universities have been unable to keep up with demand and whilst there are a reasonable number of UK graduates, many fall short of the high standards required to compete at an international level. A gap has opened up between the abilities of UK university graduates and the expectations of employers. European universities and film schools are often cited by employers as producing more work-ready graduates than UK universities. They require minimal on-the-job training before they can slot into teams and work at the high standards required.

The UK’s primary and secondary education systems do not provide sufficient emphasis to creative subjects and the omission of arts subjects from the EBacc is serious mistake. Many job roles in VFX and animation require specific blends of arts and sciences coupled with advanced computing skills. This combination of subjects is often not available within school curricula through limited GCSE options.

Schools career advisors need to be more aware of the breadth of job roles available. The film and TV industries are not just about actors, presenters and directors. More advice needs to available in schools particularly around the subject choices which lead to jobs behind the camera and in post-production, VFX and animation. There is a mistaken perception by parents and guardians of school children that jobs in the creative sector are not “proper jobs”. There should be more messaging that careers in VFX and animation do provide job security, financial reward and a genuine career pathway. These jobs will also be highly resilient to the rise of Artificial Intelligence which will negatively impact prospects within many more traditional occupations.[20] In 2018, NESTA identified Animation as the number one digital skill to future proof your job.

[20] https://www.nesta.org.uk/news/nesta-identifies-the-digital-skills-required-for-a-future-proof-job/

4. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and/or research

a. NextGen Skills Academy – Industry owned programme in Further Education (16-18 year olds). Network of FE colleges teaching an industry deigned curriculum with a package of support from industry professionals. Qualification is a Level 3 diploma in Animation, VFX and Games. b. VFX apprenticeships – Some spectacular personal successes here, despite real difficulties making the government rules work in our industry. This is more testament to the on-the-job experience gained rather than off-the-job training from colleges.
c. Animation apprenticeship standards have been submitted to the Institute for Apprenticeships and are nearing approval
d. The Animation industry has a voluntary skills levy on production, administered by ScreenSkills under the direction of an industry agreed Animation Skills Council
e. Universities – Many VFX and animation companies have direct relationships with the best university courses.
f. Engagement with future education policy – representatives for VFX are fully engaged in the creation of T-Levels.
g. Access:VFX – Nationwide VFX industry led programme of schools outreach and careers advice to widen the available talent pool by making young people (from age 11) from diverse socio-economic backgrounds aware of the opportunities for careers. Positive action to increase inclusion in the workforce.
h. Internal training and CPD on new software and techniques
i. Some companies have an internal academy system giving an intense induction to get graduates work-ready. (e.g Aardman Animation Academy, Technicolor Academy etc)
j. AnimDojo – Online training course in animation built by industry experts
k. Summer internship and work experience programmes
l. Engagement with careers advice services such Careers and Enterprise Company, Speakers for Schools, Into Film etc.
m. Direct engagement with secondary schools to speak to year groups about career opportunities
n. Engagement with UK careers fairs such as the VFX Festival, BFX, WorldSkills Live UK, ERIC Festival, Big Bang etc.
o. Recruitment from Europe – until now this has been possible because of Free Movement – attendance at trade shows such as FMX, Annecy etc.
p. Recruitment from the rest of the world – attendance at trade shows & conferences such as Siggraph and VES
q. Global reach advertising via social media. The major companies in VFX have huge followings on Twitter, LinkedIn or Instagram. The largest number of followers for a company on a single social media platform is close to 100,000. Most companies post job adverts on two or more social platforms. There were almost 700 job adverts posted on social media during 2018.

5. **Have these measures worked, if not why?**

Global recruitment strategies have alleviated shortages in many areas but there remains a worldwide lack of suitably experienced people. The ending of free movement after Brexit will create considerable challenges for the UK's VFX and animation industries and this will exacerbate the shortages and create new shortages within role where there is currently a good supply of EU skilled people. Interventions to stimulate the home-grown talent pipeline will take as much as 10 years to make a real impact on the supply of suitable applicants.

In general, UK university engagement needs to be more coordinated at industry level in order to promote centres of excellence that deliver the work-ready high-quality graduates in sufficient numbers. Work experience needs to be built in to relevant university courses. UK Screen Alliance and Animation UK are currently working up proposals for closer HE cooperation with industry.

Interventions in FE via the NextGen programme are now beginning to feed candidates into our apprenticeship programmes. The restrictions around the apprenticeship levy and the type of training that can be provided have been very challenging and have restricted the opportunity to scale-up the programme. The amount of in-work supervision required means that the numbers are still low. Individual funding caps for apprenticeships mean that delivery is inadequately funded and doesn't provide the quality training that employers require. Whilst reliable short-course training can be purchased from private providers, very few FE colleges have staff with the appropriate ability to deliver good courses. There needs to be substantial policy change to stop the apprenticeship levy being just another employment tax, which diverts money from training budgets to the Exchequer. It would be better to reframe it as a Skills and Training Levy that can be targeted more effectively to the training needs of individual sectors.

6. Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based system?

There are 17 job roles on the SOL which are regularly used when applying for visas. After Brexit, we expect more jobs to go into shortage where current demand is filled by a ready supply of EEA workers. Whilst the use of visas is currently constrained to Senior and Mid-level roles because of cost and salary thresholds, EEA citizens are present at all levels. Providing visas for Junior level roles is predicted to be very expensive, but there are insufficient UK high quality recruits to fill these posts. There are also a number of very specialist roles we have requested to be added to the SOL that are not Junior, such as VFX Editor, for which there are shortages. There are a unique set of skills required to perform these roles well within the Film and TV industry.

7. If known how many workers from outside the UK have been recruited using the Tier 2 points-based system in the last 12 months, stating the job titles.

We estimate that between 175 and 200 new Tier 2 visas were issued to VFX and animation workers in 2018. We also estimate that a further 60 to 80 new Tier 5 visas were used. We estimate that in total there are about 400 workers on Tier 2 visas (5% of the workforce) and about 80 (1%) on Tier 5. However, we anticipate these numbers to rise rapidly after Brexit once EEA migration is included. Currently around 750 EEA workers are new hires each year. A detailed breakdown of the job roles affected is available.

Annex 1 - Jobs descriptions, employment and recruitment data for current and proposed Shortage Occupation List roles

Within the tables in this Annex, salaries are shown where relevant to SOL minimum salary thresholds, otherwise they have been redacted. Salaries are also redacted for disclosure reasons where the sample size is small and risks revealing personal information.

VFX Supervisor

Job Title	**VFX Supervisor**			
SOC code/description	3416 – Arts officers producers and directors			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+ and extensive industry experience			
Job Description	VFX Supervisors will liaise with the director and director of photography from the earliest stages to devise the techniques to be used to realise the director's vision. They will usually be present on location whilst the scenes are shot to ensure the material is captured in a way that can be used by VFX artists. All other grades in VFX work to the VFX supervisor and it requires many years of experience. VFX supervisors carry the responsibility for achieving the required effects and will be the ones who receive the international awards when it goes really well.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	106	19	1	17
TOTAL	144			
2018 Recruitment Estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	9	0	1	4
TOTAL	14			
Estimated Vacancies (Dec 2018)				
TOTAL	3			

2D Supervisor

Job Title	**2D Supervisor**			
SOC code/description	3416 - Arts officers producers and directors			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+			
Job Description	The 2D Supervisor works with and collaborates with the VFX Supervisor and CG Supervisor to establish overall look and design and develop templates to ensure efficient work flow as well as overseeing the quality and continuity of projects. The 2D Supervisor leads, communicates and delegates the compositing needs to the team as well as represents the compositing team with respect to work allocation.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	21	11	0	4
TOTAL	36			
2018 Recruitment Estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	4	0	0	0
TOTAL	4			
Estimated Vacancies (Dec 2018)				
TOTAL	4			

3D Supervisor

Job Title	**3D Supervisor**			
SOC code/description	3416 - Arts officers producers and directors			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+			
Job Description	The 3D Supervisor is responsible for overseeing the 3D department's Technical Directors, ensuring work is created to the quality and standards requested by the client and the VFX Supervisors. They design and implement the creative direction of each shot and sequence, working closely with the client to ensure that their vision is met. They have the ability to break down complex VFX shot work into achievable workflows. They contribute to the bidding stage and work closely with the VFX Producer to ensure an accurate production schedule is set up and maintained. They conduct daily review of assets and work in progress.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	37	14	2	16
TOTAL	69			
2018 Recruitment Estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	3	2	0	1
TOTAL	6			
Estimated Vacancies (Dec 2018)				
TOTAL	8			

CG Supervisor

Job Title	**CG Supervisor**			
SOC code/description	3416 - Arts officers producers and directors			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+			
Job Description	The CG Supervisor works with the VFX Supervisor and Producer and is responsible for all CG aspects of a film. The role includes developing, maintaining or improving techniques and providing team-building through developing structure, lead artist roles and delegation. The CG Supervisor also works with the Producer to facilitate the scheduling of artists and resources and works with the VFX Supervisor to provide artistic and technical notes and direction to the team. The CG Supervisor is also involved in client interactions in order to represent the company's capabilities both technically and creatively.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	47	15	0	2
TOTAL	64			
2018 Recruitment Estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	10	10	1	4
TOTAL	25			
Estimated Vacancies (Dec 2018)				
TOTAL	4			

Creative Director

Job Title	**Creative Director**			
SOC code/description	3416 – Arts officers producers and directors			
SOL Status	Not on SOL – new request			
Qualification requirement	RFQ 6+			
Job Description	The Creative Director is the most senior creative person within a VFX company. They have managerial and creative leadership of the VFX supervisors. They will mentor and motivate the team to achieve the highest possible creative standards.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	64	6	0	4
TOTAL	74			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	4	1	0	5
TOTAL	**10**			
Vacancies (Dec 2018)				
TOTAL	**0**			

Animator

Job Title		Animator			
SOC code/description		3411 - Artists			
SOL Status		On current list - request to remain			
Qualification requirement		RQF4+			
Job Description		Animators may work in a variety of mediums. Traditional stop frame animation using physical models or drawings is still regularly used in some genres, but much animation is now performed digitally. In all cases the animator brings the character to life by adding movement and personality to create a performance. There are three distinct layers of seniority which should be treated as separate job roles.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£21,500	£24,508	£28,000	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	Lead/Senior	136	39	4	40
	Mid	141	58	0	38
	Junior	119	122	1	13
	Apprentice	n/a	n/a	n/a	n/a
	SUB TOTALS	396	219	5	91
	TOTAL				
2018 Recruitment Estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	Lead/Senior	23	13	1	33
	Mid	28	51	1	24
	Junior	91	53	4	0
	Apprentice	n/a	n/a	n/a	n/a
	SUB TOTALS	142	259	6	57
	TOTAL	521			
Vacancies (Dec 2018)					
	Lead/Senior	86			
	Mid	198			
	Junior	105			
	Apprentice	n/a			
	TOTAL	389			

The high numbers of non-UK animators will make this a critical area where EEA visas will have a significant negative impact. There is an insufficient supply of suitably talented animators from the UK to back fill these roles. The £30k minimum salary threshold for Skilled Worker Visas will cause considerable difficulty in filling junior roles with emerging talent and if not relaxed will undoubtably inflict damage on the industry.

Technical Director

<table>
<tr><td colspan="2">Job Title</td><td colspan="4">Technical Director</td></tr>
<tr><td colspan="2">SOC code/description</td><td colspan="4">3416 - Arts officers producers and directors</td></tr>
<tr><td colspan="2">SOL Status</td><td colspan="4">On current list - request to remain</td></tr>
<tr><td colspan="2">Qualification requirement</td><td colspan="4">RQF6+</td></tr>
<tr><td colspan="2">Job Description</td><td colspan="4">Technical Directors or TDs require high level STEM skills, good computer literacy, coding skills and a foundation in maths and physics. In smaller studios and in advertising, TDs can be generalists but in larger studios they will often have specialisms, such as lighting, effects generation (e.g. smoke, fire and explosions), crowd replication, 3D environments, creatures or pipeline (workflow) management.
There are three distinct seniority layers within TD job roles.</td></tr>
<tr><td colspan="2">Also known as</td><td colspan="4">Effects (FX) TD, Lighting TD, Crowd TD, Environment TD, Creature TD, Pipeline TD, VR TD</td></tr>
<tr><td colspan="2">Salary Statistics</td><td>10%ile</td><td>25%ile</td><td>Median</td><td></td></tr>
<tr><td rowspan="3"></td><td>Lead/Senior</td><td>Redacted but >£30k</td><td>Redacted but >£30k</td><td>Redacted but >£30k</td><td></td></tr>
<tr><td>Mid</td><td>Redacted but >£30k</td><td>Redacted but >£30k</td><td>Redacted but >£30k</td><td></td></tr>
<tr><td>Junior</td><td>£20,829</td><td>£25,000</td><td>£28,000</td><td></td></tr>
<tr><td colspan="2">Estimated Industry Employment</td><td>UK Citizens</td><td>EU/EEA Citizens</td><td>Irish Citizens</td><td>Rest of the World</td></tr>
<tr><td rowspan="6"></td><td>Lead/Senior</td><td>237</td><td>159</td><td>6</td><td>74</td></tr>
<tr><td>Mid</td><td>214</td><td>153</td><td>3</td><td>61</td></tr>
<tr><td>Junior</td><td>195</td><td>181</td><td>2</td><td>21</td></tr>
<tr><td>Apprentice</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr>
<tr><td>SUB TOTALS</td><td>646</td><td>493</td><td>11</td><td>291</td></tr>
<tr><td>TOTAL</td><td colspan="4">1441</td></tr>
<tr><td colspan="2">2018 Recruitment Estimate</td><td>UK Citizens</td><td>EU/EEA Citizens</td><td>Irish Citizens</td><td>Rest of the World</td></tr>
<tr><td rowspan="6"></td><td>Lead/Senior</td><td>36</td><td>31</td><td>2</td><td>27</td></tr>
<tr><td>Mid</td><td>58</td><td>79</td><td>0</td><td>17</td></tr>
<tr><td>Junior</td><td>73</td><td>116</td><td>0</td><td>8</td></tr>
<tr><td>Apprentice</td><td>n/a</td><td>n/a</td><td>n/a</td><td>n/a</td></tr>
<tr><td>SUB TOTALS</td><td>167</td><td>226</td><td>2</td><td>52</td></tr>
<tr><td>TOTAL</td><td colspan="4">447</td></tr>
<tr><td colspan="6">Vacancies (Dec 2018)</td></tr>
<tr><td rowspan="5"></td><td>Lead/Senior</td><td colspan="4">125</td></tr>
<tr><td>Mid</td><td colspan="4">287</td></tr>
<tr><td>Junior</td><td colspan="4">79</td></tr>
<tr><td>Apprentice</td><td colspan="4">n/a</td></tr>
<tr><td>TOTAL</td><td colspan="4">491</td></tr>
</table>

The high numbers of non-UK Technical Directors will make this a critical area where EEA visas will have a significant negative impact. There is an insufficient supply of suitably talented TDs from the UK to back fill these roles. The £30k minimum salary threshold for Skilled Worker Visas will cause considerable difficulty in filling junior roles with emerging talent and if not relaxed will undoubtably inflict damage on the industry.

Assistant Technical Director

Job Title		**Assistant Technical Director**			
SOC code/description		3416 – Arts officers producers and directors			
SOL Status		Not on SOL – new request			
Qualification requirement		RFQ6 but apprenticeship available at RFQ4			
Job Description		The Assistant Technical Director (ATD) reports to the Head of Computer Graphics. The ATD may perform a diverse series of technical support and engineering functions in order to ensure the smooth running of our film visual effects projects, such as troubleshooting pipeline and workflow issues and managing data on a large network.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£22,000	£24,000	£24,000	
	Apprentice	£15,000	Redacted	Redacted	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		1	0	0	0
Mid		1	1	0	0
Junior		16	11	0	0
SUB TOTALS		18	12	0	0
TOTAL		30			
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		0	0	0	0
Mid		0	0	0	0
Junior		4	3	0	0
SUB TOTALS		4	3	0	0
TOTAL		7			
Vacancies (Dec 2018)					
Lead/Senior		4			
Mid		2			
Junior		2			
Apprentice		4			
TOTAL		12			

Composting Artist

Job Title		Compositing Artist			
SOC code/description		3421 – Graphic Designers			
SOL Status		On current list - request to remain			
Qualification requirement		RQF6+ (but apprenticeships available at RQF4)			
Job Description		Compositing artists work at the end of the VFX process to digitally combine 3D computer generated items and digital matte paintings with live-action photography in a seamless and realistic way. There are 3 distinct layers of seniority in the compositing role.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£21,033	£25,000	£30,000	
	Apprentice	Redacted	Redacted	£16,000	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	Lead/Senior	140	44	2	22
	Mid	106	64	4	16
	Junior	82	41	1	4
	Apprentice	10	1	0	0
	SUB TOTALS	338	150	7	64
	TOTAL				
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	Lead/Senior	55	35	0	7
	Mid	52	51	3	3
	Junior	18	28	0	0
	Apprentice	0	0	0	0
	SUB TOTALS	125	114	3	10
	TOTAL	252			
Vacancies (Dec 2018)					
	Lead/Senior	20			
	Mid	30			
	Junior	12			
	Apprentice	9			
	TOTAL	71			

The high numbers of non-UK Compositing Artists will make this a critical area where EEA visas will have a significant negative impact. There is an insufficient supply of suitably talented compositors from the UK to back fill these roles. The £30k minimum salary threshold for Skilled Worker Visas will cause considerable difficulty in filling junior roles with emerging talent and if not relaxed will undoubtably inflict damage on the industry.

Matte Painter

Job Title	**Matte Painter**			
SOC code/description	3421 – Graphic Designers			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+			
Job Description	A matte painter creates virtual backgrounds to replace or embellish live action filmed material, such as adding in entirely new skylines to remove or add buildings that were out of period. They often source images from stock libraries or their own photographs which they then manipulate in software like Photoshop to meet the requirements of the shot. The Matte Painter role can be divided into 3 layers of seniority depending on experience.			
Salary Statistics	10%ile	25%ile	Median	
Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Junior	£23,309	£27,522	£31,000	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	11	5	0	0
Mid	11	9	0	2
Junior	8	9	0	0
SUB TOTALS	30	23	0	2
TOTAL	55			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	4	1	0	1
Mid	2	1	0	0
Junior	0	2	0	0
SUB TOTALS	6	4	0	1
TOTAL	11			
Vacancies (Dec 2018)				
Lead/Senior	6			
Mid	16			
Junior	2			
TOTAL				

Modeller

Job Title		**Modeller**			
SOC code/description		3421 – Graphic Designers			
SOL Status		On current list - request to remain			
Qualification requirement		RQF6+			
Job Description		Modellers create 3D digital objects; anything from fantastic creatures to everyday props. These are the basic building blocks of VFX which need to be crafted before they can be placed into shots by other specialists in the team. There are 3 levels of seniority within this job role.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£19,568	£23,240	£26,666	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		49	12	0	8
Mid		22	20	1	10
Junior		25	13	0	1
SUB TOTALS		96	45	1	19
TOTAL		161			
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		14	2	0	0
Mid		7	9	0	1
Junior		7	9	0	1
SUB TOTALS		28	20	0	2
TOTAL		48			
Vacancies (Dec 2018)					
Lead/Senior		0			
Mid		9			
Junior		2			
TOTAL		11			

Animation Rigger

Job Title	**Animation Rigger**			
SOC code/description	3421 – Graphic Designers			
SOL Status	On current list - request to remain Formerly known as Rigger. Often confused with same named role in Construction industry but is an entirely different job.			
Qualification requirement	RQF6+			
Job Description	Riggers take 3D models and work out how they are to move and add the necessary controls that will be used at a later stage by animators. This requires a knowledge of anatomy when animating creatures as the process will involve creating skeletal and muscular systems beneath the surface of the 3D creatures in order to create realistic movement which interacts correctly with skin and fur. Riggers may also animate inorganic objects such as machines, so a knowledge of mechanics is also required. Rigger jobs are classified into 3 levels of seniority.			
Salary Statistics	10%ile	25%ile	Median	
Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Junior	£23,048	£25,000	£26,000	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	20	13	0	0
Mid	14	13	0	6
Junior	16	24	0	2
SUB TOTALS	50	50	0	8
TOTAL	108			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	2	2	0	0
Mid	2	8	0	2
Junior	13	15	0	0
SUB TOTALS	17	25	0	2
TOTAL	44			
Vacancies (Dec 2018)				
Lead/Senior	4			
Mid	4			
Junior	2			
TOTAL	10			

Texture Artist

Job Title	Texture Artist			
SOC code/description	3421 – Graphic Designers			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+			
Job Description	Texture artists take the basic 3D models and add realistic surface detail. This is effectively painting in 3D using textures gained from photographs or samples. Typically, 3D computer models look too clean and perfect, so texture artists simulate real-world imperfections such as dirt, rust, patina and damage that allow the objects to blend into the scene.			
Salary Statistics	10%ile	25%ile	Median	
Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Junior	£23,140	£24,000	£29,000	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	16	13	0	6
Mid	15	17	1	3
Junior	10	11	0	1
SUB TOTALS	41	41	1	10
TOTAL	93			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	2	1	0	4
Mid	4	3	0	0
Junior	0	3	0	0
SUB TOTALS	6	7	0	4
TOTAL	17			
Vacancies (Dec 2018)				
Lead/Senior	4			
Mid	6			
Junior	0			
TOTAL	10			

Technical Artist

Job Title	**Technical Artist**			
SOC code/description	3421 – Graphic Designers			
SOL Status	Not on the SOL – request to add			
Qualification requirement	RQF6+			
Job Description	A Technical Artist on Feature Animation provides critical support to the team. A Technical Artist will troubleshoot everyday issues, design, develop, and implement new tools and processes for a particular production or department. Works closely with Technical Directors, Department Supervisors, VFX Supervisors, and the Pipeline team to maintain and further the production pipeline. Support and work with multiple departments, including modelling, texture, animation, lighting, FX, and research and development but may also specialise in one of these disciplines.			
Salary Statistics	10%ile	25%ile	Median	
	This role was not specifically surveyed in our survey but has similarities to Technical Director in remuneration			
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	This role was not specifically included in our survey but many companies counted Technical Artists in the Technical Director category			
TOTAL				
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
TOTAL				
Vacancies (Dec 2018)				
TOTAL				

Stereo Artist

Job Title		Stereo Artist			
SOC code/description		3421 – Graphic Designers			
SOL Status		On current list - request to remain			
Qualification requirement		RQF6+			
Job Description		Stereo artists are used to create stereoscopic 3D versions of movies. They require a good understanding of optics. Sometimes movies are shot with 3D in mind, but at other times the 3D is synthesised using the assets available. Stereo artists also ensure that computer generated elements composited during the VFX process sit realistically in 3D space.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	Redacted	Redacted	Redacted	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		1	1	0	0
Mid		1	0	0	0
Junior		1	0	0	0
SUB TOTALS		3	1	0	0
TOTAL		4			
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		4	0	1	0
Mid		2	1	0	0
Junior		4	2	0	0
SUB TOTALS		10	3	1	0
TOTAL		14			
Vacancies (Dec 2018)					
Lead/Senior		0			
Mid		0			
Junior		0			
TOTAL		0			

Software Developer

Job Title		**Software Developer**			
SOC code/description		2136 - Programmers and software development professionals			
SOL Status		On current list - request to remain			
Qualification requirement		RQF6+			
Job Description		Whilst much of the software for VFX and animation can be bought off the peg from vendors, individual studios will seek to create their own software to enhance and extend their capability to give competitive edge. This may be to give artists bespoke tools for a unique job or speed the workflow as assets are passed between different stages in the process.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£26,000	£30,000	Redacted but >£30k	
	Apprentice	n/a	n/a	n/a	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		34	16	1	4
Mid		58	33	0	26
Junior		34	6	0	5
SUB TOTALS		126	55	1	35
TOTAL		217			
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		16	4	0	1
Mid		7	10	0	7
Junior		11	4	0	1
SUB TOTALS		34	18	0	9
TOTAL		61			
Vacancies (Dec 2018)					
Lead/Senior		22			
Mid		20			
Junior		0			
TOTAL		42			

Shader Writer

Job Title		**Shader Writer**			
SOC code/description		2136 - Programmers and software development professionals			
SOL Status		On current list - request to remain			
Qualification requirement		RQF6+			
Job Description		All 3D objects react in different ways to the light falling on them. The shader writer creates bespoke computer code that defines the surface qualities of 3D computer generated objects in terms such as luminosity or reflectivity.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		0	0	0	1
Mid		3	1	0	0
Junior		0	0	0	0
SUB TOTALS		3	1	0	1
TOTAL		5			
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		0	0	0	0
Mid		0	0	0	0
Junior		0	0	0	0
SUB TOTALS		0	0	0	0
TOTAL		0			
Vacancies (Dec 2018)					
Lead/Senior		0			
Mid		0			
Junior		0			
TOTAL		0			

VFX Producer

Job Title	**VFX Producer**			
SOC code/description	3416 - Arts officers producers and directors			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+			
Job Description	By working with the VFX supervisor from the earliest stages of a project, VFX producers write and refine the bid/budget and schedules for the work. They will then advise on the necessary crew, artist and technical staff needed and maintain liaison between clients, supervisors and artists throughout the project.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	106	5	3	14
TOTAL	128			
2018 Recruitment Estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	20	1	1	2
TOTAL	24			
Estimated Vacancies (Dec 2018)				
TOTAL	9			

VFX Production Manager

Job Title	**VFX Production Manager**			
SOC code/description	3416 - Arts officers producers and directors			
SOL Status	On current list - request to remain			
Qualification requirement	RQF6+			
Job Description	Production managers are responsible for the flow of information between clients, supervisors and artists. They track the workflow though the various creative departments to keep the project on time and on budget. They will oversee the work of the production coordinators, who assist them in project management.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	267	34	2	17
TOTAL	243			
2018 Recruitment Estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	25	13	0	13
TOTAL	51			
Estimated Vacancies (Dec 2018)				
TOTAL	12			

VFX Production Coordinator

Job Title	**Production Coordinator**			
SOC code/description	3416 – Arts officer producers and directors			
SOL Status	Not on SOL – new request			
Qualification requirement	RFQ4			
Job Description	The VFX Production Coordinators work to the Production Manager to ensure the work stays on track in terms of time and budget and the post requires good project management and communication skills. They are the main implementers of project schedules. They will communicate the feedback from client reviews to the artists and monitor the progress of requested changes. The PC oversees the delivery of assets to the client in review and final form.			
Salary Statistics	10%ile	25%ile	Median	
	£22,191	£24,000	£26,000	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	174	43	5	17
TOTAL	239			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	68	27	1	4
TOTAL	100			
Vacancies (Dec 2018)				
TOTAL	18			

The role is not currently on the SOL, as it is an RFQ4 role. It is not currently in severe shortage as there is a ready supply of Production Coordinators from Europe, However after Brexit, there will be an insufficient supply of Production Coordinators from the UK alone to fill posts. It is skilled and vital role in VFX and animation production. The cost of visas and the £30k minimum salary threshold for EEA migrants will present severe difficulties for recruitment.

Systems Engineer

Job Title		**Systems Engineer**			
SOC code/description		2135 - IT Business analysts, architects and systems designers			
SOL Status		On current list - request to remain			
Qualification requirement		RQF6+			
Job Description		Within VFX and animation, the systems engineer will work to provide the software and hardware which the artists and technical directors use. The data requirements of VFX are very different to corporate IT in terms of data size and speed of processing, so specialist knowledge is required to design systems that are constantly exploring the edge of what is possible. Data security of valuable pre-release content is also paramount.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£17,845	£22,125	£25,313	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		38	4	0	4
Mid		62	5	1	5
Junior		26	5	0	0
SUB TOTALS		126	14	1	9
TOTAL					
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		7	1	0	0
Mid		4	0	0	0
Junior		6	4	0	0
SUB TOTALS		17	5	0	0
TOTAL		22			
Vacancies (Dec 2018)					
Lead/Senior		4			
Mid		0			
Junior		0			
TOTAL		4			

Render Supervisor

Job Title	**Render Supervisor**			
SOC code/description	2136 - Programmers and software development professionals			
SOL Status	Not on SOL – new request			
Qualification requirement	RFQ6			
Job Description	The Render Supervisor leads and manages a team responsible for developing and maintaining of software tools, providing front-line support and general management, infrastructure and deployment of the CG rendering pipeline, within a visual effects production environment. Rendering is the computationally complex and intense process of creating each finished quality frame of the film. There are typically in excess of 150,000 frames in a finished film and the production process may require many versions and revisions.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	10	1	1	1
TOTAL	13			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	2	0	0	0
TOTAL	2			
Vacancies (Dec 2018)				
TOTAL	0			

Concept Artist

Job Title		**Concept Artist**			
SOC code/description		3411 - Artists			
SOL Status		Not on SOL – new request			
Qualification requirement		RFQ4			
Job Description		The Concept Artist is responsible for the original ideation and design of characters, environments and props. They are often skilled in freehand illustration as well as digital art creation.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£22,150	£22,374	£23,750	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		8	3	0	2
Mid		5	6	0	1
Junior		1	3	0	0
SUB TOTALS		14	12	0	3
TOTAL		29			
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		6	8	0	0
Mid		0	4	0	0
Junior		0	2	0	0
SUB TOTALS		6	14	0	0
TOTAL		20			
Vacancies (Dec 2018)					
Lead/Senior		0			
Mid		0			
Junior		0			
TOTAL		0			

Storyboard Artist

Job Title	**Storyboard Artist**			
SOC code/description	3411 - Artists			
SOL Status	Not on SOL – new request			
Qualification requirement	RFQ4 but apprenticeship being developed at RFQ7. Artistic ability is more important than qualification.			
Job Description	Storyboard artists work closely with the Director, Creative Director and Concept Artists to develop the plot points and lock down the visual narrative. The storyboard presents the "action" in a series of scenes (like a comic book story), which allows producers to evaluate the project before beginning production. Storyboards are also used to provide direction and a visual reference during production. Storyboard Artists are fluent in visual storytelling and the principles of cinematic camera movement. They quickly create drawings to clearly illustrate motion scenes, involving creatures and environments, presented as sketches or more refined and detailed drawings when required.			
Salary Statistics	10%ile	25%ile	Median	
	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	26	6	0	5
TOTAL	37			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	13	0	0	0
TOTAL	13			
Vacancies (Dec 2018)				
TOTAL	2			

Layout Artist

Job Title	**Layout Artist**			
SOC code/description	3411- Artists			
SOL Status	Not on SOL – new request			
Qualification requirement	RQF6			
Job Description	The Layout Artist is responsible for creating camera moves and rough animation within a digital environment. Layout Artists work closely with the Animation Director and Visual Effects Supervisor to establish composition, timing, and continuity for each shot. When live-action photography is involved, the Layout Artist accurately recreates the set, camera moves, and actor performances to allow for seamless effects integration.			
Salary Statistics	10%ile	25%ile	Median	
	£19,497	£19,500	£25,641	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	7	4	0	1
TOTAL	12			
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	18	22	0	2
TOTAL	42			
Vacancies (Dec 2018)				
TOTAL	22			

Previsualisation Artist

Job Title	**Previsualisation Artist (aka Previs Artist)**			
SOC code/description	3411 - Artists			
SOL Status	Not specifically on the SOL but workers in this role are currently sponsored under the Animator category which has the same skill set. It would be useful for clarity to add Previs Artist as a role in its own right to avoid abiguity.			
Qualification requirement				
Job Description	Previs Artists work from an early stage in the production to take storyboards and turn them into animated sequences. They create simplified 3D objects and creatures to help the director visualise the shots and sequences in terms of motion and timing. This may occur before live action is photographed to give a guide during shooting. The previsualised assets may be composited with live action to provide temporary shots for the film editor to work with whilst the VFX elements are finessed in what can be a lengthy process.			
Salary Statistics	10%ile	25%ile	Median	
Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
Junior	Redacted	Redacted	Redacted	
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	7	1	0	2
Mid	Redacted	Redacted	Redacted	Redacted
Junior	Redacted	Redacted	Redacted	Redacted
SUB TOTALS				
TOTAL				
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior	2	3	0	0
Mid	2	0	0	1
Junior	2	5	0	0
SUB TOTALS	6	8	0	1
TOTAL	15			
Vacancies (Dec 2018)				
Lead/Senior	4			
Mid	6			
Junior	2			
TOTAL	12			

VFX Editor

Job Title		**VFX Editor**			
SOC code/description		3417 - Photographers, audio visual and broadcasting operators			
SOL Status		Not on SOL – new request			
Qualification requirement		RQF6			
Job Description		The VFX Editor assembles and presents VFX shots as sequences for review by the creative team, keeping them up to date with the latest versions of work in progress. They liaise with the editorial team and are responsible for the input and output of shots and sequences to/from the cutting room. They keep track of all the shots and multiple versions thereof. VFX editors will also use their creative editing ability for the making of company showreels.			
Salary Statistics		10%ile	25%ile	Median	
	Lead/Senior	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Mid	Redacted but >£30k	Redacted but >£30k	Redacted but >£30k	
	Junior	£23,471	£25,416	£26,762	
Estimated Industry Employment		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the Wor0ld
Lead/Senior		20	0	0	0
Mid		47	1	0	1
Junior		8	1	0	0
SUB TOTALS		75	2	0	1
TOTAL		77			
2018 Recruitment estimate		UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
Lead/Senior		9	0	0	0
Mid		2	0	0	0
Junior		0	0	0	0
SUB TOTALS		11	0	0	0
TOTAL		11			
Vacancies (Dec 2018)					
Lead/Senior		2			
Mid		0			
Junior		2			
TOTAL		4			

VFX Trainer

Job Title	VFX Trainer			
SOC code/description	3416 – Arts officers producers and directors			
SOL Status	Not on SOL – new request			
Qualification requirement	RFQ6+			
Job Description	VFX trainers work with the company's artists so they are able to reach their full potential and quickly adapt to new and changing VFX software and methodologies. They will be able to provide induction for new artists to familiarise them with the internal processes, software and workflows that are bespoke to the company or the current productions. This role would be well suited to either a 3D generalist with expertise in shot finishing or an experienced VFX compositor with a robust knowledge of the upstream pipeline. A passion for both teaching and learning is essential.			
Salary Statistics	10%ile	25%ile	Median	
	No data available but assume equivalent to senior artist role			
Estimated Industry Employment	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	No available data – but small numbers			
TOTAL				
2018 Recruitment estimate	UK Citizens	EU/EEA Citizens	Irish Citizens	Rest of the World
	No available data			
TOTAL				
Vacancies (Dec 2018)				
	No available data			
TOTAL				

Annex 2 – An award-winning industry

All of the award-winning and nominated companies below are either headquartered in the UK or have a substantial presence in the UK market.

Oscars 2019 – Best VFX Shortlist

Companies that have had their work nominated on the shortlist for the VFX Oscar 2019.

"Ant-Man and the Wasp" DNEG, Industrial Light & Magic, Cinesite, Technicolor, **"Avengers: Infinity War"** Framestore, DNEG, Industrial Light & Magic, Cinesite, Technicolor, **"Black Panther"** DNEG, Industrial Light & Magic, Technicolor, **"Christopher Robin"** Framestore, **"First Man"** DNEG **"Jurassic World: Fallen Kingdom"** Outpost VFX, Industrial Light & Magic **"Mary Poppins Returns"** Framestore, Cinesite **"Ready Player One"** Industrial Light & Magic, Framestore **"Solo: A Star Wars Story"** Industrial Light & Magic, Jellyfish Pictures, **"Welcome to Marwen"** Framestore

Previous winners of the VFX Oscar

2001 – **"Gladiator"** The Mill
2007 – **"The Golden Compass"** Framestore
2010 – "Inception" Double Negative
2013 – **"Gravity"** Framestore
2014 – **"Interstellar"** Double Negative
2015 – **"Ex Machina"** Double Negative, Milk VFX

In the VFX category of the Oscars in 2015, five out of the six nominees and the eventual joint winners were companies based in the heart of London.

2016 – "The Jungle Book" MPC
2017 – **"Bladerunner 2049"** Framestore, Double Negative, MPC

Academy Awards for Animation

Aardman Animations have won no less than 4 Oscars

1990 - **"Creature Comforts"** Best animated short film:

1994 – **“The Wrong Trousers***”* Best animated short film:
1996 – **“A Close Shave***”* Best animated short film:
2006 – **“Wallace & Gromit: The Curse of the Were-Rabbit”** Best animated feature:

Annex 3 – Survey methodology

UK Screen Alliance surveys the VFX and animation workforces with the assistance of the HR departments within member companies, who supply anonymised data which can be filtered and analysed via a series of pivot tables to create aggregate totals and medians. The main workforce survey is conducted annually with the most recent census date being 1st July 2018. A further survey was undertaken in November 2018 to concentrate specifically on recruitment during the year.

Table 10- UK Screen Alliance workforce survey (July 2018) coverage

	VFX	**Animation**
Companies in survey sample	15	11
Employees in survey sample,	4,001	1,008
Estimated employees in the industry[21]	8,140	1,790
Estimated survey coverage	49%	56%

Table 11 - UK Screen Alliance workforce survey (July 2018)– participating companies’ workforce size

Workforce size	**>1000**	**999-400**	**399-200**	**199-100**	**99-50**	**49-20**	**<20**
No. of Companies in sample	2	3	2	4	7	2	6

[21] BFI Screen Business report – published 2018 – featuring data from 2016

As a result of our methodology, the sample size is considerably larger yet more focussed on our subsector than the samples used from National Statistics sources such as ASHE or LFS, which we consider to be insufficiently granular to reveal high concentrations of EEA workers in sub-sectors. We admit that our data sample is selective, as our membership is skewed towards the larger companies and is likely to show higher levels of migrant workers than are prevalent in the whole industry. We take this into account when estimating the composition of the full sector. However, the companies that our sample covers are those that are providing the majority of work incentivised by the screen sector tax credits and the impact of visa restrictions should be seen in the context of the damage it could do to the considerable inward investment and positive GVA that the tax credits generate.

From our knowledge of the industry, we know that our data sample covers all the larger companies in VFX and most of the large companies in animation. The companies that are outside of our sample are most likely to have workforces of less than 100 people. We estimate there were approximately 40 relevant companies of between 20 and 100 employees that did not participate in the survey.

Table 12 shows that smaller companies with fewer than 100 employees make less use of the visa system to employ non-EEA workers. This is most likely because of the prohibitive overheads of running a sponsorship licence and the cost of international recruitment. We have excluded a few extreme outliers from this analysis due to the atypical, eclectic and unique nature of their creative operation.

Table 12- Percentages of workers from zones of origin compared to company size

Company Size	UK workers	EU/EEA workers	Rest of the World
400-1100	53%-57%	28%-40%	7%-15%
100-400	54%-71%	24%-32%	3%-12%
20-100	54%-71%	20%-37%	1%-4%
<20	67%-94%	0%-33%	0%-9%

Overall there appears to be a broad correlation with EEA recruitment that holds true for all but the smallest companies in that between 20% and 40% of workers are likely to be European. In the smallest companies the employees are most likely to be UK citizens. From our knowledge of the industry, we know that our data sample covers all of the larger companies in VFX and most of the large companies in animation. The companies that are outside of our sample are most likely to have workforces of less than 100 people. There were approximately 40 relevant companies of between 20 and 100 employees that did not participate in the survey. We estimate that they may account for a total of 1,500 further employees. There are an estimated 8,140 people employed in VFX[22] and therefore we estimate that there must be 2,500 people in companies with fewer than 20 people or working as sole traders. These are most likely to be UK citizens, with a few Europeans and hardly any non-EEA workers needing visas.

22 Direct employment estimate BFI Screen Business report 2018
23 Direct employment estimate BFI Screen Business report 2018
24 Direct employment estimate BFI Screen Business report 2018

Table 13- Estimated population of workers by zone of origin for different company sizes	**Companies in the UK Screen workforce survey**	**Next 40 companies between 20-100 employees**	**Remaining population in organisations with <20 workers**	**Total**
VFX				
Employees	4,001	1,500	2,500	8,140[23]
UK	2360 (59%)	1050 (70%)	2125 (85%)	5,535 (69.5%)
EU	1240 (31%)	405 (27%)	375 (15%)	2020 (25%)
Rest of the World	400 (10%)	45 (3%)	0 (0%)	445 (5.5%)
Animation				
Employees	1008	470	312	1790[24]
UK	721 (71%)	376 (80%)	280 (90%)	1377 (77%)
EU	199 (20%)	71 (15%)	32 (10%)	302 (17%)
Rest of the World	88 (9%)	23 (5%)	0 (0%)	111 (6%)

22 Direct employment estimate BFI Screen Business report 2018
23 Direct employment estimate BFI Screen Business report 2018
24 Direct employment estimate BFI Screen Business report 2018

We find that animation companies that specialise in digital animation tend to follow the recruitment pattern of set by VFX companies, but companies that specialise in traditional stop frame animation tend to be around 90% UK employees and relatively few employees requiring non-EEA visas. We therefore estimate a higher percentage of UK employees for animation companies than VFX companies.

To achieve an estimate of the annual recruitment for the whole VFX and animation sector, we extrapolated from the known sample in the recruitment survey, which consists of mostly large companies. Scale factors were produced for UK, EU and non-EEA recruitment based on mean percentages from Table 13. These were then scaled by the estimated number of employees relative to the survey group.

The sample in the workforce survey consists of most of the large companies but contains more mid and small companies than the recruitment survey, therefore the factors were

adjusted to take this into account. To achieve an estimate of the total employment for the whole VFX and animation sector, we extrapolated from the known sample in the workforce survey. Scale factors were produced for UK, EU and non-EEA recruitment based on mean percentages from Table 13. These were then scaled by the estimated number of employees relative to the survey group.
Table 9 was produced by multiplying the UK, EU and non-EEA recruitment in the sample for each job role by the appropriate scale factors as shown in tables 14 and 15.
Supervisory and departmental head roles were not scaled for small companies as we predict that they have a flatter management structure and these roles are less likely to exist in companies of that size.

Table 14 - Recruitment model scale factors

	Mid sized Companies		**Small Companies**	
Relative population compared to sample	1500/4001 = 0.375		2500/4001 = 0.625	
	Approx proportion of recruits	Scale factor from survey sample	Approx proportion of recruits	Scale factor from survey sample
UK	70%	0.7 x 0.375 = 0.2625	85%	0.85 x 0.625 =0.53
EU	27%	0.27 x 0.375 = 0.101	15%	0.15 x 0.625 =0.09
Non-EEA	3%	0.03 x 0.375 =0.11	0%	0 x 0.626

Table 15 - Employment model scale factors

	Mid sized Companies		**Small Companies**	
Relative population compared to sample	1500/4381 = 0.299		2500/4381 = 0.527	
	Approx proportion of employees	Scale factor from survey sample	Approx proportion of employees	Scale factor from survey sample
UK	70%	0.7 x 0.299 = 0.209	85%	0.85 x 0.527 =0.448
EU	27%	0.27 x 0.299 = 0.08	15%	0.15 x 0.527 =0.08
Non-EEA	3%	0.03 x 0.299 =0.08	0%	0 x 0.527 = 0

Annex 4 – The UK's VFX and Animation Industries in profile

Visual Effects (VFX)

Visual Effects, or VFX for short, is the digital manipulation of images to enhance, augment or entirely replace elements of live-action shots in films, TV programmes or commercials. In some cases, entire shots, backgrounds and characters may be computer generated. VFX have become intrinsic in most feature films and many TV dramas
VFX is still a relatively young industry, which has gone through a period of significant growth in volume demand and which is characterised by a constant re-invention of the technology and workflows necessary to create increasingly complex effects. The Harry Potter franchise provided a springboard by which the UK's VFX sector transformed itself from a cottage

industry to what is widely acknowledged as a world-leading centre for visual effects production. London houses six of the world's visual effects companies.
UK headquartered companies have won the VFX Oscar on numerous occasions, for *Gravity, Interstellar, The Golden Compass, Inception*, *Ex Machina* and *The Jungle Book*. In the VFX category of the Oscars in 2015, five out of six nominees and the eventual joint winners, *Double Negative* and *Milk VFX,* were British companies*.*

Image 1 - Ex Machina - Oscar winning VFX from Double Negative and Milk Visual Effects

Whether it is visualising epic super-hero struggles in *Guardians of the Galaxy*; designing magical creatures for *Fantastic Beasts;* building vast alien landscapes for *The Martian* or re-creating convincing period drama environments for *Florence Foster Jenkins, The Crown or Suffragette*, the UK's talented VFX workforce has a proven track record of delivering winning results, not just with the awards judges but also with global audiences. *Framestore, Double Negative, MPC* and *Cinesite* have long-standing reputations but the demand for VFX for High End TV series has led to the growth of a new breed of highly agile boutique VFX houses such as *Bluebolt, Union, One of Us* and *Milk*.

In 2014, Industrial Light and Magic[25], part of the Disney empire responsible for Star Wars were encouraged by the UK's film tax relief and other incentives to create 200 jobs in a new VFX studio in London.

[25] https://www.gov.uk/government/news/special-effects-giant-industrial-light-and-magic-to-create-200-jobs-at-new-london-studio

[26] Based on information from Companies House from the accounts of the leading top 10 VFX companies

The UK VFX industry competes fiercely and successfully with rival production centres around the world – USA, Canada, Australia, New Zealand, South Africa, South East Asia and the rest of Europe – to secure high volumes of inward investment work (predominantly from the USA) which helps to underpin domestic production as well as delivering significant economic and cultural benefit.
The growth in world-wide demand for VFX means that UK companies are compelled to compete internationally to gain access to a limited pool of intensively skilled and highly experienced labour necessary both to deliver large projects and to train junior staff.
The UK Government supports the VFX sector, and the wider film and television industry, to build on its world-leading status through a combination of production tax incentives and R&D tax reliefs.
In 2014, the thresholds for the UK's highly flexible Film and HETV tax credits were lowered allowing inward investment productions to qualify solely based on VFX or other post-production performed in the Britain. This change along with the introduction of the HETV tax relief helped the UK's VFX sector grow by an estimated 23% in 2015[26].

Animation

With distinct and successful centres of production excellence throughout the country, the UK has a vibrant and growing animation sector, producing animated content for television, feature films, commercials, websites and computer and video games. Key regional hubs include Belfast, Bristol, Cardiff, Dundee, London and Manchester.
Offering expertise in a wide range of specialisms, the UK animation industry is original, eclectic and celebrated for its ironic sense of humour and ability to deliver mass global appeal. It is particularly acclaimed for its pre-school storytelling and design animation, producing such hits as cut-out multimedia animation TV series Charlie and Lola (Tiger Aspect Productions) and international coproduction Ruff Tweet and Dave (Collingwood and Co). It also has a global reputation for its expertise in short film animation, such as Aardman Animation's Oscar-winning Wallace & Gromit series and Magic Light Pictures, The Gruffalo, and stop-motion animation, as showcased in Isle of Dogs, Fantastic Mr. Fox and Frankenweenie.
The UK animation industry has a long track record of creative and commercial success, both at home and abroad. Iconic programmes such as Noddy, Peppa Pig, Horrid Henry and

Thomas and Friends were devised, developed and animated in the UK, are exported around the world and have become true global phenomena.
Renowned for the development and use of innovative techniques and technology, UK animation companies are pioneers in the production of computer-generated animation for video games, and computer-generated visual effects for TV commercials and feature films. Increasingly, UK animation studios work in collaboration with overseas partners, particularly in the US, helping them to deliver their output to a wider global audience.

The UK animation industry is highly successful in terms of the ancillary licensed products that it generates, such as children's DVDs, books and toys. The licensed merchandise sales market for the UK animation sector is worth an estimated £500 million each year.
Beyond its purely economic significance, UK animation has a great cultural importance, contributing to the country's identity, fuelling children's imagination and helping to promote the UK globally.
Animation is the type of business that is central to the future of the UK economy – knowledge intense, IP generating and with real export potential. Thanks to a generous tax relief system, some support from broadcasters such as Channel 4, more flexible scheduling and the soaring popularity of the internet, the UK animation industry is well placed to go from strength to strength.

Annex 5 – Measures taken by the VFX and Animation Industries to develop UK talent

The supply of home-grown skills is an area that the VFX and animation industries have made considerable efforts in recent years. These include:
• Access:VFX – schools outreach and careers advice to widen the available talent pool by making young people (from age 11) from diverse socio-economic backgrounds aware of the opportunities for careers. Positive action to increase inclusion in the workforce has included a nationwide careers advice tour (19 events in 13 cities).

• Coordinated industry attendance undertaken or planned at major careers fairs such as WorldSkills UK Live, The VFX Festival, BFX and animation markets and festivals.

• NextGen Skills Academy – Industry owned programme in Further Education (16-18) teaching an industry deigned curriculum with a package of support from industry professionals leading to a Level 3 diploma qualification in Animation, VFX and Games.

• NextGen Futures – Summer Bootcamp entry level opportunity for Londoners aged 18 to 24

• Voluntary Animation Levy on UK production to boost CPD. Administered by ScreenSkills under the direction of an agreed industry Animation Skills Council.

• UK Screen Alliance and Animation UK events introducing London careers advisors to the sector. This has led to several speaking invitations to schools' industry encounter events.

• VFX Apprenticeships – Development of 2D Compositor and Assistant Technical Director apprenticeships. Some spectacular personal successes here, despite real difficulties making the government's apprenticeship rules work in our industry to allow the programme to scale-up. There needs to be substantial policy change to stop the Apprenticeship Levy being just another employment tax. We are actively engaged with policy-makers via CIC to improve the effectiveness of apprenticeships as an entry route to our industry.

• The UK Screen Alliance ALT scheme – A match making service to link large apprenticeship levy payers who are willing to transfer/donate a proportion of their levy payment for the benefit of smaller companies willing to take on apprentices.

• Development of apprenticeships in animation and post-production are nearing completion.

• Universities – Many VFX and animation companies have direct relationships with the best university courses. However, in general, university engagement needs to be more coordinated in order to promote more centres of excellence that deliver the work-ready high-quality graduates in sufficient numbers. Work experience needs to be built in to university courses. UK Screen Alliance and Animation UK are working up proposals to foster greater cooperation between industry and university.

• • Engagement with future education policy – representatives for the VFX and Animation sector are fully engaged in the creation of T-Levels through membership of the Media, Production and Broadcast T-Level panel.

• • Engagement with the new London Screen Academy.

• • Many companies run summer internship programmes.

• • The VFX and Animation sector participated in the Creative Sector Deal consultations and will engage with the Creative Careers Campaign via the Creative Industries Council and Creative Industries Federation.

However, these interventions will take as much as 10 years to make a real impact on the supply of suitable home-grown applicants, in which time if our access to global talent is restricted by an unsympathetic visa system, we risk losing our place as the world's leading base for VFX and animation.

Annex 6 – UK Screen Alliance/Animation UK member companies

VFX
Double Negative Framestore MPC The Mill Industrial Light & Magic Cinesite Milk VFX BlueBolt Union VFX Peerless One of Us Vine FX Bait Studio Axis VFX Lola Electric Theatre Collective Freefolk Outpost VFX Imaginarium Studios
Post Production
Technicolor UK Deluxe Creative Company 3 Encore Post Production Editpool Clear Cut Pictures Flix Facilities Timeline North Core Post The Other Planet Outpost VFX Gorilla TV Onsight Fifty Fifty Post The Finish Line West Digital

Animation
Aardman Animations BlueZoo Brown Bag Films Entertainment One Cake Entertainment Studio Liddell Mackinnon and Saunders Tiger Aspect Productions SpiderEye Studio AKA Acamar Films Locksmith Animation The Elf Factory Astley Baker Davies Lupus Films Jellyfish Pictures Axis Animation Flaunt Productions Cloth Cat A Productions Animation Associates Karrot Entertainment Kindle Entertainment Inflorescent Media Tinmouse Animation Finger Industries Magic Light Pictures Red Kimono Fudge Animation Salamandra Audio Post Production

WB. De Lane Lea Peacock Sound Tamborine Aquarium Fitzrovia Post

Studios
Pinewood Studios Elstree Studios 3 Mills Studios Ealing Studios

Equipment Hire
HyperActive Salon

Content Delivery and Storage Services
Beam TV Intervideo Sohonet Schedule 2

Training & Education
NextGen Skills Academy Soho Editors

Freelance Craft Talent Agencies
Independent Post Satusfaction

Affiliated Organisations
Screen Facilities Scotland Access:VFX

Other Services
Cinelab London Artem Glocal Media Sargent Disk

British Horseracing Authority

BHA MAC Submission - Data from National Trainers Federation Survey

The survey was conducted in November and December 2018.

There were 81 responses - 16.2 % of the NTF membership.

Location of responders:

Scotland 2.47% (2)
North 19.75% (16)
Midlands 8.64% (7)
Wales 1.23% (1)
East 19.75% (16)
South West 17.28% (14)
Central South and S East 30.86% (25)

Quantifying shortage:

Full time vacancies: Respondents were running at a vacancy rate of 17.25% FT employees. This equates to 214 roles amongst the respondents, which extrapolates to nearly 1300 vacancies amongst NTF members (the bulk of the training sector).

Part Time vacancies: Respondents were running at a vacancy rate of 24.6% additional PT employees. This equates to 60 roles vacant compared to the 244 current PT employed and extrapolates to around 360 part-time vacancies.

Only 6.25% of respondents did not require any additional staff.

The requirement for additional staff spread evenly through the geographical locations, demonstrating that the shortage is national not regional.

Type of staff required

Work riders 65.63%
Racing grooms 70.31%
Experienced yard staff 35.94%
Learners 10.94%
Supervisory 20.31%
None required 6.25%

Why do you need more staff now?

Increased number of horses 50%
Members of staff have left 54.69%
Changes in working practices 26.56%

Average Salaries

Work rider: £20,670
Racing groom: £20,142
Learners: £15,276

Supervisory: £25,495

NB. These figures are for basic pay and don't include overtime or prize money percentage ("pool money", which is calculated as 5% of total prize money split between the trainer's staff.)

See below, value of free accommodation.

70% of respondents provided free accommodation valued at £4,981 per annum. This figure does not include the value of utilities/Council Tax paid for by the employer.

BHA MAC Submission - Data from Thoroughbred Breeders Association Survey

The survey was conducted in November and December 2018.

49 responses (16.9%)

Location of responders:
Scotland: 0% (0)
North: 6.25% (3)
Midlands: 18.75% (9)
Wales: 8.33% (4)
East: 20.03% (10)
South West: 20.03% (10)
Central South & S.East 27.08% (13)

Quantifying shortage:

Full time vacancies: Respondents were running at a vacancy rate of 10.23%. This equates to 36 additional FT employees (36 required in additional to current 352 FT employed.) This extrapolates to 216 FT vacancies in the breeding sector.

Part Time vacancies: Respondents were running at a vacancy rate of 26.93%. This equates to 21 additional PT employees (21 required in addition to 78 current PT employed.) This extrapolates to 126 PT vacancies.

47% required more staff/ 53% did not.

The requirement for is spread across the country – mainly East, Midlands, Central and South East.

Type of staff required

Experienced stud workers 59.65%
Trainees 13.80%
Stud groom 8.78%
Riders 5.27% * These are in studs that do pre-training before the horse moves to a racehorse trainer.
Barn Leaders 3.51%
Assistant Stud Groom 1.76%

Why do you need more staff now?

The main reasons are;

1) Members of staff leaving
2) The chronic shortage of skilled staff for hard-to-fil vacancies.

Average Salaries

Senior staff: £26,000 + plus accommodation
Experienced stud worker: £21,000 plus accommodation
Learners: £14,000 plus accommodation

These figures are for basic pay and don’t include any bonuses for e.g. sales

Accommodation

80% provided free accommodation and we would value that at the same as NTF, - £4,981 per
annum. This figure does not include the value of utilities/Council Tax paid for by the employer.

British Meat Processors Association

Britsi Meat Processors Association – EU staff numbers

Region	Percentage of staff from EU
Scotland	47%
Northern Ireland	58%
Wales	71%
North West	78%
North East	69%
East Anglia	76%
South East	76%

As can be seen from the numbers above, some areas don't rely as much as others on EU staff, but if you put the two small factories aside, the typical level of EU staff is 70+%. Our plants simply cannot function without these staff.

"The pure driver for the recruitment of workers from outside of Britain is the lack of availability of applicants from the British workforce –all roles are advertised in the UKand the level of applicants from British applicants would fill less than 10% of new start vacancies. Sourcing existing pre-skilled employees (e.g butchery) from British or EU nationals is successful only from EU nationals and these now represent around 50% of our new start skilled employees, with the balance being made up again by EU Nationals (very low applicants from British nationals) with an investment being made through training to teach the skills of butchery progressing from trainee through to semi-skilled through to skilled butcher."

"The substantial majority of EU staff are recruited due to a lack of a local workforce capable (in the case of butchers) or prepared (in the case of packers) to take these positions."

"EU skilled workers (butchery / slaughterline) make up 40% of headcount, 60% of them are unskilled. It is very similar to UK staff numbers. These numbers are driven more by the fact that there are more unskilled roles in this business than skilled."

"Butcher numbers have been tight for 18 months in terms of recruiting new. Turnover has increased post Brexit and therefore the situation has worsened and will continue to do so. It is also certainly the case that unskilled recruitment has become more difficult post Brexit, our labour pool is underfilled and we are struggling to recruit the numbers locally."

"A majority of EU staff will be packing roles so non-skilled, however the two (in East Anglia and North East) sites' numbers will include around 400 skilled butchers. There will also be a further (say 300) skilled roles as the EU staff have progressed into supervisory and management roles."

"Since Brexit, the availability of labour has diminished significantly with those leaving our business citing in exit interview specifically that:

- they are taking up work in another European Country (predominantly Germany, Holland, France where there is more certainty on their future and post Brexit European pay rates has improved by a 10% margin (exchange rate changes) or
- to remain in the UK in an office / manufacturing / delivery driver type role because in a diminishing availability of labour market they are being attracted into work by sectors which would not previously have been open to them. With record employment in the UK combined with migrant workers returning to mainland Europe, other employers are adjusting their recruitment standards and finding success in the 'less attractive' food manufacturing / meat processing sector".

To train an unskilled knife worker into a skilled one takes a couple of years -this is extremely skillful and dexterous work. Workers need to be trained in the skills needed for at least 3 points of the kill line so that they can vary their work to avoid RSI problems and to accommodate shift working patterns.

Increasein pay levels could not be absorbed and would go up the supply chain and result in more expensive food for the British consumer and/or down the food chain as lower farmgate prices for producers.

Automation is not the answser to the labour shortage in many jobs in a slaughterhouse or cutting plant as it is not able to perform the tasks as well as people. Even if automation were in devleopment, it will not ready and installed in the timescales of Brexit (the next 5 years).

	Starters Weekly Paid
UK	200
EU	785
Other	20
Unknown	15

Based on 12 month period

British Medical Association

The state of pre and post-graduate medical recruitment in England, September 2017

The state of pre and post-graduate medical recruitment in England, September 2017

Summary of findings

— Although still highly competitive, fewer people are applying to medical school
— Foundation Programme posts and applications are decreasing
— Applications to specialty training are decreasing
— More trainees are choosing to take time off after F2 before entering specialty training
— Nearly three quarters of all medical specialties faced under-recruitment in 2016
— There continue to be some specialties that face recruitment shortfalls year on year (to varying degrees)
— There are geographical variations in recruitment trends with the northern regions bearing the brunt of the recruitment crisis
— Recruitment shortfalls lead to junior doctor rota gaps and could signal problems staffing services down the line
— After Brexit, the NHS will continue to rely on EU and overseas recruitment to fill workforce gaps
— Ultimately, long-term fixes to service pressures and greater investment in the health service are needed, but steps can be taken now to help improve recruitment and retention to medicine in the short-medium term

1. About this briefing

This briefing examines the current state of recruitment into pre and post graduate medical education and training. It also identifies some of the key concerns and questions that need to be addressed in order to maintain high standards of patient care. The analyses are based on publicly available data, some of which were obtained via a Freedom of Information request, and were current at the time of publication. We examined data from 2013 onwards to identify any on-going issues and trends in medical recruitment. The briefing focuses on recruitment in England only, however, figures for the UK Foundation Programme are UK-wide.

2. Introduction

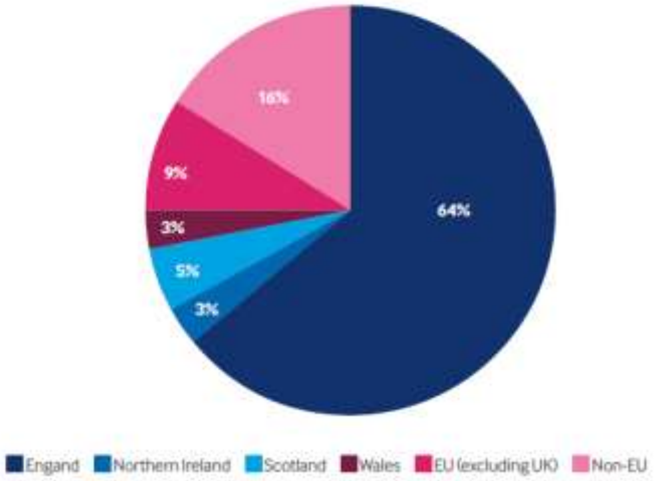
The NHS has been ranked the best healthcare system in the world for the second year in a row[1], yet it has faced years of underinvestment in the face of rising demand which has led to pressures at all levels of the system with staff working under impossible conditions. The NHS is at breaking point, plagued by workforce shortages and exacerbated by funding cuts disguised as efficiency savings. Increasing workload, low morale, stress and burnout are unfortunately characteristic of life for too many doctors working in the NHS today. For many junior doctors, the imposition of the new contract has had a demoralising effect which compounds the pressures already faced at work.
In real terms, doctors' pay has sharply declined in the past five years, with junior doctors seeing their income drop by 17 per cent. Over the same period consultants have seen their pay drop by 14 per cent and GPs by 13 per cent.2
Against this backdrop, fewer people are choosing medicine as a career with many more choosing to leave the health service at a time when they are needed most. In the sections that follow, this paper explores some of the key issues surrounding recruitment to medicine at various stages, and how the system might begin to make improvements that could positively impact recruitment and retention in the short-medium term. Ultimately, however, long term fixes to relieve service pressures and increased investment are required to safeguard the ability of the NHS to continue to deliver safe services, and the perception of medicine as a preferred career choice now and in the future. To be successful, Government, staff side unions, ALBs (arm's length bodies), regulators and royal colleges must all work together to develop innovative and practical solutions for addressing the workforce crisis and most importantly, support a properly resourced NHS.

1 http://www.commonwealthfund.org/publications/fund-reports/2017/jul/mirror-mirror-internationalcomparisons-2017
2 https://www.bma.org.uk/collective-voice/influence/key-negotiations/doctors-pay/pay-negotiations

3. Although still highly competitive, fewer people are applying to medical school

Just under 20,000 prospective medical students submitted applications to UK medical schools in the 2017 cycle. The majority of applicants were from England while the second largest group came from non-EU countries. EU nationals represented the third largest group of applicants.

Figure 1. Applicant country of origin 2017



Although medicine remains highly competitive, with only 6,000 places available in England, figures from UCAS (Universities and Colleges Admissions Service) show that the number of people applying to UK medical schools from England has decreased for the third year in a row and by more than 15% since 2013. This year, the number of EU applicants dropped to its lowest since 2013 as did applicants from non-EU countries. The 16% decrease in EU applicants from last year is notable and could reflect the uncertainties surrounding Brexit.

Table 1. Applicants for medicine courses with 15 October deadline (2017 cycle).[3]

Domicile of applicant	2013	2014	2015	2016	2017	% change from prior year (2016-2017)	% change over five years
England	14,520	14,670	12,930	12,620	12,320	-2.4	-15.2
Northern Ireland	660	590	570	580	540	-6.9	-18.2
Scotland	1,160	1,170	1,060	1,050	1,030	-1.9	-11.2
Wales	670	710	660	570	570	0	-14.9
UK	17,000	17,140	15,220	14,820	14,450	-2.5	-15.0
EU (excluding UK)	1,990	2,110	1,940	2,050	1,720	-16.0	-13.6
Non-EU	3,130	3,490	3,230	3,240	3,040	-6.2	-2.9
All	22,130	22,740	20,390	20,100	19,210	-4.4	-13.2

3.1 The rising cost of medical education and training may be a prohibitive factor for many would-be doctors

For many prospective medical students, rising tuition fees and higher student debt could be a major factor in deciding whether to attend medical school. Tuition fees were previously increased from £3,000 to £9,000 in 2012, substantially increasing the amount of debt students carry following graduation. For many, student debt can exceed £80,000 (including maintenance) and medical graduates on an average salary are unlikely to repay their SLC (Student Loans Company) debt in full.[4] With student loan interest rates set to rise to a staggering 6.1%,[5] students in England and Wales are likely to experience even more difficulty with debt in the future.

To make matters worse, tuition fees are again set to increase in line with inflation prior to 2020 following passage of the Higher Education and Research Act[6] earlier this year. As proposed, the increase in fees could then be linked to the TEF (Teaching Excellence Framework) after 2020, which could, in the long-term, lead to noticeable differences in tuition fees across providers. In responding to the proposal for TEF in 2016, the BMA argued that TEF would effectively need to be tailored to each course. Hence, the whole approach could risk misleading prospective medical students and further disrupt the successful recruitment of medical students needed to meet the country's workforce requirements and their distribution across the UK.

3.2 More needs to be done to ensure that medicine remains an attractive career choice for people from all backgrounds

While entry to medicine remains highly competitive, the decrease in the number of applications to medical courses rings alarm bells. Doctors work in highly pressurised environments and experience high levels of stress and burnout. The realities of this are not lost on those just starting out in their medical careers. More than three-quarters of medical students said that they were now less likely to recommend studying medicine to friends and family, according to a recent BMA survey.[7] More needs to be done to help doctors stay healthy while dealing with the stress of working in today's NHS if medical schools are to continue to attract the best candidates (see section 5.5 on health and wellbeing). Potential students should not be put off studying medicine by the negative experiences of existing students and doctors.

The BMA has long argued that the medical profession should be more representative of the people that it serves. However, in the past, half of all schools in the UK did not produce a single applicant to medicine and, in 2011, only four per cent of medical students came from low income backgrounds.[8] It is encouraging that the Government has made a commitment[9] to widen participation and incentivise social mobility in the medical profession, but efforts to increase diversity appear to be slowing. For example, the GMC reports that fewer women are studying and training in medicine and fewer BME trainees are working in the NHS today.[10] Widening participation by under-represented groups is key to a diverse workforce and would positively impact recruitment to the profession. The BMA's 'Right Mix' report explores the issue of widening participation in medicine in more detail.

4 http://bmjopen.bmj.com/content/5/4/e007335
5 https://www.theguardian.com/money/2017/apr/11/student-loan-interest-rate-rise-uk-inflation-brexit
6 http://services.parliament.uk/bills/2016-17/highereducationandresearch.html
7 https://www.bma.org.uk/news/2016/april/study-shows-student-dismay-over-contract
8 https://www.bma.org.uk/features/therightmix/
9 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/636527/Expansion_undergraduate_medical_education_consulation-response__2_.pdf
10 http://www.gmc-uk.org/SoMEP_2016_Chapter_two.pdf_68136455.pdf

4 **British Medical Association The state of pre and post-graduate medical recruitment in England, September 2017**

3.3 Medical school places in England will increase next year

The UK Government recently announced plans to increase the number of places at medical schools in England by 1,500 beginning in 2018/19.[11] This expansion is an effort to increase the UK's supply of home grown doctors so that the NHS can continue to deliver safe and effective care. However, the BMA has cautioned that the new places must also be matched with additional foundation and subsequent specialty training posts to mitigate the risk of unemployment within the medical profession. While the expansion might be considered a positive step toward addressing workforce shortages, Medical Schools Council data shows that there are fewer medical academics than there were in 2013[12], meaning there are fewer people to educate the increased numbers of medical students. These numbers could shrink even further if EU academics find it more difficult to live and work in the UK following Brexit. Additionally, it takes more than 10 years after selection for medical school for the prospective medical student to reach a level of training appropriate for independent practice, thus increasing medical school places is going to have little immediate impact on current pressures and workforce gaps.

International medical students

The Government has also announced plans to lift the current cap on the number of international students that can be recruited by UK universities.[13] Although this could ensure a reliable flow of students, removing the cap could create a perverse financial incentive for universities to attract more international medical students resulting either in an imbalance in the makeup of the future medical workforce or a failure to meet the workforce objectives of the expansion of medical student numbers. The BMA has advocated[14] that safeguards be put in place to protect against such an imbalance. Furthermore, more international graduates will have very little impact on the workforce if they are not permitted to remain in the UK.

4. Fewer people are applying to the UK Foundation Programme

4.1 Foundation year 1

2016 had the lowest number of applicants and the fewest appointments to F1 posts via the national allocation process since 2013. The reasons behind the fall in numbers are not

entirely clear.
Most foundation doctors are allocated via a national allocation process. However, not included in that process are those transferring from another foundation school, academic foundation posts, LTFT (less than full time) trainees who were recruited the previous year, those trainees who are repeating their F1 year, and those recruited by other methods including one-year posts, returners from maternity leave and supernumerary[15] flexible trainees [16]. These posts are all included in the final recruitment figure for the year (Table 2).

11 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/600835/Medical_expansion_rev_A.pdf
12 https://www.medschools.ac.uk/media/2026/medical-clinical-academic-staffing-levels-2017.pdf
13 https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/600835/Medical_expansion_rev_A.pdf
14 https://www.bma.org.uk/news/2014/august/bma-urges-caution-following-call-to-relax-cap-on-overseasstudents
15 Supernumerary posts are additional to a normal complement of trainees and so are often the ideal posts for LTFT trainees. As these posts are not dependent on finding someone else to take the other half or make up the other hours, they allow more independence of choice. Increasingly however they are only offered for those who require LTFT at short notice and many employers no longer offer supernumerary posts as a standard form of training, but this does not preclude a trainee from requesting a supernumerary post (source: BMA Less Than Full Time Guidance).
16 UKFPO Annual Report 2016. http://www.foundationprogramme.nhs.uk/pages/resource-bank/general
5

The number of newly qualified doctors recruited to the AFP (Academic Foundation Programme) has fallen slightly over the past three years. The number of LTFT foundation doctors recruited was less than half of what it was in 2013. The number of foundation doctors repeating their F1 year has remained steady over the past few years. Meanwhile, recruitment by other methods has increased three-fold since 2013, although numbers remain small.
The figures reported at the end of the national recruitment process don't always match the number of foundation doctors who start in post. This, according to UKFPO (UK Foundation Programme Office), is due to the fact that some withdraw from the programme before training commences at the start of August. Any posts remaining vacant are then advertised as one-year locum appointments.

Table 2. Foundation year 1 recruitment statistics 2013-2017

	2013[1]	2014[2]	2015[3]	2016[4]	% change from prior year (2015-2016)	% change over four years
Vacancies advertised (excluding AFP)	7,242	7,114	7,086	7,112	+0.4	-1.8
Applications at the time of allocation	7,537	7,349	7,438	7,157	-3.1	-2.8
Appointed through national allocation process	7,123	7,006	7,148	6,923	-3.3	-3.2
Posts not included in the national allocation process:						
Transfer from another foundation school	25	40	13	16	+23.0	-36.0
Academic recruitment	480	462	476	465	-2.3	-3.1
LTFT (recruited previous year)	51	86	55	21	-61.8	-58.8
Repeating F1	80	63	65	64	-1.5	-20.0
Recruited via other method	12	0	4	34	+750	+183.3
Total recruitment (including national allocation)	7,771	7,657	7,761	7,523	-3.1	-3.2

4.2 Foundation year 2

In 2016, the number of foundation doctors beginning the second year of their two-year foundation training was higher than in the previous year and higher than in 2013. However, total recruitment to F2 has fallen by almost three per cent since 2013. In 2016, those recruited to the second year of AFP also fell from previous years and those appointed to one-year F2 posts decreased from the previous year.
The number of foundation doctors repeating their F2 year, however, was significantly lower in 2016 than in the previous three years.

Table 3. Foundation year 2 recruitment statistics 2013-2016

	2013[5]	2014[6]	2015[7]	2016[8]	% change from prior year (2015-2016)	% change over four years
Beginning second year of two-year programme	6,688	6,961	6,334	6,781	+7.1	+1.4
Repeating F2 year	88	183	162	64	-60.5	-27.3
Appointed to one-year F2 posts (locally recruited)	323	224	313	263	-16.0	-18.6
2nd year of AFP	407	476	445	261	-41.3	-35.9
Recruited via other method	89	9	17	7	-58.8	-92.1
Total recruitment	7,595	7,853	7,271	7,376	+1.4	-2.9

Foundation trainees make up a vital part of the medical workforce and a reduction in numbers will lead to an increase in rota gaps, impacting doctors at all levels. It will also have a knock-on effect on specialty recruitment and ultimately impact the NHS' ability to provide safe services.
It is also imperative that the number of Foundation Programme and specialty training posts match the increase in medical school places to ensure that all newly qualified doctors are able to secure work in the NHS without any interruption to their training.

5. Fewer people are applying to specialty training

5.1 Fewer F2s are moving directly into specialty training

Applications to specialty training are decreasing and yet the number of training posts continues to increase year on year.

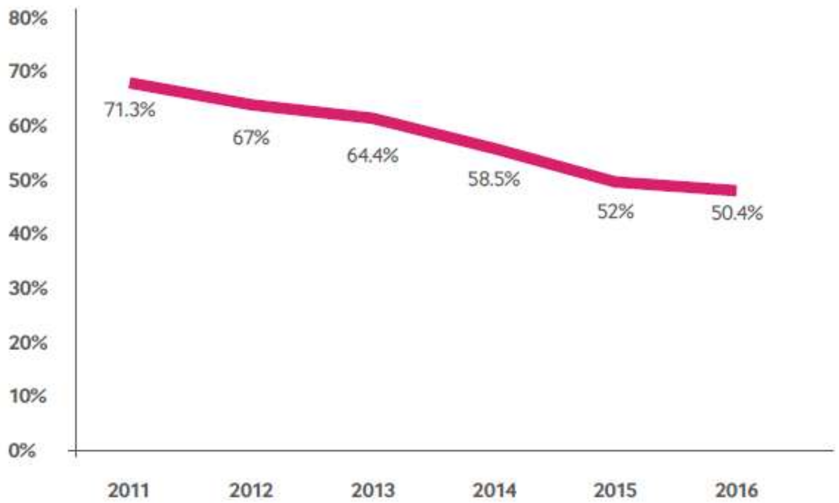
Table 4. Round 1 (CT1/ST1) overall competition ratios 2013-2016

Year of entry	2013[9]	2014[10]	2015[11]	2016[12]	% change from prior year	% change over four years
Posts*	8,061	8,192	8,545	8,766	+2.59	+8.75
Applications	16,771	16,634	16,308	15,855	-2.78	-5.46
Competition ratio	1.6:1	2:1	1.9:1	1.8:1	N/A	N/A

* The number of advertised posts may change throughout the recruitment round but was current at the time these figures were reported by Health Education England.

In 2016, just 50.4% of F2 doctors reported that they would progress directly into specialty training following completion of their Foundation Programme training.[17] This number has been steadily declining since 2011.

Figure 2 Progression into specialty training following F2 year



Because the end of the F2 year represents a natural break in training, many doctors choose to take a career break at this point.[18] The "F3" year[19], as it is commonly known, is becoming increasingly popular and future workforce planning must account for this.

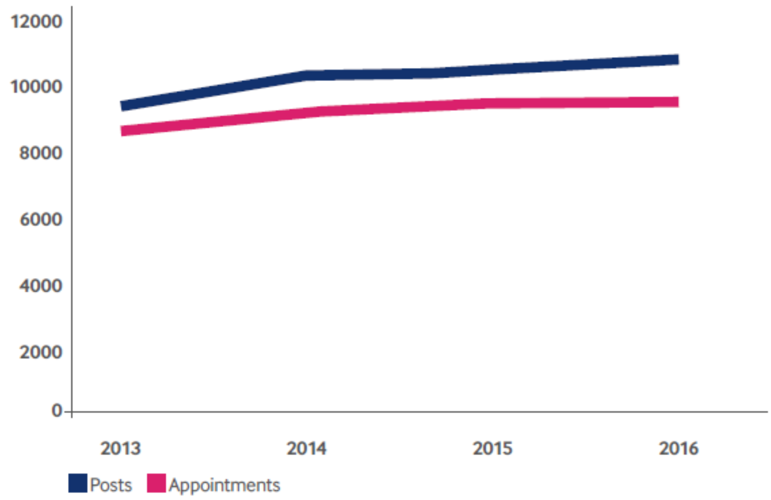
The decision to take a break at this point could be motivated by a variety of factors, such as the need for more flexibility for caring or family responsibilities, a desire to undertake further study, the chance to travel and work abroad before making the commitment to specialty training, or the need for time out due to the pressures of the service. Some doctors choose to take up locum or trust grade posts prior to choosing a specialty. It could also reflect the desire of doctors to have a better work-life balance resulting in changing attitudes toward established patterns of training and working. Future BMA research will seek to shed more light on this growing trend and the implications it has for training programmes, the nature of doctors' jobs and workload.

17 UKFPO Career Destination Report 2016
18 UKFPO Career Destination Report 2016
19 http://student.bmj.com/student/view-article.html?id=sbmj.i1125

5.2 The number of doctors applying to specialty training posts is not keeping pace with demand

The overall number of available training posts has increased in every region in England since 2013. However, there is a widening gap between the number of posts and the number of appointments, suggesting that recruitment is not keeping pace with demand.

Figure 3. Number of posts and appointments to specialty training (England)



The ratio of appointments to available training posts (fill rate) generally fluctuates year to year but overall was nearly 6% lower for all medical specialties in England in 2016 than it was in 2013. Nearly three quarters of all medical specialties faced under-recruitment in 2016.[20] Many of these specialties have experienced year on year shortfalls leading to junior doctor rota gaps and signalling difficulties staffing services down the line.

The workforce shortages in general practice, emergency medicine, paediatrics and the psychiatric specialties are widely acknowledged, and there are ongoing initiatives at the local and national levels to begin to tackle them. However, many other smaller specialties are finding it increasingly difficult to recruit trainees too, calling into question the NHS' ability to continue providing these services in the same way they are currently provided. For example, Allergy (ST3), Clinical Pharmacology and Therapeutics (ST3), Endocrinology and Diabetes Mellitus (ST3), Genito-urinary Medicine (ST3), Haematology (ST3), Metabolic Medicine (ST3) and Rehabilitative Medicine (ST3) have been unable to fill all available posts for several years.[21]

5.3 Fill rates don't tell the whole story

It is important to note that healthy fill rates do not necessarily indicate adequate overall workforce numbers in any given specialty (see below on recruitment to general practice training). While they are just one indicator and can provide a good starting point for projecting future supply of senior doctors, workforce shortages are also driven by overall failure to retain doctors in particular specialties and in particular geographical areas, high turnover and difficulties filling current vacancies at all grades. Unfortunately, there is a paucity of data on turnover of doctors at the various stages of their career which would be helpful in more fully understanding the nature of workforce shortages in the NHS. To address wider workforce challenges, both recruitment and retention strategies must be implemented at all levels of the system.

20 Specialty fill rates England 2013-2016, Health Education England. www.bma.org.uk/medicalrecruitment

21 Specialty fill rates England 2013-2016, Health Education England. www.bma.org.uk/medicalrecruitment

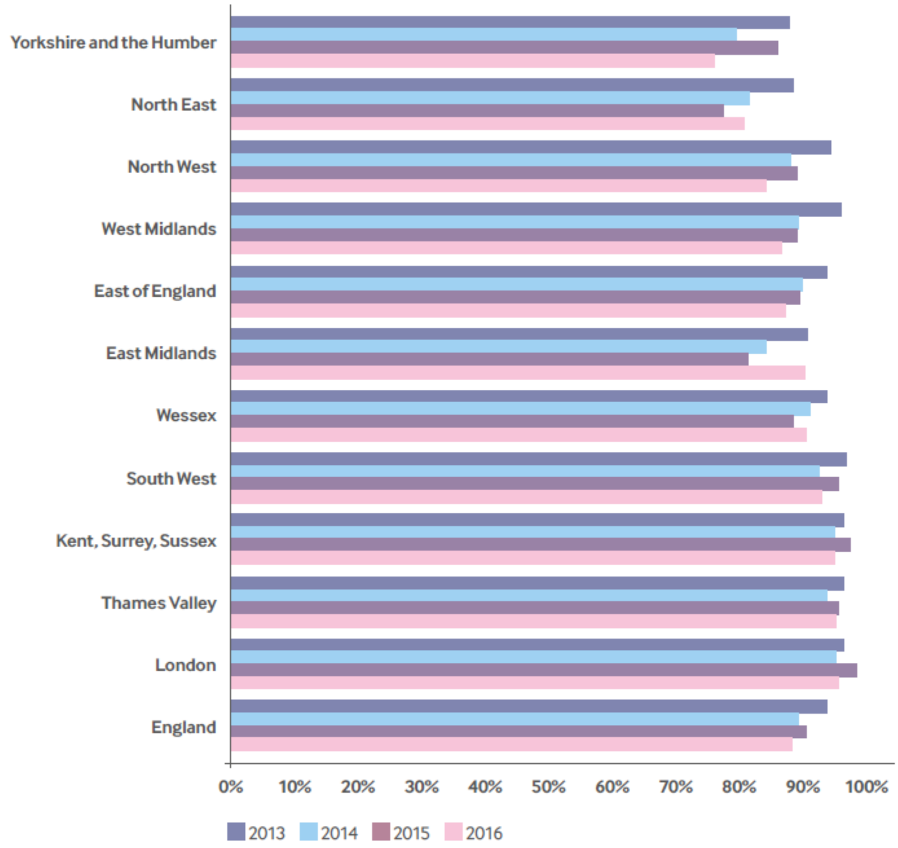
Recruitment to general practice training

The number of general practice training posts has grown from 2,761 in 2013 to 3,250 in 2016 – an increase of nearly 500. In 2016, just over 90% of these posts were filled – an increase of more than 160 appointments from the previous year.[22] While such increases should be viewed positively, they must be considered within the context of decreasing numbers of GPs working full time. With overall GP numbers stagnating, and record numbers nearing retirement[23], it is difficult to see how the Government's pledge to increase the number of GPs by 5,000 by 2020 can be realistically achieved. It is therefore not surprising that the NHS is forced to recruit from overseas in order to meet its target.

5.4 Northern regions are experiencing the brunt of the recruitment crisis

The north of England (North East, North West, Yorkshire and the Humber) experienced the lowest fill rates in the country indicating serious problems with recruitment in those regions. East of England and West Midlands have seen a steady decrease in fill rates since 2013 signalling a worsening problem with recruitment. Fill rates increase significantly in London and the southern regions.

Figure 4. Total fill rate (%) by region



22 Specialty fill rates England 2013-2016, Health Education England. www.bma.org.uk/medicalrecruitment
23 https://www.bma.org.uk/news/2017/april/nearly-half-of-gps-plan-to-quit-finds-survey

5.5 There are steps that can be taken that may improve recruitment and retention in the short-medium term

Robust recruitment initiatives and clear plans to help doctors stay working or return to working, particularly in shortage specialties, are essential. These plans must also support doctors to work safely and mitigate fatigue, stress and burnout, for example, by supporting guardians of safe working hours[24] and encouraging exception reporting.[25] While long-term fixes to address service pressures and increased investment in the medical workforce are needed to attract and keep the doctors we need to deliver safe and effective care, below are some other ways the system can make improvements that could aid recruitment and retention in the short-medium term.

Increase opportunities for flexible careers

To make a real impact on recruitment and retention for trainees, as well as for more senior doctors,

more must be done to enable flexile careers. Flexible working is becoming increasingly attractive to doctors wanting to diversify their work experience, including taking time out to study/ work overseas, as well as combining work and family life and opting for portfolio careers, including significant periods of locum work. For many younger doctors who will likely be working to 70 and beyond, flexible working offers practical, workforce retention benefits[26]. Flexible working includes not just part time working, but parental leave and carers leave, more flexibility around shift patterns, out of hours working and locum working.
Addressing these issues would make a practical difference to work life balance for doctors and could, importantly, increase the pool of doctors working in the NHS:

— **More affordable childcare that is flexible and available to cover out of hours work** – The Academy of Medical Royal Colleges[27] has found that almost 70% of doctors surveyed reported no family support, indicating most are paying expensive private providers. This cost increases for out-of-hours childcare. The imposed 2016 junior doctor contract has compounded this problem, by decreasing the number of hours that now qualify for higher "unsociable hours" pay. Providing on-site quality, flexible childcare facilities could be one way that employers could support LTFT (less than full time) doctors in work, and potentially enable them to work longer/more shifts.

— **Shared parental and carers leave** – While the right to shared parental leave exists in theory, in practice it still has very low take up. If the Government wants to change the culture to encourage more fathers to take parental leave, it must ensure that the occupational pay available for maternity leave is made available for shared parental leave in a way that will enable more fathers to utilize it in practice. Carers' leave would be an important recognition of people's caring responsibilities for older, frail and disabled relatives and allow many people to work longer.

— **More flexibility in part time medical roles** – Currently the proportion of part time working permitted depends on the LETB (local education and training board), trust, speciality and grade, as well as restrictions set by the GMC (General Medical Council). LTFTs are often also restricted on the amount of out-of-hours work they can do. Many doctors would like a wider range of opportunities for part time working and if there were more flexibility some would be able to work more hours than they are currently contracted to. A pilot in Emergency Medicine, whereby all higher trainees were offered the opportunity to train LTFT at 50%, 60% or 80%, was launched in England this year. These trainees were not required to give a reason for wanting to train LTFT, unlike the current situation, where a well-founded reason must be given for approval.

24 The guardian is responsible for overseeing compliance with the safeguards outlined in the 2016 terms and conditions of service for doctors and dentists in training. The role sits independently from the management structure, with a primary aim to represent and resolve issues related to working hours for the junior doctors employed by it. Read more here.

25 Exception reporting allows trainees to quickly and easily flag up if their actual work has varied from their agreed work schedule. Read more here.

26 Review Body on Doctors and Dentists Remuneration 2017 report, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/602319/58665_DDRB_Book_Accessible.pdf

27 "Maternity/Paternity Survey Results." Academy of Medical Royal Colleges, 2016. http://www.aomrc.org.uk/publications/reports-guidance/maternity-paternity-survey-results/

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— **Part time work should be a reality throughout medical careers** – The evidence shows that despite many wanting to work part time, the vast majority[28] of consultant posts are only advertised as full time roles. As trainees advance in their careers, fewer opt to train LTFT; the numbers plateau at ST3 and then fall at more senior grades[29]. Similarly adopting a more flexible approach may well encourage many doctors to delay retirement. Encouraging part time working throughout medical careers will reduce the stigma of and discrimination against this working pattern.

— **Further extend opportunities for less than full time training and working into academic careers**, including by encouraging funders to support innovative job-sharing schemes.

— **Deferral of training posts** – Currently, according to the Gold Guide[30], training can only be deferred for statutory reasons, or – recently for the first time – GP training in England. Giving trainees the option to defer their training posts would allow flexibility and could aid recruitment and retention.

— **Increased access to Out of Programme** – There are currently fairly stringent requirements that must be met in order to have approval for time out of a training programme, either for experience (OOPE), research (OOPR) or a career break (OOPC). Allowing trainees more capacity to take time out of programme, or to step on or step off, would allow trainees to explore outside interests, or to adapt their programme according to their personal needs. This would aid in the retention of doctors who might otherwise leave the training programme altogether.

— **Recognition of skills gained outside of training programmes** – Currently, only training completed in a recognised training programme can count towards a Certificate of Completion of Training (CCT), which means that doctors with experience in other countries or in nontraining grade posts find that this experience is not included. Early assessment of a trainee's competencies, however, would mean that trainees' expertise can be recognised early, with

potential for proceeding faster through training than they otherwise might have, in recognition of their pre-existing skills. This would also help to increase workforce numbers.
— **E -rostering** – Current arrangements for rostering shifts mean that LTFT trainees do not get advance notice of shifts and are not guaranteed the same shift patterns from week to week. They may therefore struggle to arrange shifts around fixed childcare and caring responsibilities, which e-rostering could potentially help to address. However, there are wider systemic issues that must also be considered to ensure trainees are able to access their rotas six weeks before starting a job as per the Code of Practice[31].
— **Shift patterns** – Although many trainees work beyond the end of their shift the implications of finishing late for LTFT trainees with caring responsibilities can be extremely serious. No trainee should have to work beyond their rostered hours, and the culture whereby this is acceptable (to the point where some trainees are denigrated for leaving work on time) must change to enable a healthy work-life balance.
To learn more about flexible working and less than full time training, read the BMA's guidance here.

28 Boney, Oliver. "Why male trainees should consider the flexible option." BMJ Careers, 20 Feb 2013. http://careers.bmj.com/careers/advice/view-article.html?id=20010962#ref7
29 GMC NTS survey results, 2013 quoted in BMA less than full time training guidance, appendix 2 https://www.bma.org.uk/advice/career/applying-for-training/flexible-training/what-is-ltft
30 The Gold Guide is the reference guide for specialty training in the UK.
31 The Code of Practice lays out the agreed set of information that recruiting organisations and employers should provide to doctors in training at each stage of the recruitment process, the first post and subsequent rotations.

Improve health and wellbeing services
Improving doctors' health and wellbeing must also be prioritised. One way to do this would be to provide a fully functional and resourced occupational health service for all staff working in the NHS, to help them when they are under pressure or struggling to cope with the demands of the service. Current provision is inadequate in many areas. Alongside this, the BMA itself is exploring how awareness can be raised within the medical profession about the range of health and wellbeing services (including mental health services) currently available to doctors such as BMA Counselling and the Doctor Advisor Service as well as trust or practice-based support services.

Tackle rota gaps
Alongside measures to tackle the workforce crisis, innovative thinking around alleviating the negative impacts of rota gaps is also needed. Anecdotal evidence from junior doctors suggests that many trusts are underestimating the effects of rota gaps and the impact they have on retention. According to a recent BMA survey, two thirds of respondents reported that there are currently rota gaps in the department in which they work.[32] Many trainees have reported being put under considerable pressure to accept extra shifts and cover additional wards as a result of rota gaps, leading to an increase in stress levels and contributing to feelings of burnout. The GMC found that "around one third of doctors in training, and a similar number of trainers, believe that rota gaps impact on training opportunities".[33] The BMA is currently working with junior doctors to investigate the impact of rota gaps on their working lives and identify possible ways to mitigate the worst pressures.

Address geographic variation in medical recruitment
As employers in shortage areas grapple with how to attract sufficient numbers of doctors to deliver a service, it is important to better understand how doctors choose their career paths, both in terms of specialty and location, in order to identify possible solutions. We are aware that many medical graduates tend to continue to train and work in the region of their medical school, particularly during their foundation years. However, certain parts of the country appear to be less attractive than others which could impair the NHS' ability to train doctors in these areas. To support recruitment efforts, investments need to be made to ensure that high-quality training placements are provided consistently across geographical areas.

Expand academic opportunities
Doctors in academia tend to have long careers and many continue to research and teach into their sixties. The Medical Schools Council 2017 staffing report shows that 34.4% of clinical academics are over 54 years of age compared to 18.2% of NHS consultants[34]. In addition, many clinical academics conduct research and teach beyond retirement in emeritus positions. This would suggest that widening academic practice could act as a means of retaining doctors.
There is also some evidence that we are not fulfilling the career intentions of doctors who wish to undertake academic work as part of their career. A survey of medical graduates in 2014 demonstrated that 13.5% of male doctors and 7.3% of female doctors indicated that they intended

to apply for a clinical academic training post and 6% of men and 2.2% of women specified that they wished to pursue a clinical academic career[35]. However, these figures are below the proportion of available academic jobs.

Where inclusion of an academic component of work has been tried to improve recruitment it has been successful. For example, in Wales there has been poor recruitment to core training posts in medicine, but where these posts have been changed into academic posts the competition ratio has increased to 5 applicants per post. Similarly posts in primary care in a rural area of North Wales have been successfully filled once research has been included as a key component of the post.

32 https://www.bma.org.uk/collective-voice/policy-and-research/education-training-and-workforce/quarterlysurvey/quarterly-survey-results/quarterly-survey-q2-2017

33 http://www.gmc-uk.org/2017_national_training_surveys_summary_report___initial_results_on_doctors__training_and_progression.pdf_71003116.pdf

34 https://www.medschools.ac.uk/media/2026/medical-clinical-academic-staffing-levels-2017.pdf

35 http://pmj.bmj.com/content/early/2014/08/18/postgradmedj-2014-132681

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Maintain the NHS' ability to recruit from overseas

Of particular concern is whether citizens from the rest of the EU will continue to come to the UK to study, train and work in medicine in the years following the UK's exit from the European Union. More than 10,000 doctors are currently working in the NHS, representing nearly 7% of the UK medical workforce. Any drop in numbers will only further exacerbate recruitment challenges and it is clear that the NHS will continue to rely on overseas recruitment, whether from the EU or elsewhere.

The BMA has called for permanent residence for all EEA doctors (and their families) currently living and working in the UK. We are also urging the Government to allow sufficient stay for EEA medical students currently studying in the UK to allow them to complete their courses and continue to foundation and specialty training posts. Finally, we must ensure that any future immigration system and approach to mutual recognition of professional qualifications is flexible enough to allow for recruitment of overseas doctors where the NHS cannot fill posts with qualified UK nationals. This should include undertaking a review of the Shortage Occupation List, which does not currently include all high-risk medical specialties or creating bespoke arrangements for the healthcare sector.

Improve workforce planning

Substantive workforce planning at a national level, supported by high quality data, is essential to ensure that the future healthcare workforce is sufficiently staffed and has the flexibility to be able to deliver care in different locations as required, without leaving parts of the health service inappropriately or under-staffed. Despite this, workforce planning has been devolved to HEE's regional structures, LWABs (Local Workforce Action Boards), to support STPs (Sustainability and Transformation Partnerships) although many are only in the early stages of collecting data and developing workforce strategies. This risks making future workforce planning even more difficult as STPs may not consider the impact of their local strategy on their neighbouring areas.

Workforce planning and recruitment are complex processes with multidimensional challenges. The NHS has chronically under-recruited to some specialties and geographical areas and more needs to be done to understand and plan for current and future workforce needs as well as take into account new ways of working. This paper has identified a variety of things that can be done in the short to medium term to help plug gaps in the workforce and retain doctors currently working in the NHS, but a long term strategy for a flexible and sustainable workforce that is valued and treated fairly is urgently needed.

14 **British Medical Association The state of pre and post-graduate medical recruitment in England, September 2017**

Footnotes for tables 1-4

1 UKFPO Annual Report 2013. http://www.foundationprogramme.nhs.uk/news/story/ukfpopublishes-2013-fp-annual-report-and-f2-career-destination-report

2 UKFPO Annual Report 2014 http://www.foundationprogramme.nhs.uk/news/story/ukfpopublishes-fp-annual-report-2014

3 UKFPO Annual Report 2015. http://www.foundationprogramme.nhs.uk/pages/resource-bank/general

4 UKFPO Annual Report 2016. http://www.foundationprogramme.nhs.uk/pages/resource-bank/general

5 UKFPO Annual Report 2013. http://www.foundationprogramme.nhs.uk/news/story/ukfpopublishes-2013-fp-annual-report-and-f2-career-destination-report

6 UKFPO Annual Report 2014. http://www.foundationprogramme.nhs.uk/news/story/ukfpopublishes-fp-annual-report-2014

7 UKFPO Annual Report 2015. http://www.foundationprogramme.nhs.uk/pages/resource-bank/general

8 UKFPO Annual Report 2016. http://www.foundationprogramme.nhs.uk/pages/resource-bank/general
9 http://careers.bmj.com/careers/advice/Applying_to_specialty_training%3A_considering_the_competition
10 http://careers.bmj.com/careers/advice/Specialty_training_applications_for_2015%3A_competition_ratios_and_changes_to_the_process
11 http://careers.bmj.com/careers/advice/Specialty_training_applications_for_entry_in_2016%3A_competition_ratios_and_the_application_process
12 https://specialtytraining.hee.nhs.uk/Portals/1/Competition%20Ratios%202016%20ST1_1.pdf

British Takeaway Campaign

Question 8: If you have supporting evidence such as survey results from members please attach here.

The following statistics demonstrate the takeaway sector's skills shortages:

- 68% of takeaways are experiencing a shortage in the skills necessary to run their business
- 66% say they expect skills shortages to be a challenge over the next two years
- 61% say it is difficult to recruit the staff they need
- 80% of those who find it difficult to recruit are struggling to hire chefs
- 31% specifically say current immigration rules hinder the growth of their business
- 36% believe Brexit will have a negative effect on their business, whilst a further 36% are uncertain what Brexit will mean for them
- 79% of takeaways support the introduction of the Catering and Hospitality T Level.

The following statistics demonstrate the economic contribution of the takeaway sector:

- £9.9 billion total UK spending on takeaways 2016
- £4.5 billion gross value added (GVA) annually
- Annual GVA rises to £9.4 billion when factoring in the multiplier effect of supply chain and employee spending – equivalent to 0.5% of GDP and more than telecoms, advertising or Premier League football
- 36,855 dedicated takeaways in the UK
- 12.1% of total spending on food in 2016 was on takeaway
- 34% increase in takeaway spending since 2009
- 231,350 jobs in the sector
- 41,000 new jobs created since 2009
- 13.2% of GVA of whole food services sector
- The wider hospitality industry contributes £72 billion in GVA annually.

Unless otherwise stated, all statistics used in this response are drawn from 2017 research commissioned by Just Eat for the BTC and compiled by the Centre for Economics and Business Research, or a 2018 survey carried out by Prevision of 300 restaurants on Just Eat's platform.

Annex 1: Vacancy rates for clinical scientists & technologists

Clinical Science Modality	Vacancy Rate	Projected number of years to redress shortfall at current training rate	% of overseas staff
Radiotherapy Physics	8.0%	>5 years	14%
Diagnostic Radiology & Radiation Protection Physics	11.6%	>5 years	14%
Clinical Engineering	13%	Insufficient data to project	18%
Rehabilitation Engineering	12.8%	>5 years	7.2%
Nuclear Medicine	No figures available but reports suggest that the situation is just as acute as in Diagnostic Radiology	No data available	16%
Clinical Technology Modality	Vacancy Rate	Projected number of years to redress shortfall at current training rate	% of overseas staff
Radiotherapy Physics	6.0%	>5 years	14%
Diagnostic Radiology & Radiation Protection Physics	12.8%	3-5 years	14%
Clinical Engineering	5%	Insufficient data to project	18%
Rehabilitation Engineering	9.8%	>5 years	7.2%
Nuclear Medicine	No figures available but reports suggest that the situation is just as acute as in Diagnostic Radiology	No data available	16%
Radiation Engineering	6.5%	>5 years	14%

Cavendish Coalition

Professor Alan Manning
Chair of the Migration Advisory Committee
2nd Floor Peel Building
Home Office
2 Marsham Street
London
SW1P 4DF

Dear Professor Manning,

RE: Migration Advisory Committee (MAC) call for evidence on the Shortage Occupations List

I am writing to you on behalf of the Cavendish Coalition which brings together 36 health and social care organisations in the UK united in their commitment to provide the best care to communities, patients and residents. The coalition recognises that the talented and diverse group of people we employ and represent are central to the success of that commitment, and that individuals from the UK, Europe and across the world, make a vital contribution to delivering care to the UK's population.

This letter expresses the overarching views of the Coalition with regards to your Call for Evidence on the Shortage Occupations List (SOL). In addition to this letter, several of our individual members will be formally responding to your Call for Evidence separately. Our letter makes clear our growing concern that insufficient account is being taken by policy makers of the need for the UK to access workers for health and especially social care. Whilst the technical language of 'skilled' and 'unskilled' is itself a cause for concern and no little offence for my colleagues across social care and health, the failure to recognise the pressing need for increased numbers of overseas workers across all types of roles, including the so-called 'unskilled' care workers should be of profound concern to MAC and Her Majesty's Government.

The health and care sectors in the UK are have been calling for some time for Governments to work to increase the domestic supply of a wide range of workers. Whilst some action has been taken, particularly within the NHS, Governments across the UK have failed to generate the levels of supply needed to meet the rising needs of the population[i]. Even if appropriate action should be taken on this now, increasing supply to required levels will take time. Therefore, high quality and sustainable social care and health services will continue to depend on workers from outside of the UK. This will be the case both during the period of negotiations on the UK's withdrawal from the European Union (EU) and in the years after the UK leaves.

We recognise that leaving the EU will allow the UK to re-set and review its approach to labour migration and the systems and processes which underpin it, and this includes the function of the SOL. At present the SOL has a clear purpose within the Tier 2 system, predicated on there being separate immigration routes for EEA and non-EEA nationals as required by the UK's membership of the EU. However, as we approach Brexit, the SOL's function becomes less clear, within a new immigration system for both EEA and non EEA. There are already significant challenges with regards to the present Tier 2 visa system as vital care worker and senior care worker roles do not meet the criteria within the current immigration system which disadvantages the social care sector and those relying on social care services.

The UK Government's Immigration White Paper has also left us extremely concerned about whether the new visa proposals will support recruitment of the numbers of care staff needed to sustain services. The new immigration system must adjust skills and salary levels to ensure that health and social care provision can be properly staffed by the skilled care staff it needs.

The sector relies on lower paid – but hugely skilled and valued - colleagues whose availability would be effectively cut off by a proposed salary threshold of £30,000 and with no special allowance like that recommended for seasonal agricultural workers. Either the Government needs to fund wage increases or make special provision for health and care. If the government does not address this care crisis the knock-on effects to the population and the wider economy will be enormous. People who are best cared for in their homes or in the community will need greater support from their families (putting strain on other areas of the labour market) as well as the NHS. There will be a significant detrimental impact on the safety of patients and service users.

Going forward we call on the MAC to work with us on assessing how the SOL can work effectively as a key component of the UK's immigration system to ensure that it supports our sector across the UK to address systemic workforce shortages, encouraging stronger investment in education, recruitment and retention. This is consistent with our principles as a coalition for what we want a future immigration system to achieve. These principles can be found in appendix one at the end of this letter.

The Coalition is committed to working with partners, including the MAC, to ensure that a future immigration system supports the delivery of high quality social care and health care services and many of our members will be providing responses to the MAC's call for evidence.

I hope that this letter affirms our commitment to supporting the MAC to develop an immigration policy which robustly meets the needs of our sector. I would welcome the opportunity to have further discussions with you on this important issue.

Appendix one:

As an alliance we believe that any future immigration policy should:

- Support a strategy and plan to grow and develop our domestic supply of social care and health staff.

- Maintain the ability of the sector to recruit quality and skilled staff from abroad when domestic supply is not available.

- Recognise the value and contribution of the social care and health sector to the UK population- with public service used as a primary factor to determine contribution and value, not salary and academic skill level.

- Enable the sector to attract high calibre professionals in clinical practice, research and education, and infrastructure.

- Provide opportunities for overseas nationals to learn and gain knowledge in the UK health system to support the improvement of health and healthcare systems abroad.

We have also developed six key principles which we believe should underpin immigration policy and the systems and processes it creates to ensure it is effective in the delivery of the aspirations:

- Responsive: Immigration policy must be closely co-ordinated with labour market policy and wider industrial strategy to ensure that the system works for the economic interests of the UK and is agile to meet future labour needs.

- Easy to understand: Immigration policy needs to set out clear and fair rules, underpinned by effective management, enforcement and control.

- Transparent: Immigration policy must be underpinned by clearly understood principles and decision-making must be informed by trusted evidence and open and honest debate.

- Predictable: Immigration process must be predictable and consistent so there is certainty for employers and individuals.

- Accessible: Immigration policy must be simple for individuals to navigate, employers to use and government infrastructure to oversee.

- Affordable: Immigration policy must avoid expensive burdens on employers, individuals and the government.

[i]Over 127,000 non-EEA nationals are employed in the adult social care, independent and the local authority sector in England alone. This equates to nearly 10% of the workforce.[1]

Moving forward, if the adult social care workforce in England grows proportionally to the projected number of people aged 65 and over in the population, then the number of adult social care jobs will increase by 31 percent by 2030. This is 500,000 extra jobs. In the same vein, if the English NHS continues to deliver services as now, by 2027 it will need to grow an additional 190,000 clinical posts to meet rising demand.[1]

Across the UK and across our health and care system the vital contribution of non-EEA professionals is increasing. In 2018 over 4,000 new non-EEA nurses joined the UK workforce for example, compared to just over 2,000 a year ago. There are now over 70,000 non-EEA nurses on the regulatory register.[1] In spite of this, independent workforce projections undertaken on behalf of the coalition suggests that in the short run, the UK may face an additional shortage of around 2,700 nurses. Projecting this shortfall over the Brexit transition to 2021, this research suggests that there may be a shortfall of around 5,000-10,000 nurses in addition to current vacancies.

At present, nursing vacancy rates continue to rise. In the English NHS there were approximately 41,000 RN vacancies in quarter two of 2018/19, up by 4.4% since quarter two of 2017/18. Vacancy rates in Scotland are currently 4.8%, up from 4.5% in 2017. In Northern Ireland there is an estimated NHS vacancy rate of 8.2% and while vacancy rates are not published in Wales, the 2017/18 NHS Wales agency spend for nursing & midwifery was £51m which implies significant shortages.

Communities Inshore Fisheries Alliance (CIFA)

Clyde Fishermen's Association

31th of October 2017

Dear MAC Committee,

In respect to the employment of non UK crew the Clyde Fishermen's Association would like to submit their members issues and thoughts to the current consultation.

It is very clear that the West Coast of Scotland fishing industry (all sectors, nephrops/scallops etc) has skills shortages and low crew numbers. On the West Coast fishing represents a sustainable way of life and of earning money, often when there is little else to provide for families. In mainly rural areas like Argyll and Bute the depopulation rate runs at around 4%, and in Bute itself that figure is nearer 10%, employment to and investment into the area through fishing and the landings it brings is vital.

However many boats are tied up due to the lack of a full and safe crew. Fishing associations up and down the West Coast receive almost daily phone calls from their members, desperate vessel owners and family businesses explaining that they cannot go to sea or earn a family wage without safe and skilled crew. The issue of the 12nm limit on the West Coast creates a particularly stark situation, especially for the inshore fleet who are unable to fish out beyond the 12nm.

The issue of crew shortage is linked to depopulation from rural areas, a generation of younger people heading to the cities for variety of employment and leaving behind the ways of fishing. In some instances the lack of crew has occurred due to an increase in fishermen having more daughters who haven't wished to continue the tradition of fishing. Yet there is much potential for fishing fleets to offer a back bone to Scottish and UK socio-economics, just as it does in areas like Norway. Communities thrive, families thrive and fishing thrives, supporting the national economy. Norway have managed run a fishery without the 12nm limit impeding its coastal fleets, they fish based on the ability and safety of the boat.

A fundamental issue is the way the fishing industry has considered its position outwardly. Whilst some industries have recruited younger generations into their

trade by attending career fairs, using social media to recruit, establishing formalised apprenticeships, offering formal training and by making the most of social media and marketing as a tool, the fishing industry has been slow to understand the benefits and requirements of this type of approach. Countries such as Denmark also had a similar issue around ten years and managed to turn this situation around through a longterm campaign:
http://www.fishermannow.com/
While its aspirational to copy such a scheme, it is understood that this approach would only be successful if there was enough baseline skilled fishermen to help train new generations of fishermen as well as keep a successful sustainable fishing industry functioning and developing. At least for a significant number of years West Coast fishermen believe non UK crew will be essential.

Most West Coast fishing boats need at least 5 people to operate safely, a skipper and 4 crew generally. In order to account for sickness, holidays etc the number can be higher. A slightly bigger than average West Coast boat has around 10 of a crew. On the smaller crews being one man down makes it unsafe to go to sea, therefore none of the crew can work and the boat is tied up to a cost to the owner, skipper, crew and ultimately wider communities and families who rely on the socio-economic benefits from the fishing boat. A recent example saw a 10 man crew lose 3 men, immediately the productivity reduced by 30%. In addition this West Coast boat which provided benefit directly to local rural West Coast communities had to move out of the 12nm West Coast area (where sustainable quality seafood was located) and move out to the North Sea beyond 12nm in order to replace the lost crew men with some non UK crew. The result was the fishing of a poorer seafood stock, a reduction in profits for 6 months, an increase in risk to health and indeed life by fishing in the more exposed North Sea in a boat designed for West Coast inshore waters and the breaking of the more localised socio-economic link to communities in most need.

So many boats become tied up anything from 10 weeks to 6 months of the year, it can be truly devastating for the communities and fishermen.

There is a strong wiliness amongst the fishing community to professionalise fishing training further amongst domestic crews. There is a recognition that this will take some time and fishermen themselves on the West Coast of Scotland are investing in training centres and training courses alongside improved outreach work and increased marketing to bring new starts to fishing. In a similar method to that of our Danish neighbours before us. Right now many UK recruits to the fishing industry enter by chance or because it is a last resort, so many are unsuited to the skilled requirements of the job. Often they have a low skill set and frequently issues with alcohol and drugs. This is not a risk any skippers wish to take. For many skippers they remember when navigation was taught in schools, they left school well qualified and educated skippers make for the best fishermen. The West Coast of Scotland wants to return fishing to a well respected employment status, and offer an education programme to allow young men and women to see this is a viable and interesting career path.

However there is a realisation that for the next few years non UK crew will be essential. The skills gaps to maintain sustainable fishing needs foreign crew to survive as an industry. Foreign crew is required to teach the new generations of fishermen. A major issue is the classification of fishermen as unskilled labour. Fishermen need to be aware of engineering, navigation, health and safety, sea survival, maths, commerce, boat maintenance, fish biology, IT, gear management and advanced rope work. They often perform these tasks on little sleep and in difficult conditions, the last thing they are is unskilled, indeed they are multi-skilled. The CFA would like to see a review of the classification of non UK and UK fishing workers to **skilled,** this would assist in raising the profile of the job to where it deserves to be, and it would assist with VISA requirements for non UK crew.

In addition Fishermen are often paid in shares rather than a set wage depending on what the boat makes. However the CFA would like it to be enshrined that any UK or non UK crew is paid a fair wage with a minimum set of conditions. No crew member should be treated in a different way because of his nationality. We believe the issue is a genuine skill shortage in the West Coast and we will do what we can to fairly address this, we do not seek to exploit non UK crew or develop low cost business models around lower than fair wages or payment. Likewise they should be able to benefit from structured training in the industry.

Furthermore the CFA would like to see exchange programmes established. We feel it would be beneficial for trainees to have an opportunity to work abroad, and likewise for non UK fishermen to come to the UK/Scotland on skills exchanges. It would allow them to learn new skills and the biology of different stocks in different regions, as well as learn about the culture of other fishing regions. For example in Norway and in Iceland fishermen work directly with scientists and researchers, an exchange programme would allow new fishing professionals to see how far fishing could progress by using more collaborative and smarter systems of management in the UK too.

It may be in time ratios for UK and foreign crew could be considered like in Norway, but at the moment it is a real need to help upskill.

Our association and fishermen remain available to be contacted on any points and are happy to meet with officials at anytime.

Care England

<u>Care England evidence to the Migration Advisory Committee consultation on the Shortage Occupation Lists Review 2018</u>

<u>About Care England</u>

Care England is the largest representative body for independent community care providers in England. It speaks with a single unified voice on behalf of its members and the sector, and is seeking to create an environment in which providers can continue to deliver and develop the high quality care that communities deserve. Care England members provide a wide range of services for adults with care and support needs including services in care homes, homecare, housing and community-based support and they deliver specialist services such as rehabilitation, respite, palliative care and mental health services.

Summary:
The social care sector is experiencing significant workforce pressures -and there has been a growing reliance upon both EU and Non-EU nationals to fill vacancies. The pressures are particularly felt with regard to Registered Nurses working in social care settings, but providers also have to deal with shortages of direct care workers and Registered Managers.

Skills for Care analysis shows 9.1% of care roles in adult social care are vacant, (approximately 70,000 vacancies at any one time). The vacancy rate has risen by 2.5 % between 2012/13 and 2017/18. This rise in vacancies, in the context of a workforce that has grown at a slower rate in recent years, suggests that the sector is struggling to keep up with demand as the population age[xxi]s. The Independent Care Group has cited studies showing that Brexit could leave the UK short of 380,000 care workers within the next eight years if freedom of movement is not maintained.

As part of the response to addressing these pressures, Care England is calling upon the Migration Advisory Committee to continue to **include Registered Nurses on the Shortage Occupation Lists and to also consider adding the newly created Nursing Associate role (which will be registered with the Nursing and Midwifery Council as from April 2019) as well as direct care staff and Registered Managers** (many of whom are often Registered Nurses themselves) to the lists.

The MAC recommends that the skills threshold is reconsidered to allow any job at RQF level 3, 4 and 5 to be eligible. This should be further expanded to include RQF levels 1 and 2. Alternatively, consideration should be given to recognising those vocations which require highly developed ‘soft skills’ such as compassion, care, communication and appropriate values and behaviours- typical of direct care staff working to provide highly skilled care and support for vulnerable people across the country.

1. What do you think are the main reasons for job shortages and or wider shortages in the sector?

Independent social care providers are struggling to recruit and retain staff – set against a backcloth of low prices paid by councils, competition with other sectors (to include the service and retail sector in terms of care workers- and the NHS in terms of Registered Nurses) and a poor perception of social care as a career option.

Skills for Care[xxii] estimate that there are approximately 42,000 Registered Nurses (RNs) working in the sector, but 33% have left their role within the past year and there is an estimated vacancy rate of RNs of 12.3% (around 5,000 vacancies at any given time).

As a consequence many providers rely upon recruiting foreign nationals and where recruitment issues and low prices persist, they are exiting the market regarding council placements or changing their nursing registration status (CQC noted that there was a 1.4% decline in the number of nursing homes over the course of 2017/18 – although there are regional variations depending upon local market conditions). This is counter intuitive to rising demand and the urgency to reduce NHS pressures. Care England analysis indicates that in October 2018 alone, the sector could reduce NHS costs by £8.24m through offering care home beds to patients being delayed in hospital.

It is noted that the option for providers to increase pay scales are unrealistic. Many providers are dependent on council funding (49% of residents receive council funding) whilst local government faces a £3.5bn funding gap in its adult social care budgets by 2025[xxiii] and providers are reporting that councils are not paying the true cost of care. The recent CMA study on care homes[xxiv] noted that if councils were to pay the full cost of care, the additional cost would be £1.1 billion a year.

Low Prices: Care England analysis notes:

- In 2018/19, 20% of councils gave no increase in baseline rate for nursing home placements.
- Average nursing home base rates fees paid by councils only increased by 2.4% in 2018/19. NB increases in the NMW alone was 4.4% in 2018/19

Dependence on foreign workers:

- Around 64% of RNs working in the sector were British, 17% had an EU nationality and 19% had a non-EU nationality (NB the reliance on RNs from the EU has increased from 8% of the workforce in 2012/13)

Competition with NHS:

- The mean annual pay rate in 2017/18 for RNs working in social care was £29,400. Over the same period the NHS pay band 6 was between £26,600 and £35,600.
- In 2018, NHS staff was awarded a 6.5% pay rise over 3 years.

Ending of Nursing Bursaries:

- The number of student nurses has fallen by 32% since 2016 and many professionals in the sector are critical that recent government decisions to end bursaries for nursing students will exacerbate this decline

2. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

The response to the shortage of RNs across the Health and Care Sector has been orchestrated by a number of statutory and representative organisations including innovative contributions from independent social care providers themselves.

Significant developments have included the endorsement of the Nursing Associate role (which has been supported and developed by providers). The scheme is still evolving with targets being set of 5,000 individuals to join the national scheme in 2018 and a further, 7,500 in 2019, and the Nursing and Midwifery Council (NMC) to start to register Nursing Associates as from April 2019 on similar standards as that applied to Registered Nurses.

The professionalization of the Nursing Associate role is helpful in reaffirming the skilled nature of staff working in the sector and as such this role should be included within the proposed SOL to complement the recent recognition of RNs as a SOL

The NMC has also recently adapted the English Tests being applied to foreign nationals registering as RNs as a means of supporting more entrants to the sector.

Providers themselves are looking at ways of both retaining and recruiting RNs and staff into the sector. The approaches vary and include schemes such as;

Staff Incentives:

- Incentives include some providers reviewing pay structures, refer a friend bonuses, offering flexible working, introducing “golden hellos” offering staff benefits such as vouchers, discounts at major stores, discounted health club membership, travel discounts, Childcare vouchers and paid NMC membership. However these schemes are at the discretion of the independent provider and are not universally available across the sector.

Developing Staff:

- In tandem with the evolving Nursing Associate role, many social care providers have already been developing their own local schemes to “grow their own” nurses. Examples include linking with local colleges and universities to create new career pathways for recruiting and developing nurses within nursing care homes, offering access to clinical specialist training and post graduate qualifications, as well as creating opportunities for leadership development or stepping into specialist roles.

Staff Recognition:

- Care England is a major supporter of a range of staff recognition schemes across the country, to include promoting schemes and sitting on judging panels.

3. Have these measures worked, if not why?

Despite the efforts and endeavours by independent social care providers, the significant shortfall in Registered Nurses persists, as demonstrated by the national statistics. The underlying cause is considered to be a combination of low fees paid by commissioners not meeting actual costs of care, competition from other sectors including the NHS who can offer better pay and career opportunities and a general poor perception of social care as a career option. Also simply not training enough nurses and nurse workforce planning has tended to ignore social care needs for nurses focussing only on the NHS.

Further, it is considered that recent developments regarding the Nursing Associate role and adding Registered Nurses to the SOL has not yet had time to take full effect or to be properly subject to an impact assessment by Government.

4. Supporting evidence such as survey results from members.

Care England has recently conducted a short poll of its members. The poll is only indicative and represents provider's delivery care and support over 4,700 care beds.

The poll identified that all providers responding, reported shortage of Registered Nurses and all confirmed that reasons for the shortfall directly related to competition with the NHS, as well as competition between other Providers; and that all providers experienced a low response to job adverts. All respondents supported the inclusion of the Registered Nurses role on the SOL and all were either actively or considering recruiting RNs from EA countries specifically.

The poll also asked about recruitment and retention of Registered Mangers and direct care staff. All respondents reported challenges in recruiting and retaining these staff groups, and there was general support to include these staff groups onto the SOL, with a majority respondents reporting that they are actively recruiting direct care staff from the EU and all are considering initiating recruiting for Registered Managers from both the EU and Non-EU workforce markets.

Creative Industries Federation

Response to MAC consultation on the Shortage Occupation List

4 January 2019

Contents:

About this submission

The **Creative Industries Federation** is the national organisation for the UK's creative industries, cultural education and arts, representing members in every sub-sector across all nations and regions. We are therefore in a unique position to understand the breadth of skills shortages faced by the sector and to advocate their needs.

The creative industries are one of the most valuable sectors to the UK economy with a contribution of £101.5bn to GVA in 2017, larger than the automotive, life sciences, aerospace and oil and gas industries combined. They account for one in nine UK businesses and employ more than two million people. 12.7% of all jobs in the creative industries are held by international workers and 55% of these by EU nationals.[1]

In this submission, we highlight the need for an updated shortage occupation list which reflects the needs of the creative industries. The sector faces significant domestic and international skills shortages, and any changes must be coupled with changes to the salary threshold and scrapping the immigration skills charge.

In Annex 1, you will find the results of the latest Federation survey on the Tier 2 visa system. The survey closed on 2nd January 201 9 and collected 103 responses from creative industries employers across the UK.

We also engaged in an extensive consultation with the sector and published our Global Talent Report in October 2017. You can find the report attached which outlines further recommendations.

[1] "DCMS Sectors Economic Estimates 2017: Employment." DCMS, July 2018

The government announced in its immigration white paper, published in December 2018, its intention to introduce a single immigration system covering all nationalities and sectors, and focused on skills. This includes maintaining the Tier 2 salary threshold of £30,000 and applying it to EEA hires post-Brexit. The government has also commissioned the Migration Advisory Committee (MAC) to review the shortage occupation list, which is the focus of this consultation response.

There is a clear need to expand and update the shortage occupation list. It is essential that the list keeps pace with UK skills shortages and properly reflects the needs of our sector. It should give employers as much flexibility as possible over recruitment. This should be combined with an expansion and regular review of the standard occupational classification codes and 'appropriate rates', to improve the UK's ability to track the working needs of the creative industries.

Below you will find an overview of the skills shortages and challenges faced by the sector, as well as recommendations on the shortage occupation list. These recommendations must be combined with reforms to the salary threshold and the scrapping of the immigration skills charge, alongside more effective support for companies' training programmes and backing for creative subjects in education, if skills shortages and the challenges faced by the sector are to be addressed.[2]

Given the strong levels of growth and potential growth within the creative industries (81% of creative enterprises expect to grow in the next three years[3]), it is fundamental that we ensure our creative industries have access to the full breadth of talent that they require. Access to international talent promotes growth, leading to the creation of more jobs in the economy as well as the development of the domestic workforce by bringing them into contact with the best and brightest in the world.

Skills gaps in the creative industries

Respondents to our recent survey (see Annex 1) cited a number of challenges which make it difficult for them to recruit for certain roles. These include a lack of funding, the financial and administrative burden of the current immigration system, and increased competition for talent in their market. Several respondents have also witnessed a decline in applicants recently, particularly from abroad.

They also identified a number of challenges related to both the domestic and global workforce. Respondents highlighted the lack of domestic skills due to limited training opportunities in the UK and many graduates leaving university underprepared for how the creative industries actually work. Respondents also highlighted that there are global skills gaps which cannot be addressed by upskilling the domestic workforce and which will always exist. Creative enterprises often recruit for specialist roles, particularly when working in small niche markets or with new digital technologies, where the pool of global talent is incredibly small.

These skills shortages create significant challenges for creative enterprises. A lack of domestic skills means they will often have no choice but to look abroad which introduces immigration charges, visa costs, additional advertising spend, and hiring (or training) staff with knowledge of immigration policy. An inability to fill crucial roles also delays projects, slows down business development, makes creative enterprises less agile and, overall, inhibits the growth of the sector. These issues will only get worse once we leave the EU and no longer have free movement of talent.

[2] We also support the immigration white paper's proposal to expand the Tier 2 route to medium skilled workers, to scrap the Tier 2 cap and resident labour market test, and to streamline the visa process. This should be combined with a streamlined sponsorship application process to reduce paperwork and measures to make it easier for international talent to move between employers.

[3] "Growing the UK's Creative Industries", Creative Industries Federation, 2018

As indicated in a 2017 Federation survey, conducted with over 250 creative enterprises for our Global Talent Report: 75% of creative enterprises currently employ EU nationals and two-thirds believed that these posts could not be filled by UK workers.[4]

a) Domestic Skills Gaps

The creative industries rely on international workers to fill roles where there are major skills gaps domestically.

Skills gaps are being felt across the creative industries, in particular in roles that require a mix of creative and technical skills. In the Federation's 2017 survey, 57% told us that they were facing skills shortages. Of these, 78% told us that they were not confident these would be solved in the next five years.[5]

The difficulties facing the sector stem from a mix of inadequate provision in schools, an underdeveloped technical education system and a lack of awareness about careers that the sector has to offer. The number of people studying creative subjects is declining and has been exacerbated due to the lack of importance that government has placed on creative skills and subjects:

- The number of students taking GCSE design and technology dropped by 41% between 2007/8 and 2014/15.[6]
- 2016 saw the lowest number of entries for arts subjects in England and Wales for a decade.[7]
- Entries for GCSEs in creative subjects fell by 46,000 in 2016 against a rise in subjects promoted as "core" by the government's EBacc attainment measure.[8] Entries for arts subjects in Scotland also declined.

Creative subjects and vocational training are key to the future of the UK economy and can provide people with the skills to thrive in a world more influenced by automation and artificial intelligence. As noted by Nesta and Pearson, "creative, digital, design and engineering occupations have bright outlooks and are strongly complemented by digital technology".[9]

b) Global Skills Gaps

The creative industries are incredibly innovative and use new technologies and techniques that are constantly evolving and blend a variety of skills. For example, video games developers use increasingly sophisticated artificial intelligence, fashion houses employ highly specialist craftspeople to develop unique pieces, and new materials are used by architects on construction projects.

4 "Global Talent Report" Creative Industries Federation, 2018, p.14
5 "Global Talent Report" Creative Industries Federation, 2018, p.22
6 Pooley, Emma, and Andrew Rowell. "Studying Craft 16: Trends in Craft Education and Training." Crafts Council; TBR, October 2016.
7 Johnes, Rebecca. "Entries to Arts Subjects at Key Stage 4." Education Policy Institute, September 2017.
8 Hill, Liz. "Arts in Schools Plummets, New Figures Show." ArtsProfessional, July, 2016 n.d.
9 Bakhshi, Hasan, Michael Osborne, Jonathan Downing, and Philippe Schneider. "The Future of Skills - Employment in 2030," September 2017.

The pace at which technology disrupts the creative sectors means it is not possible for industry to continuously upskill their workforce. Creative industries worldwide are therefore competing for access to a small pool of specialised talent and freelancers. Creative Carbon Scotland, for example, work on environmental sustainability in the arts and cultural sector where, for certain roles, only a handful of workers have the skills they require.

While domestic workers can be trained in foreign languages and cultures to an extent, international workers bring lived experience of overseas markets and contacts with key stakeholders on the ground. Penguin Random House for example sell international rights as a means of generating millions of pounds of profits and boosting both UK success and the profile of newer authors. These sales can only be effectively delivered by an international workforce with a sensitivity to and an ability to connect in a unique way with their cultures.

Numerous studies have shown that cultural diversity gives businesses access to a broader range of skill sets, ideas and experiences and these businesses perform better.[10] Furthermore, the UK workforce itself benefits from increased interaction with the best and brightest from across the world. This helps the domestic workforce develop new skills and practices. Our ability to bring in international staff has helped secure inward investment from multinational companies, who use the UK as a base of operations for work around the world.

An immigration system that tackles skill shortages

It is vital that the UK's immigration system gives the creative industries access to world leading talent with relative ease, and that Britain retains its reputation as an attractive place to live and work. This is essential to the continued growth of the sector and if we are to reach the Creative Industries Sector Deal target of increasing the value of creative industries' exports by 50% by 2023.

a) Shortage occupation list

There are currently around 22 creative industries job titles on the shortage occupation list, which cover dancers, musicians, animators and graphic designers. However, the shortages within the creative industries cut across many other job titles and there is a need to ensure that these are properly represented on the list. Our survey revealed 41 roles that creative organisations found to be in shortage but only 17 of these, 41%, are on the shortage occupation list. Moreover, of the 9 sub-sectors that indicated that they were experiencing shortages, 5 of them had no representation on the list at all.

To ensure the shortage occupation list is able to capture skills shortages within the creative industries, the first step is to update and regularly review the standard occupational classification codes (SOCs). A variety of roles across the creative industries, from art/technical operators such as highly skilled audio engineers, to architects with specific specialisms, circus performers, and senior teaching staff in film education, are excluded or do not fit neatly into the SOC codes. Certain roles are often confused, such as "riggers" in VFX and animation which are often confused with riggers in construction. These roles should be named more clearly.

Furthermore, as mentioned, the creative industries are a highly innovative sector, employing technologies and practices that are constantly evolving. The SOC codes have not kept up with these changes and new roles such as player interaction specialists in the video games sector are not included.

10 Nathan, Max. "Cultural Diversity, Innovation, and Entrepreneurship: Firm-Level Evidence from London." Economic
Geography 89, no. 4 (2013): 367–94; Hunt, Vivian, Dennis Layton, and Sara Prince. "Diversity Matters." McKinsey, 2015.

The shortage occupation list should then be more accurately updated to reflect skills shortages in the sector.

Job titles such as player interaction specialists, senior designers in the brand design sector, and senior teaching staff in film education - alongside job titles below in Annex 1 and put forward by creative industries trade bodies and organisations in response to this consultation - should be covered in the list. Roles should only be removed after thorough consultation and assessment of the workforce.

The government should commission biannual reviews of the shortage occupation list, in consultation with the sector, to ensure skills shortages are identified and addressed as quickly as possible. This is necessary to ensure that we are able to register and react to emerging skills gaps as quickly as possible to capture the most exciting, interdisciplinary roles that are emerging in the sector.

Currently, creative enterprises facing shortages are facing significant delays and costs in order to bring in international workers. These difficulties lead to further knock-on effects on the ability of an organisation to complete work and therefore on their ability to grow.

Ffilm Cymru Wales for example has seen delays and alterations to production schedules due to difficulties in recruiting key roles not included on the shortage occupation list such as photography directors, production accountants and special effects workers. Missing roles on the shortage occupation list can also have a greater impact than on just those occupations as there is an additional knock-on effect on all other professions they interact with to enable large and interconnected projects to happen.

b) Salary Threshold

The salary thresholds apply to all hires under Tier 2, including those on the shortage occupation list (with an exemption for those applying for indefinite leave to remain). However, salary thresholds have proven problematic and have exacerbated the current skills shortages faced by the sector. In the Federation's recent survey, around 51% of respondents stated that they are in favour of abolishing the salary threshold of £30,000, and 26% were in favour of significant changes to the threshold.

In the creative industries, high skill levels are not always commensurate with high levels of pay. Many roles crucial to creative enterprises typically pay less than £30,000. Key roles within the creative industries do not meet the threshold such as: lead paint and roto artists in visual effects (average[11] salary £25,000), arts festival producers (£24-28,000), assistant film commissioners (£23,000), acrobatic performers (£23,000) and production sound engineers (£26,000).

The salary threshold of £30,000 means that international workers brought in by the creative industries have to be paid at a rate out of line with average industry levels. This issue was recognised by the Migration Advisory Committee (MAC) in 2013 which recommended that government make special provisions for the creative industries around minimum salary and qualification requirements. While five codes of practice were developed to recognise the sector's unique educational requirements for a small selection of specialised roles (such as dancers and orchestral musicians), no such corresponding provision was made on salaries.

[11] Currently appropriate rates are based on the 25th percentile (experienced hires) and the 10th percentile (entry level).

The minimum salary threshold is also a problem for creative workers applying for indefinite leave to remain.

Highly-skilled staff - from graphic designers to pattern cutters - will not earn £35,000 after five years in a company, as the rules require. Creative enterprise cannot make a stable investment in international workers over a five year period if there is no certainty that they will be able to stay long-term. The skills shortages creative enterprises face will only be amplified if the salary threshold applies to all international hires, including EEA workers. 81% of respondents to the Federation's recent survey said that they would face challenges if they were unable to hire high skilled EEA workers on salaries below £30,000. This will place a huge burden on creative enterprises and deny them access to the best and brightest from Europe.

In our recent survey, a representative from the music sector highlighted that extending the salary threshold will hit small enterprises in particular. It "will decimate employment of ex-UK talent across [the music] sector and particularly for SMEs, whose employees are often freelance and whose margins don't allow for salaries equivalent to those offered by the finance and tech sectors." This puts smaller companies at a disadvantage when recruiting international talent in comparison to larger businesses with greater financial resources.

If the government does not intend to exempt EEA or creative workers, the salary threshold for all international hires should be lowered.[12] Alternatively, more flexibility could be introduced by a simple change to the language in the immigration rules. To bring in international workers, employers are currently required to pay the salary threshold of £30,000 per year or the appropriate rate, "whichever is higher." If a creative enterprise wants to bring in a highly skilled worker on an industry average of £23,000, they therefore have to pay them £30,000.

This could be addressed by changing the language to £30,000 per year or the appropriate rate, "whichever is lower." This would allow employers to bring in the highly skilled worker on £23,000. This should also be applied to the salary thresholds of £35,000 for indefinite leave to remain and £20,800 for new entrants. Appropriate rates in the SOC codes must also take account of the fact that salaries vary considerably at different levels of expertise. SOC codes should be divided to indicate junior, mid-level and senior positions and their corresponding appropriate rates. There should be industry involvement in determining these.

c) Immigration Skills Charge

The immigration skills charge should be scrapped. The combination of the immigration skills charge and health surcharge (which has just been doubled) means creative enterprises may end up paying an additional £7,000 per international worker over the course of five years before the worker can acquire permanent residency. The amount could reach £12,000 if the government acts on its plan to double the immigration skills charge. All of this is in addition to the underlying visa application fees and ancillary charges, the costs of holding a sponsorship licence and the staff overhead to process applications and ensure compliance. Respondents to our recent survey indicated that the sum total of their charges reached an average of nearly £4,000 per each affected employee hired. A typical breakdown of costs can be seen through an SME respondent in the Music, Performing and Visual arts sector which for one hire paid £1,820 for the immigration skills charge and £3,285 for their sponsorship licence charge, lawyer's fees and advertising necessary to meet the resident labour market test.

[12] There is consensus across the board to lower the threshold. London First has proposed lowering it to £20,115 in line with the London living wage. However, the threshold should take into account regional differences to ensure it works for industry UK-wide.

Government has stated that money raised by the immigration skills charge will be invested in skills training. It is yet to provide any details of how this money will be invested, or where money levied to date has been spent. This was recognised by the MAC in their recent report on EEA migration which described the immigration skills charge as 'disliked by employers especially as the 'skills' part of the name is regarded as misleading, there being no clear route by which the revenue raised is directed towards training: it would more accurately be described simply as the 'Immigration Charge'.[13] The charge on the contrary is eating into creative enterprises budgets for training and upskilling their staff.

The sector is primarily composed of SMEs who already face resource challenges. 89% of creative enterprises employ between 1-4 people, with just 1% employing more than 50. The charges and administration within the current immigration system therefore particularly impact the creative industries more than other sectors and are a risk to their future growth.

The significant skills gaps in the creative industries mean that creative enterprises often have no alternative if they are to secure essential workers. It is unfair to penalise companies that are hiring internationally for roles where government has already recognised a lack of adequately trained domestic workers and/or where international workers' expertise are necessary for the roles. Those roles on the shortage occupation list therefore, at least, ought to be exempt from the immigration skills charge and other surcharges which impede access to necessary international talent.

The charge also fails to recognise that international recruitment helps to develop the domestic workforce by bringing workers into contact with the best in their field, who bring with them diverse new skill sets and international insights.

Currently, the impact of the immigration system on filling employment shortages is to an extent mitigated by the UK being an EU member state with the benefits of free movement. However, the government has said the immigration skills charge will remain in place in a system with no preferential treatment for EEA citizens. This will introduce huge costs for creative enterprises and exacerbate skills shortages. One respondent from the Music, Performing and Visual Arts sector in our recent survey stated "I would not be able to employ anyone and would probably be forced to leave [the UK]."

Existing industry-led initiatives

Many creative enterprises and organisations have already put in place initiatives to tackle domestic skill shortages. Prominent examples include the British Film Institute's Future Film Skills Programme[14] and the NextGen Skills Academy[15] which are working to bring more people into our industry and to train them for successful careers. Similarly, industry non-profit social enterprises and charities, such as Creative Access[16] and The Mighty Creatives, have done significant work in improving access to relevant education [17] and employment opportunities, increasing the pool of talent available to the sector.

13 "EEA migration in the UK: Final report", Migration Advisory Committee (2018) p.114
14 " Future Film Skills Programme: Funding Guidelines", British Film Institute (2017), p.2-5
15 " About us", NextGen Skills Academy, https://www.nextgenskillsacademy.com/about-us
16 "About us", Creative Access, https://creativeaccess.org.uk/about-us/

Sector bodies have also played a key role in working to improve the uptake of essential roles in the creative industries. The Creative Industries Federation, ScreenSkills and Creative & Cultural Skills - with support from government - have recently launched an industry-led Creative Careers Programme. £2 million of grant funding has been made available by the Department for Digital, Culture, Media and Sport to kick-start the programme through to March 2020, with industry providing in-kind commitments and ensuring its sustainability long beyond this time.[18]

The overarching objective of the programme is to cultivate a workforce that is fit for the future by driving a stronger and more diverse supply of talent into the creative industries and wider creative economy. It aims to achieve this by helping young people and their influencers to understand the range of opportunities open to them across the creative economy, and the skills and qualifications they need to succeed when they leave school. It also aims to equip employers to diversify their workforce and plug skills shortages by developing the most urgently needed apprenticeship standards.

All of these initiatives though will take time to have an impact on domestic skill levels in the UK and therefore current industry initiatives cannot justify a reduction in government support. It is also important to remember that even if UK educational and training opportunities are improved there will always be a need for the UK to access global talent given the technological pace of change within the sector and the benefits that interaction with the brightest and best bring to UK workers.

17 "What we do", The Mighty Creatives, https://www.themightycreatives.com/about-us/what-we-do
18 "An Update on the Creative Careers Programme", Creative Industries Federation, December 2018

ANNEX 1: Overview of survey results

The Federation recently published a survey which ran from 6 December 2018 to 2 January 2019. The survey received 103 responses from stakeholders from across the creative industries and the UK. The survey was open to both members and non-members of the Federation.

Headline Stats

● Around 67% of respondents said that they currently experience difficulties recruiting for certain roles, compared to 21% who said they face no challenges and 12% unsure.

● 81% of respondents said that they would face challenges if they were unable to hire high skilled EEA permanent workers on salaries below £30,000, whilst just 6% said they would face no challenges.

● Around 51% of respondents stated that they are in favour of abolishing the Tier 2 salary threshold of £30,000, whilst 26% were in favour of significant changes to the threshold. Around 4% were in favour of maintaining it with no changes.

● Around 73% of those surveyed said that they were experiencing difficulties with the current sponsorship system. 60% of the reasons given as to why organisations were struggling with the system related to both the cost and time of obtaining a sponsorship licence.

● Around 54% of respondents were in favour of removing the resident labour market test and no one surveyed was clearly in favour of retaining it (the remainder of respondents said that they were unsure).

● Two-thirds of respondents agreed that employees on Tier 2 visas face challenges when moving between different employers with no one disagreeing and the remaining third being unsure.

1. Characteristics of respondents

● Almost every DCMS recognised creative industries sub-sector responded to the survey. The majority of respondents were from the music, performing and visual arts sector.

○ 5.9% - Advertising and Marketing
○ 4.4% - Crafts
○ 4.4% - Design (Product, Graphic, Fashion)
○ 10.3% - Film, TV, Video, Radio and Photography
○ 1.5% - IT, Software and Computer Services ('Creative Tech')
○ 1.5% - Publishing
○ 8.8% - Museums, Gallery and Libraries
○ 57.3% - Music, performing and visual arts sector
○ 1.5% - Animation and visual effects
○ 4.4% - Video games

2. Characteristics of workforce

● The number of international permanent staff vary. Some respondents indicated they have 1 international worker, whilst others indicated that anywhere between 50-100% of their permanent staff are international.

● Respondents indicated that hiring these workers can cost between £1,500-10,000 when you take into consideration the immigration skills charge, health surcharge and additional costs.

3. Shortage occupation list

● Around 67% of respondents said that they currently experience difficulties recruiting for certain roles, compared to 21% who said they face no challenges and 12% unsure.

● These roles are highlighted in the table below. Only 17 of these, 41%, are on the shortage occupation list. Moreover, of the 9 sub-sectors that indicated that they were experiencing shortages, 5 of them had no representation of their roles at all on the list.

Sector	Job title
Music, Performing and Visual Arts	Company Dancer; Head of New Media Arts Development; Digital Communications Officer; Senior Musician, Composer, Songwriter, Label Manager, A&R, Music Supervisor / Licensing Manager, PA / EA Marketing, and Plugger.
Film, TV, Video, Radio and Photography	Line Producer; Production Co-ordinator; Production Accountant; Director of Photography; Animator (e.g. compositors, background illustrators); Special Effects; International Sales & Rights
Animation and visual effects	Animator; Videographer; Modeller; Artist; 2D Animator; 2D Designer/Asset Creator; 2D Rigger
Museums, Gallery and Libraries	Communications Manager; Senior Development Manager (Salary: £50,000, degree required); Administration Manager (Salary: £35,000, degree required) and Operation Assistant (salary: £21,500)
Crafts	Events and hospitality related roles (e.g. employed by the Goldsmith's Centre)
Design (Product, Graphic, Fashion)	Generally all roles are difficult to fill in design agencies. Specific roles include: Web Developer; Designer Project Manager (Graphic design in shortage occupation list only covers film, television and video games sub-sectors).
Advertising and Marketing	Designer (all levels)
Video Games	Programmer; Designer; Production Lead; Technical Artist; Game Director; Marketing Specialist with territory knowledge; Player Interaction Specialist
Film Education	Specialist teaching staff in film education (Can pay anything over £30k. Requires industry and education experience, preferably with MA qualification).

4. Salary threshold

● Around 51% of respondents stated that they are in favour of abolishing the Tier 2 salary threshold of £30,000, whilst 26% were in favour of significant changes to the threshold. Around 4% were in favour of maintaining it with no changes.

● Around 39% of respondents said that they currently face challenges hiring international staff, compared to 33% who do not. However, 81% of respondents said that they would face challenges if they were unable to hire high skilled EEA workers on salaries below £30,000, whilst just 6% said they would face no challenges.

● Around 32% of respondents said that over 75% of their international staff earn under £30,000. 20% of respondents said that this applies to less than 10% of their international staff whilst 35% were unsure.

● Respondents identified the following highly skilled roles which do not command a salary of £30,000. Many of these are identical to those in the table above which face shortages.

Sector	Job title	
Music, Performing and Visual Arts	**Acrobatic Performer** Salary: equivalent of £23,000 Expected to have qualified from a performance school, have at least two years of experience and crucially skills such as tumbling or handstands which are not typical in the general population. **Dancer; Performer** Salary: £6000 (project-based) 12 years of professional training at top world conservatoire/university, 5 years of national and international work experience, plus about 4 years alongside studies.	**Company Dancer** Salary: £21,000 An extraordinary natural performance style and/or at least 2 years of professional dance experience, as well as high motivation, strong teaching and communications skills, and a commitment to fully participate in the extensive programme of ambassadorial education work worldwide. Degree level or higher; higher qualification below degree or vocational training. **Artist** Salary: £10,000 PhD, MA
	Head of Youth Circus Salary: £24,000 At least a couple of years experience as a qualified teacher **Head of New Media Arts Development** Salary: £28,335 Significant experience in developing new media arts programmes	**Producer** Salary: £24-28,000 Extensive experience making and facilitating work with international artists. Often a graduate degree is required. **Choreographer** Salary: £26,000 10 years of vocational training plus 10 years of professional experience
	Technical Manager Salary: £25-28,000 Degree or relevant training, significant experience of technical management. **Programme Manager** Salary: £29,535 Significant experience of engaging communities in arts activity **Project Manager** Salary: £28,000 More than three years' experience and a graduate degree	**Digital Marketing Manager** Salary: £25,000 Clear understanding of online developments. Experience with HTML and JAVA is a plus. Must keep up to date with new online marketing and advertising possibilities. Preferably 3-5 years prior work experience. **Communications Manager** Salary: £25,000 Degree or equivalent, 3 years experience **Customer Relations Manager** Salary: £28,335 Significant experience of team management and customer service in an arts venue.

	Marketing Manager Salary: £28,000 **Administrator** Salary: £21,000 Secondary education plus 3 years experience	**Learning & Participation Manager** Salary: £28,000
	Costumes & Wigs Technical Roles Salary: Below £30,000 **Sound Engineer** Salary: £26,000 Professional qualifications and several years experience **Researcher; Analyst** Salary: Below £30,000	**Digital Communications Officer** Salary: £28,000 Three years or more professional experience, experience of managing development of a website, social media experience etc., developing and implementing communications strategy. Degree level.
	Label Manager Salary: £25-30,000 A good understanding of the international music market, high attention to detail and able to operate with flexible deadlines. Work experience: 3-5 years. **Artist Manager** Salary: £25-30,000 Good understanding of the international music market. Work experience: 2-3 years	**Senior Musician, Composer, Songwriters, A&R, Music Supervisors / Licensing Managers, PAs / EAs Marketing, Pluggers** Salary: Often below £30,000
Animation and Visual Effects	**Compositor; Junior Compositor; Junior CG Artist; CG Artist; Videographer; Modeller, Artist, Retoucher** Salary: Often below £30,000 **Most 2D animator roles such as 2D Animator; 2D Designer/Asset Creator; 2D Rigger** Salary: £25,000 Prior experience on a 2D animation production required and 2D animation software skills essential. These are skilled staff with a number of years experience on animation productions.	**Animators (eg compositors, background illustrators)** Salary: Often below £30,000 In most instances hires get made based on prior experience/film (or high end TV) credits over and above formal qualifications, although animators and accountants (MovieMagic) will have software specific training.
Film, TV, Video, Radio and Photography	**Assistant Film Commissioner** Salary: £23,000 Industry background and a degree	**International Sales & Rights** Salary: £25-28,000 Previous industry work experience, preferred international market, languages, rights including IP law, creative suite including photoshop, and degree qualification.

	Development Executives; Marketing Manager; Training Coordinator; Bookkeeper (part-time) Salary: Often below £30,000	
Museums, Gallery and Libraries	**Senior Programme Manager** Salary: £28,000 **Engagement Producer** Salary: £26,000 **Events Manager** Salary: £27,000 **Communications Manager** Salary: £21-27,000 Degree often required and three or more years of experience. **Facilities Manager** Salary: £26,000 **Assistant Producer** Salary: £21,000	**Story Builder** Salary: Often below £30,000 Specialist literature facilitators with knowledge, skills and experience of Early Years development. **Curator: Archive Gallery** Salary: £35,000 full time equivalent, but this is a part-time role, so earns less than £30,000. MA in curatorial studies. **Curator: Community Programmes** Salary: £27,580 full time equivalent. This is a part-time role. MA. **Operation Assistants** Salary: £21,500
Crafts	**Events Sales Manager** Salary: £29k Experienced in events and with a degree **Events Sales Executive** Salary: £25k Junior role requiring a degree	**Events Duty Supervisor** Salary: £19k Events undergraduate
Advertising and Marketing	**Account Manager** Salary: £28,000 Humanities/media degree, additional languages an advantage, and 3 plus years experience. **Specialist Sales for Foreign Markets** Salary: Often below £30,000	**Designer, Artworker** Salary: Often below £30,000 **Junior Designer** Salary: £25,000 3 plus years industry experience and degree level education in design specific subject area.
Video Games	**Entry level Programmer; Artist; Animator; Designer; Player Interaction Specialist** Salary: Often below £30,000	
Film Education	**Visiting Director, Designer, Skills Teacher** Salary: £2-4,000 These staff may be earning £30,000 or less across a range of jobs with RADA and elsewhere. Anything from 10 years professional experience upwards.	
Publishing	**Designer** Salary: £28,000 **Managing Editor** Salary: £25,000	**Picture Editor** Salary: £22,000

5. Other

● Around 73% of those surveyed said that they were experiencing difficulties with the current sponsorship
system. 60% of the reasons given as to why organisations were struggling with the system related to both the cost and time of obtaining a sponsorship licence.

● Around 54% of respondents were in favour of removing the resident labour market test and no one surveyed was clearly in favour of retaining it (the remainder of respondents said that they were unsure).
● Two-thirds of respondents agreed that employees on Tier 2 visas face challenges when moving between different employers with no one disagreeing and the remaining third being unsure.

ANNEX 2: Additional data collected

Additional data reported by Federation members indicated the following positions to be in shortage, some of which were also indicated in our survey results above. The shortage occupation list should retain or add all of these positions alongside job titles identified by creative industries trade bodies and organisations in response to this consultation.

Sector	Job title
Advertising	Roles relating to IT, Creatives/Designers and Management
Animation and Visual Effects	IT Business Analysts, Architects and Designers (systems engineer); Programmers and Software Development Professionals (Software Developer, Shader Writer, Games Designer); Artists (Animator); Arts Officers, Producers and Directors (2D Supervisor, 3D Supervisor, CG Supervisor, Producer, Production Manager, Technical Director,VFX Supervisor); Graphic Designers (Compositing Artist, Matte Painter, Modeller, Rigger, Stereo Artist (for 3D content), Texture Artist) Systems Administrator (IT for creative businesses is significantly different to IT for corporates); Production Co-ordinator; Technical Artist; Concept Artist; Storyboard Artist; Layout Artist; Pre-visualisation Artist; Creative Director; VFX Editor
Architecture	Specialist Architects e.g. Building Information Management (BIM) Co-ordinators
Music	All Orchestral Musicians including Tutti (the non-senior positions within orchestras that are currently not included under the scope of orchestral musicians included on the shortage occupation list).
Video Games	Systems Engineer; Software developer; Shader writer; Game designers; Animator; 2D Supervisor; 3D Supervisor; Computer Supervisor; Producer; Production Manager; Technical Director; Compositing Artist; Matte Painter; Modeller; Rigger; Stereo Artist; Texture artist; VFX Artist; Feature Designer; Level Designer; Graphics Programmer; Principal Programmer; Principal Designer; Network Programmer; Tools Programmer; Principal Animator; Senior Environment Artist; Senior Animator; Data Analyst; Junior Data Analyst; Client-Side Engineer; Client-Side Developer; Server-Side Engineer; Server-Side Developer; Producer; Senior Software Engineers

DCMS I (Letter)

Dear Professor Manning,

The Shortage Occupation List: call for evidence

Thank you for your call for evidence as you carry out a review of the Shortage Occupation List with your Migration Advisory Committee colleagues. As we consider the details of the UK's future immigration system which will apply from 2021, it is more important than ever that we ensure that the UK has the skilled and talented people that we need to build a competitive and prosperous economy of the future.

The Shortage Occupation List plays a critical role in our immigration system, and it is right that we are updating it to ensure that we have the very latest evidence underpinning our migration arrangements.

My department has been encouraging our stakeholders to respond to your call for evidence, and to share their on-the-ground intelligence from inside the labour market. My officials have also carried out a review of our own evidence, and I would like to share some of our key findings, which are annexed to this letter.

The current list
Based on current evidence, gathered both from our stakeholders and our own market intelligence, it is our view that all DCMS-related occupations and job titles currently listed should remain on the next revision of the list. We have provided these in Table A in the annex.

Occupations to add to the list
There are a number of ONS occupations which there is evidence to suggest are in shortage, and should be considered for listing in this review. Full details are in Table B of the annex, but in summary these include:

a) Occupations within the fast-moving video games industry, many of which did not exist when the list was last updated in 2013; and

b) Roles in the film and television sector for which there are ongoing shortages, including production managers, production accountants, and visual effects specialists.

Anecdotal evidence of shortage

There are also some job roles for which DCMS does not have empirical evidence, but has received substantial anecdotal evidence from stakeholders to demonstrate that labour is in shortage. This includes occupations in the construction sector which are critical for digital infrastructure delivery, in the arts (including dancers and musicians) and some specialist IT professionals. Further details are in Table C of the annex. DCMS officials continue to work with our sectors to develop this evidence base, particularly as we work towards the implementation of the UK's future immigration and borders system in 2021.

Thank you again for the work of the Committee to carry out this review. I look forward to reading your full report in the Spring. My officials would be happy to provide you with further information should that be useful, and I know that the Minister for Arts, Heritage and Tourism hopes to meet with you in the new year to discuss the tourism sector.

Jeremy Wright

Rt Hon Jeremy Wright QC MP
Secretary of State for Digital, Culture, Media and Sport

DCMS II (Annex)

<u>Annex B: Current Shortage Occupation List (SOL) and Occupations for Consideration in Future List</u>

Table A: Current DCMS-related occupations on the Shortage Occupation list

The following annex provides a list of the current DCMS-related occupations listed on the Shortage Occupation list, including a breakdown by their Standard Occupation Code (SOC), the specific jobs within this category, whether the department believes these occupations should continue to be listed, alongside any available evidence.

SOC (Standard Occupation category) code (2010)	**Specific Job**	**Evidence**
2135 IT business analysts, architects and systems designers	Systems engineer in visual effects and 2D/3D computer animation for the film, television or video games sectors.	A UKIE (Association for UK Interactive Entertainment) report, The State of Play (2017), reported 87% of games business hired international talent due to skills gaps in UK candidates. The full report can be found at the following link: http://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf More recently this been indicated as a shortage area by UKIE through an upcoming survey. This survey work is ongoing and an update should be available shortly, though no firm date is yet known. UKIE will be submitting a response as part of the call for evidence.
2136 Programmers and software development professionals	The following jobs in visual effects and 2D/3D computer animation for the film, television or video games sectors: Software Developer Shader Writer Games Designer	UKIE report, State of Play (2017), reported that 21.7% of those in programming roles were from RoW and a further 18.5% from other EU countries due to skills shortages: http://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf More recently this been indicated as a shortage area by UKIE through an upcoming survey. This survey work is ongoing and an update should be available shortly, though no firm date is yet known. UKIE will be submitting a response as part of the call for evidence.
2139 Information technology and communications professionals not elsewhere classified	Cyber security specialist employed by a qualifying company, where the job requires a person with a	[The DCMS Cyber Skills team have published two research reports: one that looks at the current cyber security skills gap in the UK and the other that looks at the FE/HE education sector in England in-terms of cyber security skills. The Government Cyber Security skills strategy by the end of the year too.] [Research reports published at): https://www.gov.uk/government/publications/the-role-of-further-and-higher-education-in-cyber-security-skills

	minimum of five years' relevant experience and demonstrable experience of having led a team.	https://www.gov.uk/government/publications/cyber-security-skills-in-the-uk-labour-market] Non-Government cyber security skills shortage evidence: - ISACA (2015) https://www.isaca.org/cyber/Documents/2015-UK-Cybersecurity-Status-Report-Data-Sheet_mkt_Eng_0115.pdf - ISC2 (2018) https://www.isc2.org/-/media/ISC2/Research/2018-ISC2-Cybersecurity-Workforce-Study.ashx?la=en&hash=4E09681D0FB51698D9BA6BF13EEABFA48BD17DB0 - MacAfee (2016) https://www.mcafee.com/enterprise/en-us/assets/reports/rp-hacking-skills-shortage.pdf
3411 Artist	Animator in visual effects and 2D/3D computer animation for the film, television or video games sectors	UKIE report, State of Play (2017), reported that 10.1% of those in artist roles were from RoW and a further 14.1% from other EU countries due to skills shortages: http://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf More recently this been indicated as a shortage area by UKIE through an upcoming survey. This survey work is ongoing and an update should be available shortly, though no firm date is yet known. UKIE will be submitting a response as part of the call for evidence. Animation UK reports that within the animation sector, 66% of respondents to their survey indicated difficulty recruiting due to skills shortages, with 37% of respondents reporting difficulty recruiting animators due to skills shortages. The full report can be found at: https://drive.google.com/file/d/1d3Bv-DjnvJ6frBgtbUHFzezMKsjLyB4C/view (Animation UK: We need to talk about skills) (Nov 2018)
3416 Arts officers, producers and directors	The following jobs in visual effects and 2D/3D computer animation for the film, television or video games sectors: 2D supervisor 3D supervisor computer graphics supervisor producer production manager	As highlighted above, UKIE report, State of Play (2017), reported that 10.1% of those in artist roles were from RoW and a further 14.1% from other EU countries due to skills shortages: http://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf More recently this been indicated as a shortage area by UKIE through an upcoming survey. This survey work is ongoing and an update should be available shortly, though no firm date is yet known. UKIE will be submitting a response as part of the call for evidence. A British Film Institute (BFI) report by the Work Foundation also identified skills shortages in a number of production and visual effects roles in the UK screen industries: http://www.theworkfoundation.com/wp-content/uploads/2016/10/420_A-Skills-Audit-of-the-UK-Film-and-Screen-Industries.pdf (A Skills Audit of the UK Film and Screen Industries) (June 2017)

	technical director visual effects supervisor	
3421 Graphic designers	The following jobs in visual effects and 2D/3D computer animation for the film, television or video games sectors: compositing artist matte painter modeller rigger stereo artist texture artist	Evidence as above.
5434 Chefs	Skilled chef where: the pay is at least £29,570 per year after deductions for accommodation, meals etc; and the job requires five or more years relevant experience in a role of at least equivalent status to the one they are entering; and the job is not in either a fast food outlet, a standard fare outlet, or an establishment which provides a	Stakeholder Evidence: - KPMG - Labour migration in the hospitality sector (2017): https://dip9shwvohtcn.cloudfront.net/wordpress/wp-content/uploads/2017/03/BHA-KPMG-Labour-migration-in-the-hospitality-sector-report.pdf - People 1st, a consultancy in the hospitality sector, published the following report on chef shortages in the UK: http://people1st.co.uk/getattachment/Insight-opinion/Latest-insights/21st-century-chef/Report-download/Exec-summary-_-The-chef-shortage-A-solvable-crisis.pdf/?lang=en-GB Key points from the report: Chefs continue to be the most challenging role for which to recruit. Figures from the 2015 Employer Skill Survey found that a quarter of hospitality businesses in the UK had vacancies, 22% of which were for chefs, ranging from classical chefs to production chefs and canteen cooks. When it comes to reasons for hard-to-fill vacancies, 64% report that they can't find applicants with the required skills, which means we are not just dealing with a labour shortage, but a skill shortage. Projections suggest that at least 11,000 additional chefs will be needed over the next five years to growing demand and to replace existing chefs.

	take-away service; and The job is in one of the following roles: executive chef - limited to one per establishment head chef - limited to one per establishment sous chef - limited to one for every four kitchen staff per establishment specialist chef - limited to one per speciality per establishment .	

Table B: DCMS-related occupations for consideration to be added to the Shortage Occupation list

The following table provides a list of the occupations not currently listed on the Shortage Occupation list but with stakeholder or departmental evidence to suggest that consideration should be given to these particular jobs in the upcoming revision of the list. As in Annex A, tables include a breakdown by their Standard Occupation Code (SOC) where possible, the specific jobs within this category, whether the department believes these occupations should continue to be listed, alongside any available evidence.

SOC code (2010)	Specific Job	Evidence
2136 Programmers and software development professionals 3416 Arts officers, producers and directors 3421 Graphic designers	Specifically: Games Data Analysts (Data Analyst; Junior Data Analyst;) Games Designers (Feature Designer; Level Designer, Principal Designer) Games Developers (Client-side and Server-side) Games Engineers (Client-Side Engineer; Server-Side Engineer; Senior Software Engineers) Games Producers Games Programmers (Principal, Design, Network, Tools)	The previous UKIE report, The State of Play (2017) reported 87% of games business hired international talent due to skills gaps in UK candidates. The full report can be found at the following link: http://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf More recently this been indicated as a shortage area by UKIE through an upcoming survey. This survey work is ongoing and an update should be available shortly, though no firm date is yet known. UKIE will be submitting a response as part of the call for evidence.
3416 Arts officers, producers and directors	Line Producers	These three roles have been highlighted as an area in shortage by Screen Skills (FKA creative skillset) at their Skills Forecasting Service event on 6/12. The accompanying report can be found below:

	Production Accountants	https://www.screenskills.com/media/2179/2018-12-05-quarterly-screenskills-barometer.pdf (ScreenSkills Quarterly Barometer) (Dec 2018)
1259 Managers and proprietors in other services n.e.c.	Production Manager	A British Film Institute (BFI) report by the Work Foundation also identified skills shortages in skills required for job titles including line producer and production accountant in the UK screen industries: http://www.theworkfoundation.com/wp-content/uploads/2016/10/420_A-Skills-Audit-of-the-UK-Film-and-Screen-Industries.pdf (A Skills Audit of the UK Film and Screen Industries) (June 2017)
3421 Graphic designers	Storyboard artists	Highlighted as an area in shortage by Screen Skills (FKA creative skillset) at their Skills Forecasting Service event on 6/12. The accompanying report can be found below: https://www.screenskills.com/media/2179/2018-12-05-quarterly-screenskills-barometer.pdf (ScreenSkills Quarterly Barometer) (Dec 2018) Alongside this, Animation UK reports that within the animation sector, 22% of respondents to their survey indicated difficulty recruiting Storyboard Artists due to skills shortages. Full report can be found at: https://drive.google.com/file/d/1d3Bv-DjnvJ6frBgtbUHFzezMKsjLyB4C/view (Animation UK: We need to talk about skills) (Nov 2018)
3421 Graphic designers	VFX Supervisors Visual effects: animal effects specifically	Highlighted as an area in shortage by Screen Skills (FKA creative skillset) at their Skills Forecasting Service event on 6/12. The accompanying report can be found below: https://www.screenskills.com/media/2179/2018-12-05-quarterly-screenskills-barometer.pdf (ScreenSkills Quarterly Barometer) (Dec 2018) A British Film Institute (BFI) report by the Work Foundation also identified skills shortages in a number of visual effects (VFX) job titles in the UK screen industries: http://www.theworkfoundation.com/wp-content/uploads/2016/10/420_A-Skills-Audit-of-the-UK-Film-and-Screen-Industries.pdf (A Skills Audit of the UK Film and Screen Industries) (June 2017)
6145 Care workers and home carers	Adult Social Care**	Stakeholder Evidence: Skills for Care estimates that 8.0% of roles in adult social care are vacant, this gives an average of approximately 110,000 vacancies at any one time. The vacancy rate has risen by 2.5 percentage points between 2012/13 and 2017/18. https://www.skillsforcare.org.uk/NMDS-SC-intelligence/Workforce-intelligence/documents/State-of-the-adult-social-care-sector/The-state-of-the-adult-social-care-sector-and-workforce-2018.pdf
2114 Social and humanities scientists	Archaeological site assistant/technician (RQF level 3+)	Stakeholder Evidence: Highlighted by the Chartered Institute for Archaeologists (CIfA). New figures commissioned by CIfA show that there are now more archaeologists working in the UK commercial archaeology sector

		than ever before (an estimate of 4,908 in commercial roles). This is a growth of 12.8% in the financial year 2017-18. The commercial sector also grew by 13.2% in the year 2016-17. The reason for this growth is to do with increased construction-sector activity. CIfA publishes an annual Archaeological Market Survey, which includes data on employment, training, skills, staff nationalities and financial performance of archaeology organisations. The 2018 report is about to be published. CIfA is conducting further consultation on whether additional archaeology professions should be added to the Shortage Occupation List.
2114 Social and humanities scientists	Archaeological site supervisor (RQF level 3-6)	As above.
6139 Animal Care Services Occupation n.e.c.	Work Rider	Stakeholder Evidence: The British Horseracing Authority (BHA) have reported a shortfall of c.500-1000 work riders in the racing industry. They have noted that the proportion of the UK worker population physically capable of riding thoroughbreds is decreasing (ideally less than 9 stones). British racing draws racing grooms from countries who don't often have formal qualification frameworks in place, but who have a rich history of horseracing and culture of handling and riding horses (as well as physical characteristics). As of March 2017, 7,377 racing grooms were on the BHA register. Of these, 814 (11%) are drawn from 23 EEA countries excluding the UK - the most significant of which are 348 (4.7%) employees from the Republic of Ireland. The BHA plan to submit up to date data in their response to MACs call for evidence.
9120 Elementary construction occupations*	Labourer (general, semi-skilled, trades, roadworks, manhole)	Data from the Office of National Statistics: Migrant labour force within the UK's construction industry: August 2018 shows that there are approximately 17,000 EU nationals working in the UK construction industry undertaking 'civils' work. Anecdotal evidence - based on scale and nature of the different utility providers would indicate that a significant proportion work in the deployment of telecoms. Analysis from the Infrastructure and Projects Authority commissioned by the DCMS says that a single civil engineering is responsible for connecting 100 homes per annum. The DCMS, released the Future Telecoms Infrastructure Review in July 2018 where we have asked industry to connect 15 million properties by 2025 with nationwide coverage by 2033. To meet these target the industry has to increase the number of properties they are connecting to full fibre broadband from the current 1 million per year to 3 million a year. This will require a significant number of labourers and street trained civil engineers.

Table C: DCMS-related occupations for consideration to be added to the Shortage Occupation list with only anecdotal evidence

The following table presents a list of job titles for which significant anecdotal evidence has been provided to demonstrate labour is in shortage but for which no formal analysis is available at this time.

SOC code (2010)	Specific Job
Occupations and job titles on current Shortage Occupation List	
2133 IT specialist managers	IT product manager employed by a qualifying company, where the job requires a person with a minimum of five years' relevant experience and demonstrable experience of having led a team
2135 IT business analysts, architects and systems designers.	Data scientist employed by a qualifying company, where the job requires a person with a minimum of five years' relevant experience and demonstrable experience of having led a team.
2136 Programmers and software development professionals.	Senior developer employed by a qualifying company, where the job requires a person with a minimum of five years' relevant experience and demonstrable experience of having led a team.
2442 Social workers**	Social worker working in children's and family services. Many civil society organisations operate in this sector.
3414 Dancers and choreographers	Skilled classical ballet dancers who meet the standard required by internationally recognised United Kingdom ballet companies.
	Skilled contemporary dancers who meet the standard required by internationally recognised United Kingdom contemporary dance companies.
3415 Musicians	Skilled orchestral musicians who are leaders, principals, sub-principals or numbered string positions, and who meet the standard required by internationally recognised UK orchestras.
Occupations and job titles to be considered for future Shortage Occupation List	
2319 Teaching and other educational professionals n.e.c.	Specialist Film Education Teaching Staff
2135 IT business analysts, architects and systems designers (though granularity not captured by SOC)	Specialist Architects
3415 Musicians	Tutti (also known as rank and file) orchestral musician who meets the standard required by internationally recognised companies.
3417 Photographers, audio-visual and broadcasting equipment operators 5241 Electricians and electrical fitters	Music Industry Technical professions including sound/lighting technicians and set engineers & designers.

4159 Other administrative occupations n.e.c.	Lower paid advertising jobs: eg social media managers, technicians etc
5319 Construction and building trades n.e.c.*	Steel Fixer - Grade 1, Grade 2 (inc. Mesh),
5330 Construction and building trades supervisors*	Ganger
7214 Communication operators*	Traffic Marshall Traffic Management Operator
8129 Plant and machine operatives n.e.c.*	Machine operative (Up to 21T)
8142 Road construction operatives*	Kerb layer
8229 Mobile machine drivers and operatives n.e.c.*	Roller driver - Hand (Upto 4T) Roller driver - (Over 4T)
8229 Mobile machine drivers and operatives n.e.c.*	Telehandler
9120 Elementary construction occupations*	Ground Worker
9260 Elementary storage occupations*	Store Person
9241 Security guards and related occupations*	Gateman

DEFRA

Department for Environment, Food and Rural Affairs: Response to Migration Advisory Committee Call for Evidence on the Shortage Occupation List

14 January 2019 [1]

Introduction

1. This is the response to the call for evidence from the Migration Advisory Committee regarding the SOL. In it, we set out:

- Current Tier 2 shortages in core Defra areas
- Shortages that exist but are not in scope of Tier 2 currently
- Other areas of shortage where there could be an impact for Defra's sectors
- Areas of possible shortage post EU Exit

2. For each sector/occupation covered, we outline the evidence available as to why there are shortages, measures in place to mitigate against those shortages and the impact those mitigations are having.

3. The agri-food chain faces particular workforce challenges driven by pressures to keep product prices low for consumers in a highly competitive sector with low returns for businesses. This has resulted in a higher proportion of jobs with relatively low wages compared to other sectors, in turn making them less attractive, contributing to shortages in the supply of domestic labour and a reliance on workers from the EU to fill often low skilled and low paid roles. Only 4% of respondents (in agriculture and horticulture) to a Food and Drink Federation survey indicated they would deal with any loss of access to EU nationals post EU Exit by increasing wages, demonstrative of significant profit margin pressures and the low returns many businesses have to deal with.

4. Data from Defra, industry and market intelligence providers suggests that price is the key driver of food and drink purchasing and consumption decisions. Against a backdrop of rising food prices linked to world commodity prices, exchange rates and oil prices, price for customers is more important than quality and provenance. Between 2006 to 2013 food prices grew at a faster rate than general prices in the UK economy, and faster than increases in the cost of housing. Consumers respond to food price rises in a combination of ways: buying less, spending more and trading down to cheaper brands. The dependencies on EU labour are clear in a number of areas. For example, 69% of meat processing workers are estimated to be from the EU (British Meat Processors Association, 2018) and 85% of official vets working in Food Standards Agency approved abattoirs are from the EEA (Eville and Jones, 2018). 99% of all seasonal agricultural workers in the UK are from EU countries (Defra survey).

5. There are now additional and increasing pressures on accessing suitable labour from the EEA. Both before and since the June 2016 EU referendum, the national income differential between the UK and labour-supplying countries – as measured by GDP and GDP per capita growth – has been narrowing significantly. This

narrowing is expected to continue. Median wage growth rates have also been significantly stronger in all ‘source’ countries, relative to the UK, in recent years. These factors, coupled with a depreciation of Sterling against the Euro and other EEA currencies, have contributed to difficulties in sourcing EEA labour to work in the UK. As we exit the EU all the indications are that this will lead to further and greater labour shortages across all sectors.

6. Defra has encouraged its stakeholders to submit their own responses to the MAC’s call for evidence. Defra's submission represents the England position only. In some instances the supporting evidence is presented on a UK-wide basis where it is only available in this form and cannot easily be broken down to England only.

Key issues/asks

8. Vets and Vent Chick Sexers to be included on the Shortage Occupation List (SOL) as it currently exists.
9. Shortages for occupations not currently in scope for Tier 2 to be considered for SOL in light of the future skills-based immigration system.
10. MAC to consider the evidence supplied by other government departments and industry on key areas with impacts on Defra’s sectors.
11. MAC to consider the implications of potential shortages that may result as a consequence of EU Exit.

Current tier 2 shortages in core Defra areas

Veterinarians (Vets) Job Title	**Closest ONS Job Title**	**Closest ONS Occupation Code (4 digit)**	**Sectors most affected**	**Shortage levels**
Veterinarian	veterinarian	2216	Across sectors – of strategic importance to animal welfare, food biosecurity and public	890 vacancies, representing a shortage of 11.5% and per Major

11. According to the Major Employers Group (MEG), as of November 2018 there were 890 veterinary surgeon vacancies in member veterinary practices, representing a shortage of approximately 11.5 %, principally in the private clinical practice sector (MEG, 2018). The unfilled vacancy rates across the profession predate the decision of the UK to leave the EU.

12. The main reasons for staff shortages in key veterinary roles are:

 growing demand for veterinary surgeons;

 difficulties in increasing numbers of UK veterinary students due to high costs of veterinary degrees;

- high student debt coupled with low professional salaries mean that not all veterinary roles are attractive, which leads to difficulties with recruitment and retention;

- graduates leaving the veterinary profession due to career progression patterns.

13. The profession of a veterinary surgeon is highly complex and requires specialist knowledge and skills. Veterinary qualification can be achieved only through 5 years of academic training combined with clinical practice, and is regulated by the Royal College of Veterinary Surgeons (RCVS).

14. It costs approximately £100,000 to train a single veterinary surgeon (cost to individuals is approximately £46,250, and combined costs to Universities and Government are around £53,750 per student (Veterinary Schools Council, 2018).

15. The Government provides £1.3bn annually to support students in high cost subjects. Veterinary education is in the highest cost bracket with a subsidy of £10,000 per student which is above the average subsidy of £9,250 for the majority of degrees (The Office for Students, 2018).

16. In terms of recruitment and retention, some veterinary roles, such as official vets in abattoirs, traditionally have not been attractive to UK nationals (Eville and Jones, 2018), and have high turnover rates because of lower salaries, and veterinary career progression patterns.

17. Around 25,000 vets are practicing in the UK (RCVS, 2017). According to a survey by the Institute of Employment Studies, 37% of non-UK vets currently practicing in the UK are considering leaving the profession (Institute of Employment Studies: European veterinary surgeons working in the UK: The impact of Brexit June 2017) due to UK intention to leave the EU. Assuming the survey is representative of the veterinary profession as a whole, our estimate is that this would mean a further 2,000 fewer vets practicing in the UK. Furthermore, 18% of the total number of respondents are already actively looking for work outside of the UK. This could translate to 1,000 fewer vets practicing in the UK (Institute of Employment Studies: European veterinary surgeons working in the UK: The impact of Brexit June 2017).

18. Depending on the final outcome of the EU exit negotiations, there may be a need for additional, emergency veterinary capacity to deliver product certification and checks at the border. We estimate the certification market will need an additional 50 full-time Official Vets, with industry telling us that the use of Certification Support Officers, and the ability to bring more vets into the market should be able to meet this demand. Being on the SOL would help facilitate this.

19. Due to the length of time and cost needed to train new veterinary surgeons, as well as high turnover rates within the profession, in the short term it would not be possible to fill the vacant posts with veterinary surgeons who are UK nationals, or with overseas vets who already have the right to live and practice in the UK.

20. In an effort to reduce the shortages, Defra is working with veterinary professional bodies on solutions to improve recruitment and retention of veterinary staff, and to increase the number of UK veterinary graduates within the veterinary profession:

a) Defra provided funding to RCVS and BVA to support initiatives for improving well-being and retention within the profession.

b) To enable EU and EEA vets with non-UK degrees to continue to be able to practice their profession in the UK after the EU exit, Defra is in the process of amending the Veterinary Surgeons Act. This will ensure that EU nationals already registered or in the process of registering by exit day will continue to have their registration recognised by the RCVS. This will also enable RCVS to continue to recognise the overwhelming majority of EU veterinary degrees as these meet their equivalent standards. This is particularly important, given UK's reliance on EU/EEA vets in many sectors of the veterinary profession.

c) Defra worked with the Royal College of Veterinary Surgeons to support establishment of a new veterinary school at the University of Surrey, with the first cohort of students scheduled to graduate in July 2019.

21. To support the veterinary industry in facilitating international trade and product certification, the Royal College of Veterinary Surgeons has agreed to the use of Certification Support Officers (CSOs). The new CSOs will handle some of the administrative aspects of export health certification, freeing up OV time and capacity to provide the final assurance required and to sign the certificates. The Animal and Plant Health Agency has developed a comprehensive training programme for CSOs and will be making the course available free of charge initially.

22. Additionally, to reduce demand on veterinary surgeons' time, Animal Plant and Health Agency (APHA) is working with key veterinary stakeholders and will be piloting a role of lay Tuberculosis testers for livestock.

23. In terms of use of the current Tier 2 system, in addition to immigration costs, veterinary surgeons with degrees from non-UK universities that are not automatically recognised by RCVS will incur the cost of professional examination and registration with RCVS (totalling approximately £2,000).

24. The salary threshold (proposed in the MAC report concerning EEA labour) of £30,000 for skilled workers will prevent employers of certain veterinary sectors from filling key vacancies. For instance, the average starting salary for vets who work on inspecting and maintaining hygiene standards for meat processing in abattoirs is currently under £30,000 (Eville and Jones, 2018). Currently, over 95% of vets working in food hygiene roles in abattoirs are from overseas, with approximately 85 % from the EEA (Eville and Jones, 2018).

25. Maintaining the salary threshold would result in an inability to recruit to this sector, which could have an adverse effect on food safety or in increased costs to providers of these services, the meat processing industry and the farming sector.

26. The breakdown of countries of origin for veterinary degrees on the RCVS register is shown in Table 1 (This does not equate to the UK practising figure that is around 25,000):

Table 1: Country of origin of veterinary degrees on RCVS Professional Register (RCVS Facts 2017): **Origin of the degree**	**Number of degrees**
UK	20,740
EEA	9,140
Commonwealth	2,079
Rest of the world	604

Vent Chick Sexer Job Title	**Closest ONS Job Title**	**Closest ONS Occupation Code (4 digit)**	**Sectors most affected**	**Shortage levels**
Vent chick sexer	chick-sexer	9119	Poultry	26% as per previous MAC report.

Vent Chick Sexers identify the sex of chickens. They do this by looking inside the bird's anus (vent). Checking whether they are male or female allows the chicks to be reared appropriately. A MAC review dated February 2015 identified that the average salary for a Vent Chick sexer was £38,500.

28. In the MAC review dated February 2015 of the Shortage Occupation List the MAC suggested the government should ask them to look at this job in more detail when they were next commissioned to review the shortage occupation list. Given that this is the first opportunity to ask the MAC to look in more detail at this post, it is included here. In the previous report, it was stated that 'according to the respondents to a British Poultry Council survey of its membership, the vacancy rate for vent chick sexers is 26 per cent with vacancies remaining unfilled for up to five years'.

Shortages not in scope of Tier 2 currently

Job title	Closest ONS job title	Closest ONS Occupation Code (4 digit)	Sectors most affected	Shortage levels
Tree planter	Planter, tree	5112	Forestry	Not more than 200
Tree Nursery Labour	Nurseryman	5112	Forestry	Not more than 200

People working in tree planting and tree nursery will earn £17k-20k, although it should be noted that many will be paid per hour and not on fixed term contracts. Businesses report that they all try to recruit local labour but they rarely take up the work, and often then don't last long in the job and can be unreliable. The scale of the shortage is less than 200 people but these roles are very important.

30. Forestry workers are not included in Tier 2 – the roles are considered to be low skilled, primarily at entry level or levels 1 and 2 of the Recognised Qualifications Framework

(RQF), although a small number of related occupations under the 5112 occupation code are at Level 3.

Herdsperson Job Title	Closest ONS Job Title	Closest ONS Occupation Code (4 digit)	Sectors most affected	Shortage levels
Herdsperson	farm workers	9111	Livestock	Exact shortage levels unknown

31. Employment in manufacture of dairy products stands at 26,000. Employment in dairy farming is estimated to stand at around 44,000*.* Employment in dairy farming is categorised as low skilled because of the lack of formal qualifications, but it requires skill and aptitude. These skills can be learned on the job using a peer to peer approach but this takes time and while employees are learning they are operating at reduced efficiency, having a knock on effect on the farm business' overall productivity. Therefore, skilled herdsperson and stockmen are in high demand. Unfortunately there are not enough of them available at the moment as reflected by the experience of agricultural employment agencies who report having many unfilled vacancies on their books.

32. The annual costs of labour in the dairy industry vary, falling into the following bands:

 Stockman - £30-35k plus a house and pension

 Dairy Manager £40–60k plus a house and pension

 General operative (processing) £21-24k

 Supervisor (processing) £21-£57k depending on exact role and shifts

33. According to Royal Association of British Dairy Farmers (RABDF) surveys, in 2016, 62% of respondents were concerned Brexit would affect their ability to employ EU labour; 58% were worried about their unit's financial viability due to labour shortage. 51% of respondents in 2016 had experienced difficulty recruiting staff within the last five years; in 2014 this was 40%.

34. In the last ten years dairy farmers have been negatively impacted by a range of factors e.g. extremely volatile prices, changes in global supply and demand, the weather, or fluctuating product prices and input costs, the price crash in 2015/16 caused by the abolition of EU production quotas, the ban imposed by Russia on imports of dairy produce from EU countries in retaliation to sanctions imposed by the EU over its intervention in Ukraine, global over-production of milk and lower global demand. As a result many dairy farmers went through a challenging period of low prices and future uncertainty.

35. The dairy sector has experienced significant product margin challenges in the last decade where there have been price shifts of up to 40%. Reliance on EU labour in low skilled occupations is 35% (ONS, 2016). 63% of dairy farmers state they employ EU labour due to insufficient UK staff availability (Royal Association of British Dairy Farmers (RABDF), 2017); 83% of dairy farmers indicate 'willingness to work' as the reason why they employ EU labour (RABDF, 2017). Attracting non-skilled UK labour to re-locate to an area where they would lose their network of family support without a compensating

increase in income is very difficult (The Provision Trade Federation, cited in MAC Report, March 2018).

36. There are some initiatives already in place that are looking to improve interactions with schools. There is however no longer a co-ordinated industry careers initiative to inform pupils, parents and career advisers about opportunities in agriculture following the dissolution of Bright Crop.

37. Robotic milkers have been installed on many farms over the last 5 years and it is likely the number will continue to increase. Other examples of automation include kit such as heat detection and cattle movement sensors. Although these apparatus may not have a large impact on reducing labour requirements, they can have an impact on improving working conditions through speeding up procedures or improving detection and can have positive knock-on effects on overall productivity.

Horticulture Job Title	**Closest ONS Job Title**	**Closest ONS Occupation Code (4 digit)**	**Sectors most affected**	**Shortage levels**
Fruit Picker	picker, fruit, farming	9119	Horticulture	Association of Labour Providers (ALP) suggests 60% of agriculture and horticulture businesses are experiencing shortages in low and unskilled roles. The NFU (National Farmers Union) figure for shortage in seasonal labour in horticulture for 2017 was 10% and for 2018 is over 13%. ONS estimates put the seasonal agricultural workforce at c67,000

Vegetable Picker	Picker, fruit, vegetable growing	9119	Horticulture	Association of Labour Providers (ALP) suggests 60% of agriculture and horticulture businesses are experiencing shortages in low and unskilled roles. The NFU figure for shortage in seasonal labour in horticulture for 2017 was 10% and for 2018 is over 13%. ONS estimates put the seasonal agricultural workforce at c67,000.

38. The Association of Labour Providers (2018) completed a survey in September 2018 that revealed that 83% of labour providers were unable to meet their food industry clients' demands during the summer. They also completed a survey in January 2018 with food growers and manufacturers that indicated that 60% of agriculture and horticulture businesses were experiencing shortages in low and unskilled roles with one in eight in crisis.

39. There is a high dependence on seasonal labour from the EEA (only around 1% of workers are from the UK). Workers will often cross over between the two roles above, picking fruit one week and vegetables the next.

40. The NFU have highlighted that the lack of labour availability in horticulture has multiple ramifications for UK horticulture businesses and UK supply of horticultural produce. Firstly, there is a risk of produce being left unharvested resulting in huge food waste and large economic loss to businesses. One top fruit business estimated that loss of labour availability to pick their apples resulted in late harvesting in 2017. These apples were then no longer suitable as eating apples and were instead sent for juicing. The economic impact of this was estimated at approximately £30,000 to that business.

41. Many of those businesses that can are looking to export their production overseas where labour is more readily available. Exporting of production is already beginning to happen, with critical investment being lost to overseas establishments. This loss of UK horticultural growth will result in a reliance on imports of products that can be grown here, impacting the food chain, UK horticulture business and rural economy. The potential impact on food security should production be exported overseas should also be noted.

42. The Bright Crop Careers initiative was set up in 2012 to address the shortages of new talent being recruited across the agriculture and horticulture industries. The project was wound up in 2017.

43. For the longer term, Defra is working with industry explore the potential for innovation and automation in meeting future labour demands.

44. The Government has announced that it will introduce a new pilot scheme for 2019 and 2020 enabling up to 2500 non-EEA migrant workers to come to the UK to undertake seasonal employment in the edible Horticultural sector. This pilot will test the effectiveness of our immigration system at alleviating seasonal labour shortages during peak production periods, whilst maintaining robust immigration control and ensuring there are minimal impacts on local communities and public services.

45. This pilot is not designed to meet the full labour needs of the horticultural sector. Rather we are seeking to evaluate the immigration pilot's ability to assist in alleviating labour shortages during peak production periods. The pilot will operate in the edible horticulture sector, to support farmers growing UK fruit and vegetables. This is the sector of agriculture which has been experiencing the most severe seasonal labour shortages, and which the pilot aims to support.

Meat Processing Job Title	**Closest ONS Job Title**	**Closest ONS Occupation Code (4 digit)**	**Sectors most affected**	**Shortage levels**
Meat Processor	processor, meat	8111	Meat processing	Meat Processing employs c75,000 people according to the British Meat Processing Association BMPA). Shortages are at 10% according to the BMPA

46. According to a British Meat Processors Association (BMPA) survey, companies are on average experiencing a 10% shortfall on their required staffing levels. Jobs are advertised in the sector for £8-12 an hour depending on skill level and position. Trainee slaughterers can expect to earn anywhere between £17,000-25,000 a year according to a range of industry adverts. Since the referendum, and due to currency fluctuations, it has been more difficult for plants, often located rurally in areas of low unemployment, to hire

agency workers. A big multi-site BMPA member needs 1,500 agency workers a day yet many of its plants are in areas where local unemployment is less than 2% (BMPA, 2018). The meat processing sector is particularly vulnerable to price pressures. According to the BMPA, meat prices have not risen in line with average food prices since 1990 (46.4% vs. 57.7%). The drop in the price of meat, concludes the BMPA report, is linked to the consolidation of meat processing into large plants supplying supermarkets.

47. Many meat processers do attempt to recruit locally, through sustained campaigns in local colleges, job centres and with targeted social media and leaflet drops. However, these schemes are not reported to be highly successful as there little appetite for abattoir work and many plants are located in areas where local unemployment is relatively low, at less than 2%. In addition, it is hard for processors working with tight margins to pay significantly higher than the minimum wage. However, wage rates are seen to be regionally competitive and are not considered to be the main reason for the low numbers of domestic applicants or employees.

48. Industry is working with a charity which gets ex-servicemen trained in animal husbandry. They are also exploring ways to improve working conditions on farm – offering more weekends off, and improving the environment workers are in.

49. For meat inspectors, a new Apprenticeship Occupation for Meat Inspectors will be launched in early 2019 by Eville and Jones.

50. As a result of difficulties accessing suitable labour, these plants have been exploring methods to reduce the proportion of agency workers relative to full time workers, and have also been exploring ideas in automation at a faster rate than they might have previously. Plants are attempting to find technology which will replace large numbers of jobs, making investment worthwhile.

51. There is exploration of automation within meat processing for the purposes of slaughter, but it will be prove difficult to adopt on a widespread basis due to high upfront costs and unless it can be proven to maintain or improve animal welfare standards whilst improving productivity.

Veterinary Nurses **Job Title**	**Closest ONS Job Title**	**Closest ONS Occupation Code (4 digit)**	**Sectors most affected**	**Shortage levels**
Veterinary Nurses	nurse, veterinary	6131	Across sectors – of strategic importance to animal welfare, food biosecurity and public health	475 vacancies, representing a shortage of 7.6% (MEG, 2018).

52. According to the Major Employers Group survey, there were 475 vacancies in practices employing over 6200 nurses representing a nursing workforce shortage of approximately 7.6 % (2018).

53. Currently, only 261 (1.6%) of the total of 17,052 VNs registered with RCVS to practice in the UK come from EU/EEA area, and around 190 nurses—from third countries.

54. It would not be possible to train a sufficient number of veterinary nurses to fulfil a growing demand, we would like to attract more qualified veterinary nurses from outside of the UK in the shorter term to enable delivery of important public health services after UK exit from the EU.

55. It takes at least 3 years to qualify as a Veterinary Nurse, and the average Veterinary Nurse salary is £18,000- £26,000, which is below the £30,000 salary threshold currently in place for Tier 2 – they are also classed as only being at RQF Level 3.

Viticulture

Job Title	Closest ONS Job Title	Closest ONS Occupation Code (4 digit)	Sectors most affected	Shortage levels
Vineyard manager	viticulturalist	1211	Wine production	Exact shortage levels unknown.

56. Viticulture currently employ c2100 full time equivalents in the UK. The UK is simply not producing enough skilled vineyard managers to cope with demand, an issue which is likely to be exacerbated by the number of new vineyards being established and the growth in the area under vine.

57. There are approximately 700 establishments registered as directly linked to wine production in the UK with most situated in the southern half of the UK. Employment in 2017 stood at about 2100 full time employees with between 3000-4000 seasonal workers used at key times in the year.

58. Vineyard area is currently approx. 2500 hectares but is expanding rapidly with approx. with another 500 hectares scheduled to be planted this year.

59. Production fluctuates according to the season but is currently averaging at 6m p/a mark – although this will soon start to rise as new vineyards start to come on line (vines take 3yrs to mature to production capability) with a sales value estimated to be about £100m.

60. There are some initiatives that that are being developed by industry and educational establishments but these are limited and further educational/training opportunities are required.

Other occupations in shortage where there could be an impact for Defra’s sectors

Drivers Job Title	Closest ONS Job Title	Closest ONS Occupation Code (4 digit)	Sectors most affected	Shortage levels
Drivers	driver	8212	All	52,000 shortage in

LGV drivers according to the Freight Transport Association

61. Drivers of Large Good Vehicles (LGVs) play a vital role in agri-food chain, transporting from farm to fork and everything in-between. Defra is aware of substantial shortages (as reported by the Freight Transport Association and the Road Haulage Association) in the haulage sector and supports measures to ensure that this shortage is reduced. We are aware there is a wider EU shortage of hauliers, with other EU countries making recruitment drive as far as Asia. We understand that DfT along with industry and trade associations will be supplying the MAC with further evidence of the shortages as part of their own responses to the call for evidence. Due to the importance of hauliers in ensuring food supply is maintained, we fully support these responses.

Hospitality

62. Defra is aware of the shortages in the hospitality sector (as reported by UK Hospitality), with a particular interest in those that affect the agri-food chain, such as chefs and food and drink beverage managers. We understand that DCMS along with industry and trade associations will be supplying the MAC with further evidence of shortages as part of their own responses to the call for evidence and due to the importance of the hospitality trade at the end of the food chain, we fully support these responses.

Retail

63. Retailers play a vital role in the agri-food chain, enabling consumers to a have access to an enormous variety of produce. Defra is aware of the shortages in the retail sector (as reported by the British Retail Consortium) and understands the impact that the pressures that current labour market conditions along with the uncertainty created by EU Exit has had on retailer's recruitment. We understand that the British Retail Consortium along with industry will be supplying the MAC with further evidence of the shortages as part of their own responses to the call for evidence and due to the importance of retail at the end of the food chain, we fully support these responses.

Areas of possible shortage following EU Exit

Introduction

64. In addition to those shortages outlined above, which may be exacerbated as a result of EU Exit, the following areas have been identified as sectors where there may be a particular risk of any dramatic reduction in EU nationals working/coming to work in the UK.

Eggs

65. Over 10,000 people are directly employed in egg production according to the British Egg Industry Council (BEIC), with a further 13,000 indirectly employed. Evidence suggests those working in egg packing centres often work there long term. Defra visited one egg packing centre in the North East of England where a large number of employees had been in the company for over a decade. This reflects industry reports which also suggest that longer term migrant labour is useful to the sector. The egg industry operates year round so seasonal or temporary labour is not as important as it is in other sectors. Full time jobs advertised on farm for egg collectors can fetch £15,000-18,000 and a managerial role at an egg packing centre may fetch £19,000 a year.

66. A Government report from 2017 estimates 40% of on farm workers and 50% of those in egg packing centres are EU migrants. Industry information, however, implies this could be a low estimate with figures as high as 60% for eggs packaging. For the egg packing centres, a reduction in EEA labour could lead to a slow-down of production lines, higher breaches of egg marketing and safety laws and increase wastage.

67. The egg industry has tried to recruit domestically by setting up the Lion Scheme Training Passport in 2016 designed to help attract, retain and professionalise roles and is a step forward in adapting to uncertainty. However, they believe that more can be done in schools to show the importance of food and production at an early age.

68. In terms of levels of engagement with T-Levels and other government initiatives, the industry is remotely located in areas where unemployment is low. This can lead to difficulties in getting people involved, particularly younger people who are unable to travel independently to and from locations without a car.

69. The egg industry has operated for several years without subsidy. This has meant they are often highly receptive to change, and are ready to innovate and adapt business practice in order to address need. As a result, industry is ready to invest in technology in order to reduce a requirement for labour, particularly in egg packing and processing plants where a large amount of automation is already in place.

70. However, the positive impact of automation is not immediate, and labour is needed to fill the roles whilst systems are developed, in addition to fewer, higher skilled workers as operatives. Additionally, due to animal welfare priorities, some roles on farm can never be replaced.

Fisheries

71. Seafish (the NDPB set up to support the fishing industry) have conducted a number of recent surveys on labour in the fishing sector. Seafish found there were 17,999 full time equivalents working in fish processing in 2016. In their most recent survey (2017) of labour in the UK seafood processing sector, workers who are citizens of other EEA countries represented 49% of those employed in fish processing sites (UK workers represented 48%). Region and site size were major factors influencing the nationality mix of the workforce. The Grampian region had the largest proportion of non-UK workers at 71% of the workforce. Overall 7,113 workers in the survey sample were employed in Scotland, and 55% of these were from EEA countries. The Humber region had the lowest proportion of non-UK workers at 33% of the sampled workforce. 5,065 in the survey sample were employed in England and 43% of these were from EEA countries. Larger processing sites are more likely to employ EEA workers than smaller sites. Workers from other EEA countries make up a greater proportion of low-skilled and unskilled roles than skilled or high-skilled roles – these are held by UK workers.

72. The main barrier to recruiting UK workers in the seafood processing sector is the negative perception of the industry held by some workers. The main reasons for this negativity include the physicality of the job, the cold and wet working environment, and unsociable working hours. The second most common response in the survey was that low levels of local unemployment meant there was a lack of UK candidates for vacancies.

73. Seafish conducted a Pilot survey on employment in the UK fishing fleet in 2017, with information on nationality of workers provided by the skippers or owners of fishing vessels

(although not checked against any supporting documentation). Out of the information provided, three quarters of the jobs in the sample were filled by UK workers. A further 10% of jobs were filled by workers from other EU/EEA countries, and 13% from non-EEA countries. Most of the non-UK workforce filled deckhand and engineer positions.

74. To help meet the challenges for the future, Defra Fisheries team has established the Seafood Industry Leadership Group to deliver 'Seafood 2040: A Strategic Framework for England'. It will deliver a single cross-sector seafood training and skills plan, aiming to support businesses in the seafood supply chain to recruit workers with suitable skills.

75. We understand that Seafish will be supplying the MAC with further evidence of the shortages as part of their own response to the call for evidence.

Food and Drink Manufacturing

76. The 2018 Migration Advisory Committee report on EEA migration in the UK notes that the manufacture of food and beverages sector "…currently has a very large percentage of migrant workers, particularly NMS [new member state] migrants, the share of which has risen from 2.6% in 2004 to 24.3% in 2016. EU migrant labour is primarily employed in lower-skilled factory-based roles. Access to flexible migrant labour has been critical to growth of this sector".

77. The MAC report indicates that it is primarily NMS migrants that occupy low-skilled jobs, with more than 50% of 'EU 13+ migrants' occupying high/medium roles in the sector. This is broadly consistent with a 2017 Grant Thornton study that revealed that, taking the food and drink manufacturing sector as a whole, 38% of EU workers are working in lower skilled roles, whilst a further 19% are highly educated and doing specialised roles.

78. The sector has been trying to improve its image amongst potential employees. Towards this end over thirty initiatives have been initiated. Prominent amongst these are IGD's 'Feeding Britain's Future' campaign where industry representatives volunteer to talk to school children about careers in the food and drink manufacturing industry, and the 'Tasty Careers' web career map which gives a clear representation of the myriad careers possible in the industry beyond the ones that would naturally come to mind.

79. Whilst there is increasing evidence that wages are not the sole factor around decisions on a new job, there is no doubt that for many this will be an important issues. As such the fact that, in general, the wages in the food and drink manufacturing sector are below the median wage of the whole economy does need to be recognised. That said there are variations with some parts of the sector paying well above the median wage. Alcohol production, for example, is relatively well remunerated. Median pay in breweries was £18.02 an hour (2015), well above the national average, and distilleries pay only slightly less on average (£16.31 in 2015).

80. The Food and Drink Sector Council is a formal industry partnership with Government to create a more productive and sustainable food and drink sector. The Council is an industry-led board composed of businesses from every part of the food chain. Among the Council's priorities are agricultural productivity, nutrition, exports, workforce and skills, innovation, logistics and packaging.

81. The workforce and skills group, led by Dame Fiona Kendrick, seeks to:

'Secure an energetic, ambitious and world-class workforce capable of upholding the UK Food and Drink Industry's position as world leading producers of innovative, quality, affordable and sustainably produced food and drink.'

82. The focus is currently on three discrete areas - apprenticeships, image and upskilling/retraining – with overarching work on evidence. The aim is for the group to present recommendations to the Sector Council in March 2019.

Livestock

83. Around 7,000 people are employed in pig production. Approximately half of pig farming business surveyed in by the National Pig Association (NPA), the main trade body for the pork industry in the UK, reported that their business would be unviable without the use of these EU migrants. According to this survey, around 20% of pig business would be unable to survive without access to overseas workers, and a further 25% would have to completely change how they operated in such a change of circumstance. The companies surveyed claimed that 94% of non-UK workers came from the EU.

84. The NPA study concluded that the UK pig industry struggles to attract, recruit and retain suitable people to work on farms, and currently relies on migrant labour to fill permanent roles – farms, abattoirs and processing plants. Around 58% of business employ at least one foreign worker, with 11% employing more than 10 and 2% employing more than 50.

85. In 2015, the British Poultry Council (BPC) stated that 37,300 people were directly employed in the poultry industry, with 9,300 working in agriculture and 28,000 in processing. The British Poultry Council (BPC), whose members represent around 90% of poultry production in the UK, estimated in their response the EFRA sub-committee, that around 60% of the workforce in the UK poultrymeat industry are EU nationals. The average job would earn around £18,000 a year. Assistant farm manager roles are advertised for around £19,000-22,000 and farm manager roles may fetch up to £34,000.

86. The poultry industry has a higher dependency on permanent workers from the EU with these workers are often classed as 'low-skilled', but require a certain type of skill. However, in addition to this, the industry seasonally expands its workforce by around 13,000 people in order to meet increased demand for the processing of turkeys at Christmas time (NFU, 2017). The NFU report suggests that the majority of this seasonal workforce (approximately 58%) tends to originate from outside of the UK. It is likely that this workforce would be filled by workers from the EU, as work in the poultry meat sector is not listed on the shortage occupation list, and there are no other provisions to allow non-EU workers to work short term in this industry. This work is specialised and highly labour intensive.

87. There have been many industry-led actions to improve recruitment and retention of staff. The UK pig industry has its own training strategy and continuing professional development scheme. For example, the recently launched AHDB Pig Pro platform enables staff and managers to organise and track training and to develop career paths for themselves. The pig sector is highly supportive of the T-levels being introduced by Government. The pig sector is actively participating in selection for panel members for the agriculture route within the T-skills framework. The stockman specification has now been agreed as part of the Trailblazers programme and a general farm worker specification (important for mixed farms) is in development.

88. The poultry industry have been committed to developing the skills and capabilities of their workforce, investing in training and development, and taking advantages of the apprenticeship trailblazer scheme and a new apprenticeship levy. The industry have also been involved in creating close links with education, attempting to promote career paths and qualifications in the industry to make it a viable option to young people. The BPC has driven the commitment to minimum levels of qualifications across the industry, along with embracing the apprenticeship trailblazer initiative.

89. The poultry meat sector has historically been unable to increase the number of UK workers as it is located in areas of generally low unemployment. In addition the sector often has unsociable hours, requires heavy labourers, and is located in geographically remote areas, meaning that any prospective employees must be able to travel independently.

Water and Waste

90. In addition to roles critical to ensuring our food supply a number of additional roles within Defra sectors are important for environmental outcomes. In the 25 Year Environment Plan, the Government pledged to leave the environment in a better condition for the next generation. Our plan is to become a world leader in using resources efficiently and reducing the amount of waste we create as a society.

91. A number of very specific roles have been identified in Water and Waste as potentially in shortage already. For Water these include roles as diverse as chartered engineers, data scientists, electricians and electrical engineers, programme and project managers and watermen. For Waste they include chemists, clinical waste operatives, engineers, financial modellers and weighbridge operators.

92. For the water workforce, 4% come from the EU (Labour Force Survey, July 17 to June 18, Energy and Utility Skills):

- Skilled Trades (12% of that workforce - i.e. craftsperson/ technician roles) – half of these are from the EU8 countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia).

- Professional occupations (6% of that workforce - i.e. engineering) roles.

93. For the waste workforce, 10% come from the EU (Labour Force Survey, July 17 to June 18, Energy and Utility Skills):

- 17% of the admin workforce
- 16% of elementary occupations – mainly from the EU8 countries (Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia, and Slovenia).

94. The Energy and Utilities Workforce Renewal and Skills Strategy 2020 was produced in 2017 as a means to help address the sector shortages. In the face of an increasingly competitive talent environment, the energy and utilities sector predicts that 221,000 vacancies will need to be filled during the next decade – brought about through 100,000 existing employees that are set to retire and 90,000 people who will leave to find new roles. The 2015 Employer Skills Survey reported that 36% of hard-to-fill vacancies in the

UK energy and utilities sector were driven by a lack of proficient skills – well above the 23% national average This strategy has actions based around three themes:

- Sector attractiveness and recruitment – to increase the future talent pool.
- Maximising investment in skills – investment made by asset owners and their supply chain
- Targeted action – to address anticipated skill gaps and shortages

Conclusion

The supply of migrant workers is evidently vital to many of the sectors represented by Defra and also to the UK and food and drink supply chain as a whole. It is also plays a role in ensuring that Government can deliver against the environmental commitments it has made. This can be expressed at both sectoral and occupational level. This response highlights the shortages that already exist and those which may come to exist depending on the development of the future skills-based immigration system. Those shortages that already exist may be further exacerbated after EU Exit.

Defra welcomes this call for evidence, the review of the SOL and the opportunity to provide evidence across the full breadth of skill levels. We have encouraged our stakeholders to respond to this call for evidence to ensure that the most detailed and accurate information is supplied to the MAC for their consideration. We will continue to work with stakeholders to monitor and assess labour supply as well as continue to work closely with cross government officials and we will continue to develop our evidence base and data to support governmental and industry understanding of labour supply.

Department for Education

The Migration Advisory Committee’s review of the Shortage Occupation List

Evidence submitted by the Department for Education

January 2019

Introduction

1. The Government asked the Migration Advisory Committee (MAC) to carry out a full review of the Shortage Occupation List (SOL) to determine which high-skilled roles would be sensible to fill through non-EEA migration under Tier 2 of the Points Based System. This submission outlines the key challenges currently facing children's services in recruiting and retaining social workers, and outlines the main strategies we are currently deploying to meet these challenges. It argues that government action will take time to secure sufficient improvements in recruitment and retention to address current challenges. **It therefore recommends the retention of child and family social work on the SOL**

Summary

2. Social work is a highly skilled graduate profession that supports the most vulnerable children, families and adults. Children's social work is, in particular, under significant strain with both high vacancy and turnover rates – at 17% and 15% respectively at the end of September 2017. Continuing increases in demand for children's social care are likely to further increase pressure on the sector.

3. A well-qualified, motivated and skilled workforce is vital for an effective children's social care system. Although there are many examples of good social work practice around the country, there is evidence that the system currently faces a number of recruitment and retention challenges. These include; difficulty in recruiting enough people with the right skills and aptitude; inconsistent initial training; social workers that lack the time, specialist skill and supervision to achieve real change; and retention of the best and most experienced practitioners within the profession

4. The Department for Education has a significant programme of reform, focusing efforts on recruiting domestic social workers and addressing issues that lead to poor retention. However, the increased demand for child and family social workers, coupled with the time it will take for additional qualified social workers to enter the workforce means that the Department believes it would be premature to remove child and family social work from the shortage occupation list. Local authorities will still need to recruit from overseas as a means of, at least in part, addressing demand and secure the provision of strong children's social care services for the most vulnerable children and young people.

Background

5. There are currently around 92,000 social workers registered in England. The Department for Education collects information on the number of **child and family social workers** in local

authorities on an annual basis (as at 30 September each year). The data for 30 September 2017 was published on 15 February 2018 and showed that:

- The number of child and family social workers at 30 September 2017 was 30,670 (headcount). This equates to a full-time equivalent of 28,500 child and family social workers.
- There were 5,820 FTE vacancies, equating to a vacancy rate of 17%, with particularly high vacancy rates in London. Table 1 provides regional vacancy rates.
- The turnover rate (defined as number of leavers divided by the number of workers in place at 30 September 2017) was 15% (headcount).[15]

Table 1: Regional vacancy rates

Region	FTE vacancy rate (%)
East	16.7
East Midlands	21.3
London	25.7
North East	11.5
North West	13.4
South East	15.2
South West	15.8
West Midlands	19.2
Yorkshire and Humber	7.8

6. Table 2 compares the national **vacancy rate** for children's social work against other workforces. Whilst these are not directly comparable, using different survey design and vacancy definitions, it demonstrates the particular challenges faced in child and family social work.

Table 2: National vacancy rate by workforce[16]

Children's social work	Adult social work	Health and social care	Whole economy average
17 %	11%	6.6%	2.6%

7. Responses to the Department's omnibus survey carried out in October and November 2017 showed that whilst local authorities were, on the whole, confident that they would have sufficient

[15] The Children's Social Work Workforce 2017 - https://www.gov.uk/government/statistics/childrens-social-work-workforce-2017

[16] Sources: DfE, DH, ONS

permanent, well-qualified child and family social workers to meet their needs over the following 12 months (76% were confident), a substantial minority (25%) were not confident about this.[17]

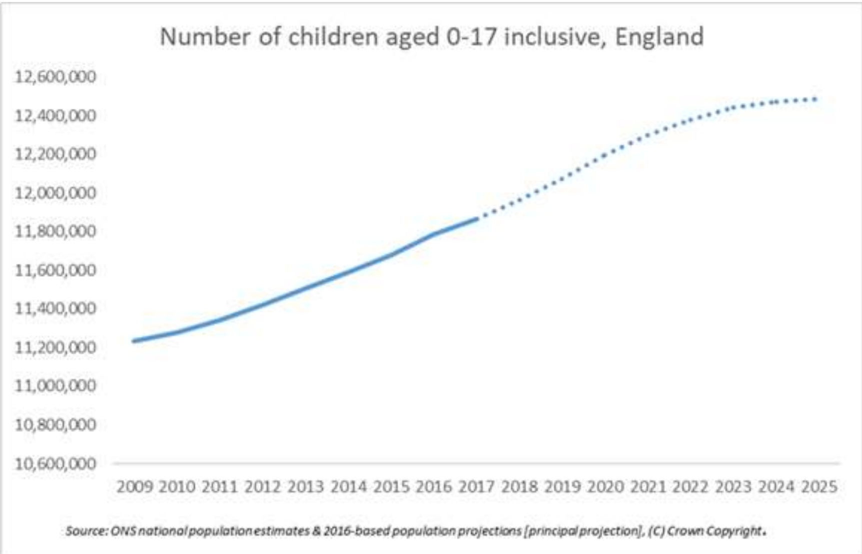
8. Breaking this down further, there is some evidence that sufficiency problems vary significantly based on:

   - Location: with London and the West Midlands facing the highest shortfalls, although a small proportion of local authorities have close to zero vacancies and agency staff.
   - Level of experience: with shortfalls greatest for more experienced staff (60% of LAs reporting difficulty in recruiting senior social workers, compared to 36% of LAs for newly qualified social workers).
   - Type of role: some evidence that frontline child protection roles are the hardest to fill, and anecdotal evidence of attrition from frontline roles to wider social roles in the children and families sector.

Future demand for social workers

9. Whilst there are already resourcing challenges demand continues to grow. One key factor is, of course, the overall population of children. As figure 1 shows this is projected to increase further.

Figure 1: Number of children aged 0-17 inclusive



[17] Children's Services Omnibus, Wave 3 Research Report, May 2018, DfE, https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/707194/DfE_CSO_Wave_3_Final_report_150518.pdf

10. At the same time the demand for children's social care support, in which certain work must be carried out by a registered social worker, also continues to rise:

- The number of referrals (a request for services to be provided) to children's social care grew by 1.5% from 646,120 in the year ending 31 March 2017 to 655,630 in the year ending 31 March 2018.
- The number of children in need at 31 March continues to increase, from 389,040 in 2017 to 404,710 in 2018, an increase of 4.0%. The rate of children in need per 10,000 children under 18 also grew from 330.1 in 2017 to 341.0 in 2018. This continues a long-term trend as shown in table 3 below.
- The number of section 47 enquiries carried out by local authorities when there is a reasonable cause to suspect a child is suffering, or is likely to suffer significant harm increased from 185,680 in 2017 to 198,090 in 2018, an increase of 6.7%.
- The number of child protection plans at 31 March has also increased from 51,080 in 2017 to 53,790 in 2018, an increase of 5.3%.

Table 3: Number of children in need[18]

Year ending 31 March	Number of children in need at 31 March	Rate per 10,000 children aged under 18 years
2013	378,030	330.9
2014	395,480	343.7
2015	390,130	336.6
2016	393,910	337.3
2017	389,040	330.1
2018	404,710	341.0

Social worker supply

11. The majority of social workers enter the profession through traditional higher education social work courses. Skills for Care[19] report that 4,590 students enrolled onto social work courses in 2015/16. The number of enrolments had remained at a similar level since 2012/13 after having

[18] Characteristics of children in need: 2017 to 2018
https://www.gov.uk/government/statistics/characteristics-of-children-in-need-2017-to-2018
[19] https://www.skillsforcare.org.uk/NMDS-SC-intelligence/Workforce-intelligence/documents/Social-Work-Education-in-England-2017-2.pdf

previously decreased by around 1,000 between 2010/11 and 2012/13. Skills for Care also report that 4,040 people qualified from social work courses in 2015/16, a reduction of 9% from 2014/15.

12. Skills for Care estimate 89% of social work graduates had found employment 6 months after graduating with a qualification (69% as social workers, 16% in health and social care related roles and 4% in non-social care related roles). This was higher than 77% of graduates across all higher education.

13. This suggests that social work remains an attractive profession for students and that a majority of those qualifying move in to social work employment following graduation. The data also indicates regional variations in the rate of conversion from graduation to employment and, in particular, that graduates in regions with larger number of graduates were less likely to find employment in social work. This could indicate a mismatch in supply and demand at regional level.

14. Furthermore, Holmes et al (2013) suggest that the key recruitment challenge in social work does not appear to be a shortage of people wanting to enter the profession.[20] They point out an apparent paradox with high employer vacancy rates on the one hand, and high numbers of newly qualified social workers being unable to find employment on the other. They suggest that employers may be unwilling to take on newly qualified staff (because of costs of further training and concerns about quality of social work education), preferring to opt instead for candidates with some post-qualifying experience.

Government action to address recruitment

15. Government has a comprehensive programme in place that focuses on supporting **recruitment** of high quality social workers and addressing the conditions that lead to poor **retention** rates. It also places an emphasis on establishing the conditions that reduce demand for services including for example recently announced investment to help the reduce the number of children entering care. The following sections outline how government is helping to address the supply of social workers.

Social Work Bursaries

16. Introduced in 2003 the social work bursary supports students on higher education social work programmes. Funded by the Department of Health and Social Care:

[20] Holmes, E et al (2013) Reforming Social Work. Improving social worker recruitment, training and retention. Policy Exchange. London.

- The number of whole-time equivalent social work bursaries for postgraduate students starting in the 2018 academic year has been set at 1,500.
- The number of whole-time equivalent social work bursaries for undergraduate students who started in the 2017 academic year has been set at 2,500. The bursary is available to undergraduate students as they start their second year of study. The bursary is only available to students ordinarily resident in England.
- The value of the basic bursary is as much as £4,862.50 pa (£5,262.50 in London) for undergraduate study and £3,362.50 pa (£3,762.50 in London) for postgraduate study. There are additional payments for eligible postgraduate students for childcare allowance and disability.
- The total funding available for bursaries in the 2018-19 financial year will be, £58.5m, the same amount as in previous recent years.
- Students who do not receive a bursary are eligible for a fixed Placement Travel Allowance grant of £862.50.

Fast-track Recruitment

17. Since 2010, the Department has directly supported fast-track graduate recruitment programmes that aim to bring in to the profession people who would not otherwise follow a traditional post-graduate route.

Step-Up to Social Work

18. Step Up to Social Work (Step Up) is a tailored, employer-led, training programme that provides successful trainees with a Postgraduate Diploma in social work, alongside intensive hands-on experience. It supports those already working with vulnerable children or families who may not be able to take two years out of their career to undertake a Masters programme.
19. Participants are required to hold a minimum 2:1 degree from a UK Higher Education Institution (or approved equivalent overseas qualification); or a 2:2 degree plus a post-graduate level 7 qualification (in any discipline except social work). Such latter qualifications could include a Post-graduate Certificate or Master's degree. Participants are also required to hold GCSEs in English/English Language and Mathematics at grade C or above
20. Since its introduction in 2010 the programme has grown extensively:
    - 42 local authorities participated in its first cohort, which started in 2010; 137 are committed to involvement in the 2020 cohort.

- 168 social workers qualified through the first cohort, 546 are studying on the current cohort and the 2020 cohort will support up to 700 trainees.

21. Evaluation of the programme also indicates that it has been successful in retaining programme graduates within the profession. The first findings from a three-year longitudinal evaluation by Durham University of Step Up cohorts 1 and 2 indicate that 84% of the cohort 1 Step Up graduates identified in the study were still practising in child and family social work after three years.[21]

Frontline

22. Introduced in 2014 Frontline is a 2-year, fast-track training programme targeted at bringing high performing graduates with leadership potential into child and family social work. The programme, aimed at those who may not otherwise have considered social work as a career, has given social work prominence in the graduate recruitment market.

    - The first cohort of participants started their training in July 2014, with 100 qualifying as social workers.
    - The fifth cohort commenced in July 2018 with 336 participants starting and 51 local authorities offering the programme.
    - Recruitment for the sixth cohort to begin training in July 2019 is underway. Funding is in place to recruit up to 452 candidates.

23. The Department has recently carried out a procurement exercise to secure a replacement programme from 2020 onwards.

Graduate Apprenticeship in Social Work

24. The Institute for Apprenticeships has recently approved the standard and assessment plan for a new graduate apprenticeship in social work. Intelligence suggests that the first people to start training as a social worker through this route will do so from autumn 2019 and we estimate that around 600 people may do so each year. The first people qualifying as social workers through this route should do so during 2022.

Retention

[21] Step Up to Social Work evaluation after 3 and 5 years: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/707085/Step_Up_to_Social_Work_evaluation-3_and_5_years_on.pdf

25. Studies suggest that a combination of workforce issues over time have affected staff morale and reduced incentives to stay within the profession, resulting in high turnover rates of staff and skilled social workers leaving the profession (Holmes et al, 2013). One study estimated the average working life of a social worker to be just under 8 years, compared to 16 for a nurse and 25 for a doctor (Curtis et al, 2010). [22]

26. Data collected from local authorities show that in 2017, around half of all child and family social workers had been in service in that local authority for less than 5 years, 20% for 5 to 10 years, 21% for 10 to 20 years and 9% for 20 years or more. Eighty percent (FTE) of child and family social workers, who left a local authority during 2017, had worked there for less than 5 years.

27. Research also shows that social work suffers from working conditions that exacerbate stress and lead to high levels of intention to leave the profession. For example research carried out by Bath Spa University on behalf of the Social Workers Union and British Association of Social Workers showed, for example, that:

    - Nearly half of responding social workers were either slightly or extremely dissatisfied in their jobs, and that this was highest in child and family social workers.
    - One-third of social workers suggested that they were looking to leave the profession completely in less than 18 months.
    - The main issues leading to high levels of stress, and intentions to leave, included managerial support and supervision, and working practices (including physical conditions and levels of respect for the profession).[23]

Government action to address retention

28. The Government is taking action to address the retention challenge. In particular, it funds professional development programmes at key stages in social work careers. These include:

    - The Assessed and Supported Year in Employment, which provides employers with £2k per participant to support newly, qualified social workers with the transition from initial education and training to the realities of practice. This programme supports around 2,800 newly qualified social workers each year in child and family services.

[22] Curtis, L., Moriarty, J. and Netten, A. (2010). The expected working life of a social worker. British Journal of Social Work, 40 (5). pp. 1628-1643.
[23] UK Social Workers: Working Conditions and Wellbeing (August 2018) https://www.basw.co.uk/system/files/resources/Working%20Conditions%20%20Stress%20%282018%29%20pdf.pdf

- Programmes targeted to frontline managers in response to research that indicates the quality of management and supervision is key to both quality of provision and the experience of frontline social workers. A programme for new managers started in autumn 2018.
- A programme for aspiring future leaders in social work that launched in 2017.

29. Furthermore, a comprehensive programme of improvement for children's social care is in place. This includes addressing specific failures in local authorities, and helping secure better working environment and conditions allowing social workers to thrive and remain in practice.

Pay

30. Available evidence does not suggest that pay is a key motivating factor in either the initial recruitment or retention of social workers. Local authority child and family social workers are subject to local government pay agreements. Each local authority decides where to place its employees on the local government national pay spine. The National Joint Council, representing both unions and their employers, agrees the national pay spine. It agreed a two-year pay deal in April. From information available to the Department the average starting salary of a newly qualified social worker is around £24,000 which compares to a minimum of £23,700 on the main teaching pay range, and a little over £23,000 for a nurse. An experienced social worker can expect to earn around £40,000. [24]

Conclusion

31. The evidence and analysis presented here identifies that there are ongoing high levels of vacancies in child and family social work, and retention is a key challenge. Increasing demand for services suggests that both increasing the number of newly qualified social workers entering the profession and securing improvements in retention are needed to address the vacancy challenge. Government has a comprehensive suite of programmes in place to address both of these challenges but they will take time to secure significant improvements. The demands of child and family social work are high and the expectations place on the profession to support the most vulnerable in society means that it is essential employers can recruit appropriately qualified staff with the greatest degree of flexibility. We therefore recommend that child and family social work should remain on the Shortage Occupation List.

[24] Salary information provided by the National Careers Service

The Migration Advisory Committee's (MAC) review of the UK Shortage Occupation List (SOL)

Evidence submitted by the Department for Education's International Higher Education and STEM teams, January 2019

Introduction

The UK Higher Education (HE) and science, technology, engineering and maths (STEM) sectors are British success stories, underpinning key aspects of the UK's Industrial Strategy, including our ambitious target to boost spending on Research and Development (R&D) to 2.4% of GDP by 2027.

Access to international talent reinforces this success by enabling universities and research institutions to recruit world-leading academics and researchers across a range of disciplines. It is vital, therefore, that the UK immigration system, including the Shortage Occupation List (SOL) – which exempts employers hiring international workers to listed occupations from undertaking the Resident Labour Market Test (RLMT)[1] and the five-year salary threshold for settlement in the UK (of £35,000) – remains fit for purpose, and does not restrict UK access to a global talent pool that supports academia and research. This is particularly important in subject areas that are in shortage, and in areas that are a priority for the UK economy, including key HE occupations and STEM.

[1] The RLMT requires an employer to show to UK Visas and Immigration (UKVI) that no 'settled worker' (a UK national, an EEA national exercising 'treaty rights' or a citizen of a UK Overseas Territory, except citizens of Sovereign Base Areas in Cyprus) is available for the role they wish to fill with a Tier 2 skilled visa worker. To satisfy the RLMT, employers must advertise jobs in at least two places that are suitable for the industry/job in question and advertise for a total of 28 days in either one to two stages; either of which should not be shorter than 7 days.

International staff in UK HE

The UK's academic workforce is internationally diverse, with staff from 199 countries other than the UK who comprise 29.8% of academic staff and 10% of non-academic staff overall.

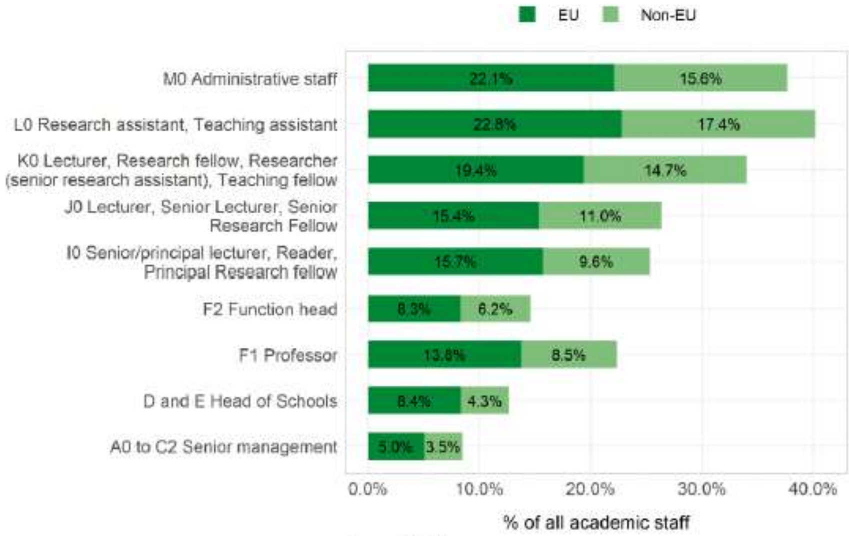
Of all academic staff in the UK, 13% have a non-EU nationality, representing an increase of 9% since 2015/16, compared to a growth in UK national academic staff of just 2% between 2015/16 to 2016/17. This demonstrates the vital importance of non-EU international staff to the UK HE sector, and to a number of key subject areas (explored further below).

The proportion of EU academic staff has also grown, with an increase of 6% since 2015/16, bringing the share of UK HE staff with an EU nationality (non-UK) to 18% in 2015/16. While EU staff are not relevant in the context of the MAC's current review of the SOL, it will be vital to consider the high proportion of EU academic and non-academic staff at UK providers when the new immigration system is introduced.

Roles held by international staff

In terms of contract level, there is above average representation of non-EU international staff at lower contract levels[2] in the UK, such as research assistant (17.4%) and lecturer and researcher (14.7%), **indicating a significant reliance on international staff in the early stages of the academic pipeline** – see Figure 1.

Figure 1: Academic staff by contract level and nationality, 2016-17



Source: HESA.

The same is true for EU staff, who represent an even greater proportion of staff at lower contract levels – 22.1% of research assistants and 19.4% of lecturers and researchers at UK HE providers. Taken together, EU and non-EU international staff make up around 40% of staff in occupations such as research and teaching assistants in the UK. **Many of these individuals will be skilled to a high-level, and will not be easily replaced by UK nationals**, who may not possess the requisite skills and expertise to take up these often-niche roles demanding very specific knowledge.

International staff in key subject areas in the UK

UK HE providers are reliant on international staff in a wide range of STEM subjects, as well as economics, modern languages and development studies. There are currently three subject-areas where a large proportion of staff in the UK are international: economics, chemical engineering and modern languages – see Table 1[3].

2 Further detail about the contract levels utilised within the HESA Staff Record collection can be found on their website: https://www.hesa.ac.uk/collection/c17025/combined_levels

Universities &Colleges Employers Association. Higher Education Workforce Survey 2018. https://www.ucea.ac.uk/en/publications/index.cfm/hews18

Table 1: International academic staff by subject area, 2016-17

Subject area (cost centre)	EU	Non-EU	Total international
(129) Economics & econometrics	36.8%	27.6%	65.7%
(116) Chemical engineering	26.3%	28.5%	55.4%
(137) Modern languages	36.4%	13.9%	51.1%
(125) Area studies	23.5%	23.8%	49.1%
(127) Anthropology & development studies	22.9%	23.3%	48.4%
(117) Mineral, metallurgy & materials engineering	20.3%	26.7%	48.3%
(119) Electrical, electronic & computer engineering	18.9%	28.1%	47.5%
(122) Mathematics	26.6%	19.0%	46.5%
(114) Physics	27.1%	17.9%	46.1%
(128) Politics & international studies	26.4%	16.7%	43.8%
(115) General engineering	17.7%	24.1%	43.0%
(121) IT, systems sciences & computer software engineering	21.7%	18.6%	41.3%
(118) Civil engineering	21.9%	19.0%	41.2%
(113) Chemistry	23.3%	16.4%	40.7%
(120) Mechanical, aero & production engineering	17.1%	22.3%	39.7%

UK HE providers' dependence on non-UK nationals for academic staff in STEM subjects is striking, and unlikely to change in the immediate future, with non-UK nationals making up a significant proportion of the UK STEM pipeline.

- EU and non-EU international students represent 48.4% of all UK full-time taught postgraduates in STEM subjects;

- EU and non-EU international students also make up 47.5% of full-time postgraduate research students (those studying towards Research Masters and PhDs), according to 2016/17 HESA data.

Skills shortages across the UK

There is broad agreement across industry and government, reiterated in the Public Accounts Committee on STEM skills in April 2018, of the importance of STEM skills to the UK's future economic growth and continued prosperity, particularly in terms of improving our international competitiveness through increased productivity.

The Confederation of British Industry (CBI) and other organisations like Engineering UK and the Royal Academy of Engineering have repeatedly highlighted the critical importance of STEM skills in playing a central role in developing innovative products and services that can be effectively positioned in world markets. The UKCES 2015 STEM review of 38 high level STEM occupations identified how these contributed 2.8 million jobs to the UK economy.

Noting the importance of STEM skills to the wider economy, concerns have also been raised by the HE sector and wider industry about a shortage of suitably skilled graduates and trained professionals in the UK STEM workforce. This is particularly challenging in the context of the Government's clear and ambitious aim to raise the overall R&D intensity of the UK economy to 2.4% of GDP:

- The DfE Employer Skills Survey 2017 reported difficulties in recruiting people in STEM occupations;

- The 2018 STEM skills indicator[4] revealed that nine in ten (89%) STEM businesses have found it difficult to hire staff with the required skills in the last 12 months, leading to a current shortfall of over 173,000 workers.

[4] Research conducted by PCP Market Research among a nationally representative sample of HRs and senior decision makers at 400 businesses in STEM industries (excluding micro-businesses) across the UK, between 20th and 30th April 2018.
5 UCEA (November 2018) and www.elsevier.com/research-intelligence?a=507321

The Government has committed to addressing our STEM skills gaps in the Industrial Strategy White Paper – and ensuring that we have a viable pipeline of international talent is a key part of ensuring that. Maintaining the existing status of STEM professions within the SOL will be an important indicator to the Public Accounts Committee that we are taking their concerns around the immigration pipeline seriously.

Can the UK workforce fill vital HE and STEM skills gaps?

The inherently international nature of academic research means that it is extremely challenging to simply replace EU and non-EU international staff with domestic UK staff. **The specificity of knowledge and the time it takes to develop such knowledge means that substitution is far more difficult than for other occupations**.[5] Upskilling the domestic population to key specialist (including STEM and other technical) roles, whilst desirable, will also be a very long-term and multi-faceted process, possibly requiring changes to school policies to encourage pupils to study particular subjects and consider HE careers. These changes would not bear fruit for many years; even without changes at the school level, it takes *at least* 7 years to complete a BA, MA/MSc and a PhD.

It is probable that some non-academic, non-technical groups could be replaced domestically, given their small numbers and either lower skilled or less specialist nature. **However, technical and research support staff are likely to be difficult to replace entirely domestically owing to their specialist skills (e.g. the ability to use particular equipment and acquire niche knowledge).**

The case for technicians

Technicians, in particular, are essential to supporting the delivery of teaching and research and are a vital component of HE and STEM workforces. Technical roles call for highly specialised expertise, but are vulnerable to the Tier 2 salary threshold of £30,000.

Analysis by UCEA estimates that:

- Around 9,300 technician roles in total (42% of all technicians) fell below the Tier 2 experienced worker threshold salary of £30,000 in 2016-17;[6]
- The median gross earnings of 13,590 science and engineering technicians in HE was £26,280 in 2017, which falls below the Tier 2 new entrant and experienced worker salary thresholds. [7] Median earnings for Laboratory Technicians (RQF 3-4, occupation SOC code 3111) is even lower – around £19,400; significantly below the Tier 2 salary threshold.[8]

The Department for Business Energy and Industrial Strategy (BEIS) have highlighted several specific occupations in the within the life science sector to be included or retained on the SOL. These include Laboratory Technicians, which are vital to the HE and STEM sectors and, as highlighted above, cannot compete with salaries in the finance and creative industry sectors. **Laboratory Technician is not currently on the SOL as a specific occupation.**

Along with BEIS, we would make a case for Laboratory Technician to be added to the SOL as a specific, stand-alone, occupation:

- Laboratory Technicians perform a variety of technical support functions requiring the application of highly specialised procedures and techniques that are critical for supporting the HE and STEM research, and for achieving the Government's 2.4% R&D target.
- While Laboratory Technicians at the lower end of the skills spectrum can be sourced from the domestic workforce or trained in the UK, at the higher end there exist roles where years of experience are required; often these may be very specialist, where only a few qualified people in the world. If someone skilled in a particular specialist technique is needed, which may have taken many years to acquire, UK HE may not be able to replace this person from within the domestic workforce.
- Currently there are over 1.5 million technicians working in all sectors in the UK with 60% of the technician workforce set to retire in the next 5 years. As highlighted by BEIS, the Gatsby Foundation forecasts that 700,000 more technicians will be required in the next decade to meet demand from industry.[9]

6 UCEA (November 2018)
7 UCEA (November 2018)
8 ONS data.
9 http://www.gatsby.org.uk/education/focus-areas/stem-skills-in-the-workforce

Summary of key asks
1. **That the MAC retains existing HE and STEM occupations on the SOL until a further review of the SOL, within a new immigration system that includes EU and EEA nationals, is conducted**. Removing HE and STEM occupations prematurely, while the UK is managing the transition to EU Exit, could present significant risks to the HE and STEM sectors and their ability to recruit to critical posts that support the wider UK economy;

2. Due to their vital role in supporting the HE and STEM sectors, **the MAC should add Laboratory Technicians to the SOL**. Laboratory Technicians, whilst highly specialist in many cases, often earn well below the required Tier 2 salary threshold. As these are important for supporting key HE and STEM roles, we think there is a strong case for raising their priority within the Tier 2 route, and for exempting them from other prohibitive visa requirements, such as the RLMT;

3. We expect the HE and STEM sectors to be detrimentally affected by skills shortages in future. **We would therefore want to work closely with the MAC on any subsequent review of the SOL within a future immigration system**, which includes EU workers, to try and mitigate the impact that changes to the system are likely to have on the HE and STEM sectors' ability to recruit specialists from overseas.

The Migration Advisory Committee's review of the shortage occupation list Evidence submitted by the Department for Education on the teacher workforce January 2019

Introduction

1. On 14 June 2018, the Migration Advisory Committee (MAC) was asked by the Government to undertake a full review of the shortage occupation list (SOL). This is to determine which high-skilled roles it would be sensible to fill through non-EEA migration under Tier 2 of the points based system. This submission contains evidence provided by the Department for Education (the department) on the teacher workforce to the MAC.

Summary

2. Evidence shows that the quality of teaching is the biggest in-school factor affecting the outcomes of children and that this is particularly important for disadvantaged pupils[1]. It is therefore essential that schools can recruit enough good teachers to raise student attainment and deliver a world-class education for every child.

3. There are now more than 450,000 full-time equivalent teachers in state funded schools in England[2]. Over one in six trainees (19%) starting postgraduate initial teacher training (ITT) in 2018/19 held a first class degree, the highest proportion ever recorded, with nearly three-quarters (73%) holding a 2:1 or better[3]. The majority of teachers, 98 per cent, hold qualifications at degree level or higher – this includes those with Bachelor of Education degrees and those with a Postgraduate Certificate of Education (PGCE)[4].

4. Despite that positive picture, demand for teachers is continuing to grow, with a key driver being an increase in pupil numbers as the result of a population bulge currently working its way through the school system. This has passed through the primary phase and is now driving an increase in the secondary school population. An increase of more than 14,000 (7%) in the number of secondary school teachers is needed between 2018/19 and 2024/25 to teach these students[5].

5. Whilst the demand for secondary school teachers is increasing, the pool of recent graduates – and thus potential trainee teachers – has decreased. The number of UK-domiciled students obtaining a first degree[6] from institutions in England dipped between 2013/14 and 2014/15 and, although numbers are now

[1] Hanushek, E. and Rivkin, S. 2012. 'The distribution of teacher quality and implications for policy', *Annual Review of Economics*, 4, pp. 131–57. Hamre, B. and Pianta, R. 2005. 'Can instructional and emotional support in the first-grade classroom make a difference for children at risk of school failure?', *Child Development*, 76(5), pp. 949–67. Slater, H., Davies, N. and Burgess, S. 2012. 'Do teachers matter? Measuring the variation in teacher effectiveness in England', *Oxford Bulletin of Economics and Statistics*, 74, pp. 629–45.

[2] Department for Education. 2018. School workforce in England: November 2017.

[3] Initial teacher training performance profiles: 2014 to 2015. Available from: https://www.gov.uk/government/statistics/initial-teacher-training-performance-profiles-2014-to-2015

[4] Department for Education. 2018. School workforce in England: November 2017.

[5] Department for Education. 2018. Teacher Supply Model 2019 to 2020.

[6] Throughout this document, unless otherwise stated, a first degree refers to the 'first degree' level of undergraduate study according to HESA statistics 3

increasing, only around 285,000 such qualifications were awarded in 2016/17 compared with 295,000 in 2013/14[7].

6. Schools are already experiencing pressures on the number of secondary teachers. Over 1,600 more secondary teacher trainees started training in 2018/19 than in 2017/18, but, despite this increase, only 83% of the target number of secondary recruits required was reached[8].

7. In addition to this, the proportion of secondary teachers leaving the profession each year has risen from 10.2% in 2011 to 11.4% in 2017[9], with the rate of new teachers leaving in the first five years increasing from 27%, for those starting in 2007/08, to 33% for those starting in 2012/13[10].

8. As well as the challenging picture in absolute numbers of secondary teachers, in particular subjects the issue can be more even acute. In 2018/19, for example, target numbers of initial teacher trainees were not met in 14 out of 18 subjects[11].

7 HESA. 2019. Higher Education Student Statistics: UK, 2016/17. Figure 16. https://www.hesa.ac.uk/data-and-analysis/sfr247/figure-16`

8 Department for Education. 2018. Initial teacher training trainee number census 2018 to 2019

9 Department for Education. 2018. Teachers Analysis Compendium 4

10 Department for Education. 2018. School workforce statistics: November 2017

11 Department for Education. 2018. Initial teacher training (ITT) census: 2018 to 2019 - Main tables. 18 subject groups as listed in Table 1

9. The department recognises the need to support both teacher recruitment and retention, and we will continue to focus our efforts on growing and developing the domestic teacher workforce. There has been significant investment to attract people into teaching, with over £1.3 billion being invested in the five years to March 2020.

10. In particular we target our approach to those subjects that are hardest to recruit. Our bursary scheme, worth up to £26,000 per trainee for priority subjects, is designed to encourage talented trainees into key subjects such as maths, physics and modern foreign languages (MFL). We have also invested in initiatives to encourage returners to the profession and to retrain serving teachers to teach shortage subjects. We have supported this by offering a teacher subject specialist training programme in maths, physics and MFL.

11. The department's teacher recruitment and retention strategy is due to be published in early 2019. This will set out the department's long-term plan to help, support and improve both teacher recruitment and retention.

12. It will take time, however, for these measures to affect teacher numbers. In the interim, pressures on the secondary teaching workforce are growing, and schools need to have the option to recruit qualified teachers from abroad to ensure that every child is taught by good teachers across the curriculum.

Recommendations

13. The increase in secondary pupil numbers, along with the narrowing of the graduate pool, a strong labour market and an increased rate of qualified teachers leaving the profession are all creating pressures on recruitment of secondary teachers as set out above. In order to meet demand for shortage subjects, schools employ existing teachers from other subjects to fill those gaps and offer a complete curriculum. This does not add to the total number of secondary teachers in the system, so does not address the fundamental shortfall being experienced.

14. Schools therefore need flexibility to hire teachers internationally across all secondary subjects to help them meet the overall demographic and subject-specific challenges set out here.

The department therefore recommends that all secondary school teacher occupations be included on the SOL.

15. Whilst there are overall pressures on all secondary teacher numbers, the pressures in some subjects are greater than on others. In January 2017, the MAC published a partial review of the SOL covering teacher occupations[12]. It concluded that teachers of maths, physics, computer science, Mandarin and general science[13] should be included on the SOL.

12 Migration Advisory Committee (MAC) report: teacher shortages in the UK https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-teacher-shortages-in-the-uk
13 Where an element of physics will be taught
14 Department for Education. 2018. Initial teacher training (ITT) census: 2018 to 2019 - Main tables.
15 Department for Education. 2018. Initial teacher training (ITT) census: 2018 to 2019 - Main tables.
16 Where an element of physics will be taught

16. Pressures in these subject areas have continued. In maths, physics and computing combined, the number of trainees recruited in 2018/19 (3,300) was lower than in 2014/15 (3,325). Over the same period, the target number of trainees increased from 3,903 to 5,058. In 2018/19, we recruited 71% of the target for mathematics teacher trainees, 47% for physics trainees, and 73% for computer science. [14]

17. In MFL, while numbers of trainees recruited increased from 1,240 in 2014/15 to 1,465 in 2018/19, showing that our initiatives to increase recruitment are working, targets rose from 1,375 to 1,669 across the same period. Hence recruitment against target dropped from 90% to 88%[15].

The department recommends that, as an absolute minimum, maths, physics, computer science, Mandarin and general science[16] should be retained on the SOL and that modern foreign languages should be added.

18. Separately to the SOL, secondary school teachers in maths, physics, chemistry, computer science and Mandarin have been subject to a temporary lower Tier 2 visa salary threshold (£22,022 rather than £30,000). This was introduced to reflect ongoing public sector pay restraint and specific recruitment challenges. It is due to expire in July 2019. In 2018/19, the main pay range minimum and maximum for teachers is £23,720 and £35,008 respectively in England and Wales (excluding the London Area).

The department believes that this lower salary threshold should be extended beyond July 2019 and applied to all teacher occupations, so that schools can continue to have access to non-EEA teachers, but raised from £22,022 to £23,720 to reflect the new pay ranges.

The case for all secondary school teacher occupations to be included on the SOL

19. The following sections set out the specific evidence for including all secondary teacher occupations on the SOL. This includes the expanding secondary pupil population, the impact this is having on the number of secondary teachers needed, and current supply of secondary teachers.

Overall demand for teachers: Student demographics

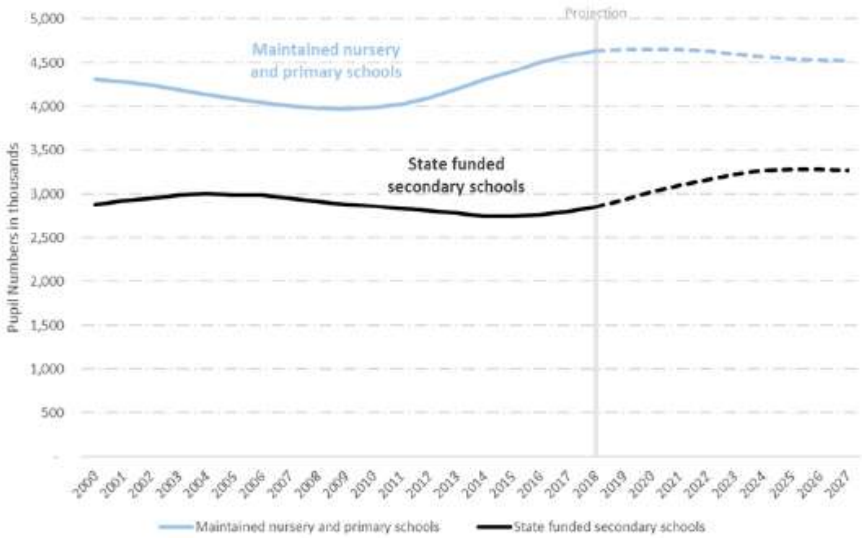
20. A population bulge is currently working its way through the school system. This has passed through the primary phase and is now driving an increase in the secondary school population. After falling from 2004 to 2015[17], numbers of pupils in secondary schools are projected to rise sharply, by 20% between 2015 and 2025 (Figure 1).

17 Table 1: https://www.gov.uk/government/statistics/national-pupil-projections-trends-in-pupil-numbers-july-2015

18 Department for Education. 2018. National pupil projections: July 2018

19 Department for Education. 2018. Teacher Supply Model methodological annex 2019 to 2020.

Figure 1: National pupil projections for state-funded nursery & primary and secondary schools[18]



21. The department's teacher supply model (TSM) estimates on an annual basis how many post-graduate teacher trainees are required to start ITT in the following autumn. The model assumes that part of how schools will cope with the population bulge entering the secondary phase will be to increase pupil:teacher ratios (PTRs) [19], which will reduce the number of additional teachers needed.

22. Even allowing for this, however, the number of secondary teachers will still need to grow by more than 14,000 (7%) between 2018/19 and 2024/25 to account for this significant increase in the number of pupils. This includes an increase of 2,000 secondary school teachers between 2018/19 and 2019/20 alone. To ensure we have these additional teachers whilst also replacing those teachers who will leave over the same period, the TSM estimates that the system needs around 26,000 qualified secondary teachers to join the state-funded mainstream school sector in 2019/20[20]. This is over 5,000 more than the number who started in 2017/18.

20 Department for Education. 2018. Teacher Supply Model 2019 to 2020.

21 Hutchings, M., 2011, 'What impact does the wider economic situation have on teachers' career decisions? A literature review'.

22 Office for National Statistics. (2018). UK labour market: October 2018.

23 Department for Education. 2018. Graduate outcomes (LEO): 2015 to 2016. Table 5.

24 Department for Education. 2018. Teachers Analysis Compendium 4.

Supply of teachers

23. A wide number of factors influence the supply of teachers, including the strength of the labour market. The labour market is currently strong, which means there is greater competition for the graduates we want to attract into teacher training[21]. UK unemployment is at its lowest rate since the 1970s and the number of vacant jobs across all sectors has increased to a level almost a fifth greater than its pre-recession peak[22].

24. Graduates' earning prospects vary significantly, based in part on their subject of qualification. Those with a STEM background, or with qualifications in other quantitative subjects, tend to be able to command relatively high salaries. In 2015/16, median earnings of UK domiciled first degree graduates three years after graduation from English institutions were £42,800 for medicine and dentistry graduates, £32,400 for veterinary science, £31,500 for economics, £29,500 for engineering and technology, and £28,000 for mathematical sciences[23]. In 2018/19, on the main pay range – on which most new teachers will start – the minimum/maximum is £23,720/£35,008 in England and Wales (excluding the London Area), £29,664/£40,372 in Inner London, £27,596/£38,963 in Outer London, and £24,859/£36,157 in the London Fringe.

25. This strong labour market increases the challenge of recruiting enough teacher trainees, and of retaining existing teachers in the profession.

26. There are three main sources of teachers. The major source is newly qualified teachers (NQTs), i.e. those who enter teaching directly after completing their training. In 2017, 53% of people who started teaching in secondary schools were NQTs. 35% were returning teachers, and the remainder (11%) were teachers who had not previously worked in the state sector.

27. Table 1 shows that, despite the demand for secondary teachers having risen, the number of NQTs joining secondary schools (11,033 in 2017) has not changed substantively over recent years[24]. Secondary schools are therefore relying more heavily on teachers who have left teaching returning to the sector, and although the number of returning teachers has increased (5,575 in 2011, increasing to 7,333 in 2017), this has not been by enough to make up for shortfalls in recruitment to ITT.

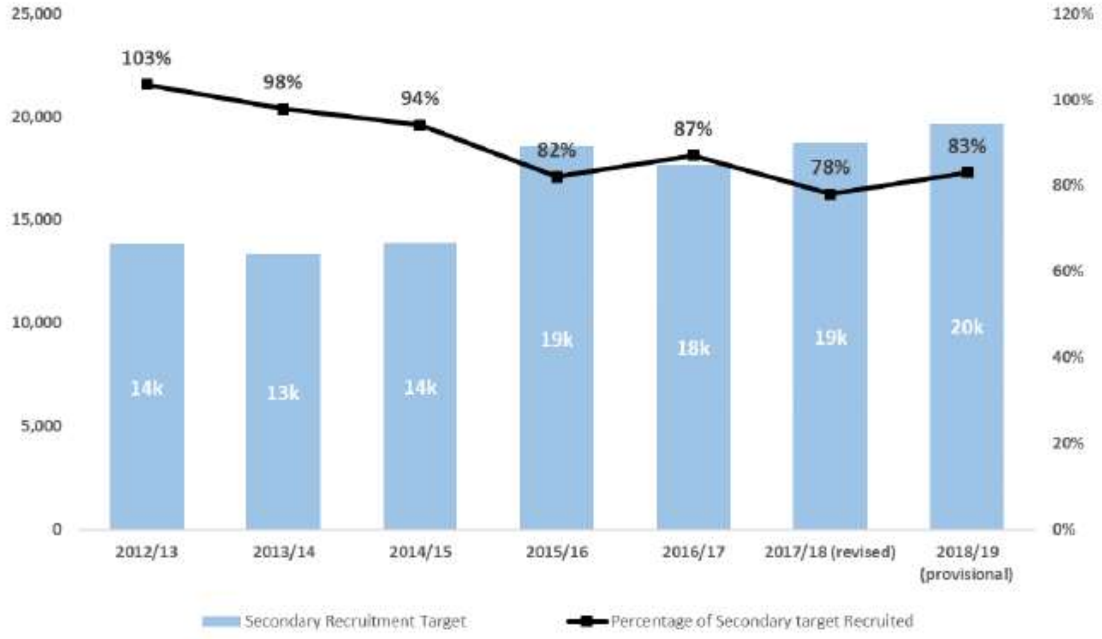
Therefore, in the year to November of the reference year[25]

	2011	2012	2013	2014	2015	2016	2017
Newly qualified teachers	11,059	11,274	10,568	10,793	10,867	11,317	11,033
New to state-funded sector	2,873	3,574	3,144	3,044	2,609	2,306	2,305
Returners	5,575	6,678	6,930	7,583	7,320	7,169	7,333
Total entrants	19,507	21,526	20,642	21,419	20,796	20,793	20,672

25 Department for Education. 2018. Teachers Analysis Compendium 4. Included teachers joining with qualified teacher status and unqualified teachers already in service obtaining QTS.

28. Although over 1,600 more secondary trainees started training in 2018/19 than in 2017/18, only 83% of the target number of secondary recruits was reached – 16,280 recruits against a target of 19,674. This reflects the pattern over the past four years, where between 78% and 87% of the target number of secondary ITT recruits has been achieved (see Figure 2). In other words, recruitment to ITT has generally risen, but has not kept pace with the increased demand for teachers.

Figure 2: Secondary postgraduate ITT recruitment target (000s) and percentage of target achieved (18/19 provisional)[26]



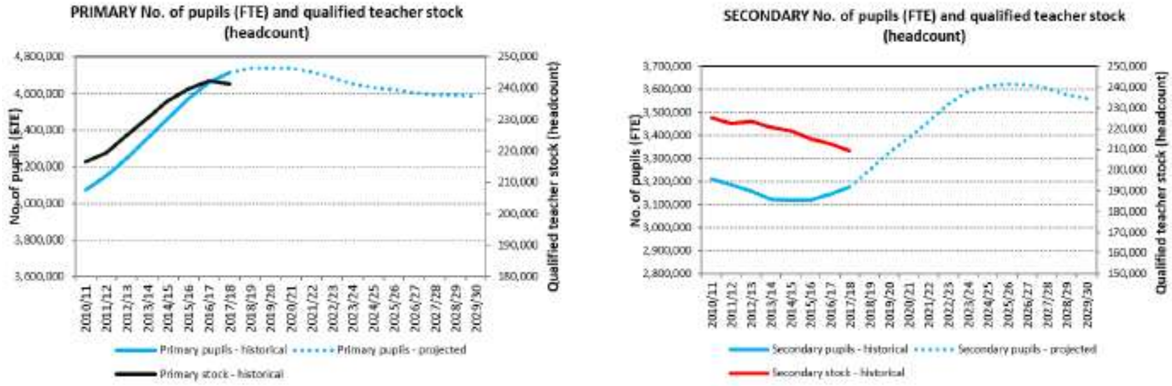
25 Department for Education. 2018. Teachers Analysis Compendium 4. Included teachers joining with qualified teacher status and unqualified teachers already in service obtaining QTS.
26 Department for Education. 2018. Initial teacher training (ITT) census: 2018 to 2019.

29. Whilst the number of teachers entering secondary schools is, therefore, relatively stable, the numbers are not high enough to meet the demand forecast by the TSM. In addition to this, of those teachers already working in secondary schools, the proportion leaving each year has risen from 10.2% in 2011 to 11.4% in 2017[27]. In particular, the rate of new teachers leaving in the first five years has increased, from 27% for those starting in 2007/08 to 33% for those who started in 2012/13[28].

30. We are seeing the impact of these challenges on the total number of secondary teachers. Despite secondary pupil numbers already having increased by 4% (109,000) between 2014/15 and 2017/18, secondary teacher numbers fell by 4% (9,000) over the same period[29]. Figure 3 plots these trends. The result is that the ratio of pupils to teachers has increased, from 15:1 in 2013 to 16:1 in 2017[30].

27 Department for Education. 2018. Teachers Analysis Compendium 4.
28 Department for Education. 2018. School workforce statistics: November 2017.
29 Department for Education. 2018. National pupil projections: July 2018. Department for Education. 2018. School workforce statistics: November 2017.
30 Department for Education. 2018. School workforce statistics: November 2017.
31 Department for Education. 2018. Teacher Supply Model 2019 to 2020.
32 Department for Education. 2018. School workforce statistics: November 2017
33 Department for Education. 2016. Local analysis of teacher workforce: 2010 to 2015.
34 Department for Education. 2018. Teachers Analysis Compendium 2.
35 Both primary and secondary schools.

Figure 3: Trends and forecasts for FTE pupils, and headcount of teachers reported by the Teacher Supply Model 2019 to 2020[31]



31. The overall vacancy rate in secondary schools has also increased, from 0.4% in 2010 to 1.1% in 2017[32], and an increase in the vacancy rate was seen at the subject-level over the same period in all subjects for which data is available, with the exception of drama.

32. In September 2016, the department published new analysis looking at the local trends and comparisons of data from the School Workforce Census[33]. Further research calculated a Supply Index to help identify those schools likely to face recruitment challenges[34]. Survey-based research was carried out with 90 schools[35] that were ‘high’ on the Supply Index (suggesting greater potential for supply problems), and a further sample of schools that had ‘low’ scores. Over three-quarters of the schools identified using the data as likely to have high supply problems in 2015 reported that they had significant problems with recruitment, retention or both. Among these schools, a third of all responses related to recruitment/retention difficulties for specific subjects, key stages, or specific roles. These most commonly related to English, STEM, ICT, key stage 2, and headteacher roles. In addition, 37% of schools with a ‘low’ value of the Supply Index still reported significant problems. The issues reported by high and low SI schools tended to be similar, though of differing severity.

33. However, 44% of schools classified as low on the Supply Index also reported significant difficulties with recruitment to particular subjects. Maths and science were cited most frequently, followed by English, geography, physics and MFL. The combination of factors listed was different for most schools, but some common factors were:

- Low response rates in relation to recruitment;
- A lack of choice of quality applicants when making an appointment decision;
- Schools in deprived areas;
- Ofsted ratings;
- Schools with gaps in leadership or leadership perceived to be of poor quality; and
- Location challenges around being in remote areas, areas where property was unaffordable or where teachers could easily earn more across a local authority border.

34. The majority of the schools in the survey reported they experienced supply problems, some for multiple years.

Views from the sector

35. Ofsted’s previous Chief Inspector, Sir Michael Wilshaw, has spoken publicly about how schools in disadvantaged areas are hindered in their efforts to improve teaching standards by difficulties in recruiting sufficient numbers of good teachers[36]. This is echoed

by the current Chief Inspector, Amanda Spielman, who has identified teacher retention as a pressing issue[37]. The Association of School and College Leaders (ASCL) highlighted the issue of recruitment challenges in their survey of members, reporting maths and science among the subjects where most of those surveyed were experiencing recruitment difficulties. The survey also found that many respondents were also experiencing difficulties finding staff to teach languages as well as other English Baccalaureate subjects[38].

36 Ofsted. 2016. Sir Michael Wilshaw's Speech to the Festival of Education. 23 June 2016. Available from: https://www.gov.uk/government/speeches/sir-michael-wilshaws-speech-to-the-festival-of-education
37 Gov.UK. 2018. Amanda Spielman speech to the SCHOOLS NorthEast summit. Available from: https://www.gov.uk/government/speeches/amanda-spielman-speech-to-the-schools-northeast-summit From: Ofsted and Amanda Spielman
38 ASCL. 2016. 'Survey Shows Damage of Teacher Shortages'. Available from: http://www.ascl.org.uk/news-and-views/news_news-detail.survey-shows-damage-of-teacher-shortages.html

Supporting teacher recruitment and retention
36. We have put in place a range of measures to increase domestic teacher recruitment and retention, including generous bursaries and scholarships. These are detailed in full in Annex A, and include:
- Bursaries worth up to £26,000 in physics, maths, chemistry, computer science, geography and MFL;
- Piloting of financial incentives which encourage retention;
- A new bursary for trainees undertaking undergraduate ITT courses in shortage subjects;
- Subject knowledge enhancement courses to widen the pool of graduates able to enter ITT;
- Piloting reimbursement of student loans for some teacher trainees;
- Developing programmes designed to attract more career changers into ITT; and
- Initiatives to reduce teacher workload.

37. The department will also shortly be publishing a teacher recruitment and retention strategy. The strategy aims to address four key themes:
- Ensuring teachers can focus on what is important – teaching;
- Transforming support for teachers in their first years of teaching;
- Clarifying the teaching career offer, particularly as life circumstances change; and
- Improving the process of becoming a teacher.

38. The need for secondary teachers is growing significantly, and will continue to do so for a number of years. The strong labour market means that graduates have a range of attractive careers open to them, and this will put pressure on the numbers that enter Initial Teacher Training. The decreasing retention rates add to the pressure to recruit more teachers. In order to ensure that schools continue to have access to good quality teachers, they need to be able to easily employ teachers internationally where they cannot recruit domestically.

More specific evidence on the case for retaining the existing secondary school teacher occupations on the SOL
39. The following sections set out the specific evidence for retaining the existing secondary school teacher occupations on the SOL - maths, physics, general science (where an element of physics will be taught), computer science and Mandarin. It also contains a section on MFL. We consider that these subjects, as a minimum, should be included on the SOL.

40. The MAC's partial review of the SOL in January 2017 reported shortages among these occupations, and these shortages continue. As described above, in 2018/19, we recruited 71% of the target for mathematics teacher trainees, 47% for physics, 73% for computing and 88% for MFL. Annex B contains relevant vacancies data on these subjects.

Curriculum changes

41. Curriculum changes – as part of a long-term strategy designed to ease skills supply pressures in the labour market more widely – have increased demand for good teachers in certain subjects, including maths, physics, computer science and MFL. These subjects support the UK's industry and productivity and are particularly important. We therefore included these subjects in the English Baccalaureate (EBacc), a school performance indicator linked to the GCSE which was introduced in 2010.

42. The EBacc ensures that pupils have the opportunity to study the core academic subjects at GCSE – English, maths, science, history or geography, and a language – subjects that the Russell Group says at A level open more doors to more degrees[39]. These subjects provide a sound basis for a variety of careers beyond the age of 16, can enrich students' studies and give them a broad general knowledge that will enable them to participate in and contribute to society. The subjects included in the EBacc have been selected to improve the life chances of all children, including those from disadvantaged backgrounds. The government's ambition is that 75% of year 10 pupils in state-funded mainstream schools will start to study GCSEs in the EBacc combination of subjects by September 2022, reaching 90% of Year 10 students by 2025.

43. A Sutton Trust study[40] looked at a set of 300 secondary schools that had increased the proportion of pupils entering the EBacc from 8% to 48% between 2010 and 2013. They compared these schools to a set of schools with similar characteristics which had not increased its EBacc entry significantly. The study found that pupils in these schools largely benefitted from these changes and were more likely to achieve good GCSEs in English and maths, with pupil premium pupils (disadvantaged pupils who receive additional funding) benefitting the most from the curriculum changes.

[39] Russell Group. 2017/18. Informed Choices - A Russell Group guide to making decisions about post-16 education.

[40] Allen, R. and Thompson, D. 2016. 'Changing the Subject'. Education Datalab. 13

44. Moreover, research published by the Centre for Longitudinal Studies[41] shows that studying the EBacc combination of GCSE subjects increases the likelihood that a student will stay on in full-time education. Students taking EBacc subjects at GCSE are also more likely to take A levels, and to study "facilitating" subjects – those A levels the Russell Group universities say are more helpful for getting onto a degree course at their member institutions.

45. The EBacc also has an important social mobility aspect as it aims to ensure that all young people at 16 are given the same opportunities through education to succeed. Further research[42] looked at the impact of subject choice on social mobility. It found an association between A level subject choices and pupils' socio-economic background, particularly in those subjects deemed as facilitating subjects. The research concluded that closing this gap at A level is likely to depend on reducing differentials in attainment and subject choice by social background at GCSE and that the introduction of the EBacc may help with the GCSE subject choice element. Therefore, ensuring that all pupils, from all

backgrounds, have the opportunity and are encouraged to study core academic subjects is important from a social mobility perspective.

46. Lower socio-economic groups are also under-represented at high-status universities. This is due in part to differences in subject choice at A level. As EBacc students are also more likely to study "facilitating" A levels the EBacc is an important tool to re-balance this effect.

47. Another area the EBacc aims to address is tackling the national STEM skills shortage, making sure that more young people leave our education system with sufficient scientific knowledge. To do this we must ensure there are enough teachers with the required standard of subject knowledge. This is supported by research undertaken by the National Audit Office (NAO), who in their 2010 review[43] of how best to increase the number of science graduates, stated that one of the critical success factors in improving take-up and achievement is the quality and quantity of science teachers.

48. This is important as UK businesses report they find it challenging to recruit people with the necessary skills. There is broad agreement across industry and government of the importance of STEM[44] skills to the UK's future economic growth particularly in terms of improving our international competitiveness through increased productivity[45]. The Confederation of British Industry (CBI) and other significant trade bodies such as the UK Commission for Employment and Skills (UKCES) have repeatedly highlighted the critical importance of

41 Moulton, V., Henderson, M., Anders, J. and Sullivan, A. 2017. 'Continuing education post-16: does what you study at GCSE matter?' CLS working paper 2017/8. London: Centre for Longitudinal Studies.
42 Dilnot, C. 2016. 'How does the choice of A-level subjects vary with students' socio-economic status in English state schools?' *British Educational Research Journal*, 42, 1081–1106.
43 NAO. 2010. Educating the Next generation of Scientists. Available from: https://www.nao.org.uk/wp-content/uploads/2010/11/1011492.pdf
44 Science, Technology, Engineering and Maths
45 HMT. 2015. Fixing the Foundations: Creating a More Prosperous Nation. Available from: https://www.gov.uk/government/publications/fixing-the-foundations-creating-a-more-prosperous-nation 14

STEM skills in playing a central role in developing innovative products and services that can be effectively positioned in world markets[46]. The UKCES 2015 STEM review of 38 high level STEM occupations identified how these contributed 2.8 million jobs to the UK economy[47].

49. Noting the importance of STEM skills to the economy, concerns have been raised by industry about a shortage of suitably skilled graduates and trained professionals in the UK workforce. The 2017 CBI/Pearson Education and Skills Survey[48] reports that studying STEM subjects is an essential basis for subsequent employment in the UK's key high-growth sectors. This same publication also reports that UK businesses are worried about finding enough people with the necessary skills, with nearly two-thirds viewing the current skills gaps as a 'threat to the UK competitiveness'. This is supported by the department's Employer Skills Survey 2017[49] which also reports difficulties in recruiting people in STEM occupations, particularly in engineering and IT professionals.

50. The Government has set out a long-term plan in its Industrial Strategy White Paper to boost productivity and earning power across the country. It sets out how we are building a Britain fit for the future – how we will help businesses create better, higher-paying jobs

in every part of the United Kingdom with investment in the skills, industries and infrastructure of the future. Science, research and innovation are vital to the UK's prosperity, security and wellbeing, and are at the heart of our industrial strategy. To unlock the benefits of the Industrial Strategy's commitment to increase research and development to 2.4% of GDP by 2027, we recognise how important it is to have more people with the right skills at all levels.

51. To achieve the aspirations set out above, we need to have enough teachers in EBacc subjects such as maths, physics, computer science, and MFL, including Mandarin. None of these subjects reached their target ITT trainee recruitment level in 18/19. We have set out below detailed information on the challenges these subjects face in teacher availability, the pipeline of potential trainees, performance in ITT recruitment, and retention of qualified teachers. While we will always aim to recruit teachers domestically, it is essential that schools, when necessary, are able to recruit good teachers from abroad. It is therefore particularly important to retain maths, physics, general science, computer science and Mandarin teachers on the SOL and to add MFL.

46 CBI. 2014. Engineering Our Future: Stepping up the Urgency on STEM. Available from: http://news.cbi.org.uk/business-issues/education-and-skills/engineering-our-future/
CBI. 2015. CBI 2015 Inspiring Growth: CBI/Pearson Education and Skills Survey 2015. Available from: http://news.cbi.org.uk/business-issues/education-and-skills/gateway-to-growth-cbi-pearson-education-and-skills-survey-2015/
47 UKCES 2015. Reviewing the Requirement for High Level STEM Skills. Available from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/444052/stem_review_evidence_report_final.pdf
48 http://www.cbi.org.uk/insight-and-analysis/helping-the-uk-thrive/
49 Winterbotham, M., Vivian, D., Kik, G., Huntley Hewitt, J., Tweddle, M., Downing, C., Thomson, D., Morrice, N. and Stroud, S. 2018. Employer skills survey 2017. 15

Maths teachers

52. Higher levels of achievement in maths are associated with higher earnings for individuals and higher productivity[50]. The annual economic cost to the UK of low adult numeracy has been estimated at around £20bn per year, including lost earnings, profit and government costs from reductions in taxes and increases in benefits[51]. Professor Sir Adrian Smith's review of post-16 mathematics[52] set out that mathematical and quantitative skills will be increasingly required in the future, not just for traditional STEM routes but for a wide range of future careers. The review also made clear that basic numeracy skills are vital to everyday life and citizenship.

53. Whilst our pupils perform close to the average across all OECD countries in maths at age 15, we are outperformed by many East Asian countries. The average score in England on the PISA 2015 maths test was 493, with seven East Asian countries scoring at least 20 points higher, including Singapore, China and Japan[53]. The spread of pupil scores in our country is also wider than in most others.

54. Professor Sir Adrian Smith conducted a review on behalf of the department and the Treasury into improving the study of post-16 maths. This included an assessment of the economic case and feasibility for all students continuing to study maths to age 18. He reported "there is a strong case for higher uptake of 16-18 maths. Increased participation would be likely to deliver significant returns in terms of labour market skills,… increased productivity and longer-term economic benefits".

55. The department is seeking to improve standards in maths in secondary schools and raise post-16 uptake. EBacc entries at GCSE have been included in performance tables,

the ‘Progress 8’ performance measure attributes a high weight to maths results, and we have introduced a new, expanded maths GCSE. For those students who wish to study maths post-16 but do not want to take an AS/A level, we have introduced core maths qualifications.

56. The extra maths teachers needed to help deliver both the curriculum changes highlighted above and respond to the demographic change are reflected in the TSM’s projections, which forecast that an extra 7% (around 2,100 teachers) will be needed between 2018/19 and 2023/24[54]. We are testing initiatives designed to improve the recruitment and retention of maths trainees – for example, the maths phased bursary pilot – and have programmes designed to increase the number of maths teachers e.g. maths and physics chairs. Annex A sets out full

50 Vignoles, A., De Coulon, A. D., Marcenaro-Gutierrez, O. 2011. The value of basic skills in the British labour market. *Oxford Economic Papers*, 63(1).
51 Pro Bono Economics. 2014. Cost of outcomes associated with low levels of adult numeracy in the UK.
52 Smith review of post-16 mathematics: https://www.gov.uk/government/publications/smith-review-of-post-16-maths-report-and-government-response
53 Jerrim, J. and Shure, N. 2016. Achievement of 15-Year-Olds in England: PISA 2015 National Report.
54 Department for Education. 2018. Teacher supply model 2019 to 2020. 16

details of a range of initiatives to increase the recruitment and retention of maths teachers. Despite our strong focus on increasing the supply of maths teachers, recruitment and retention issues persist.

57. Current availability: In 2017, the combined vacancy and temporarily filled post rate for maths teachers in all secondary schools was 1.4%. This is an increase from 0.7% in 2010. In 2017 approximately 22% of maths teachers did not hold a relevant post A level qualification[55]. 12.9% of the total maths teaching time was by a teacher who did not hold a post A-level qualification in a relevant subject (compared to 12.8% in November 2016).
58. Pipeline: The number of pupils taking maths A level has risen over the past 8 years[56]; it is now the single most popular A level choice. Between 2014/15 and 2017/18, the number of 16 to 18-year-olds achieving an A level at grades A* to E increased by 3%. First year students in mathematical sciences first degrees in English universities have risen by 3% between 2013/14 and 2016/17[57]. The number of HE qualifications obtained in these institutions increased by 4% over the same period, and by 2% for those taking a first degree[58].

59. ITT recruitment: In 2018/19, 71% of the target number of 3,116 maths ITT entrants were recruited, a shortfall of over 900 people. Recruitment against target dropped from 95% in 2015/16 to 82% in 2016/17 and 71% in 2018/19[59]. Six percent of new trainees in maths in 2018/19 were of non-EEA nationality, compared with 3% for all secondary subjects[60].

60. Retention rates: 82% of newly qualified maths teachers are still in service after 1 year, compared to the highest retention rate of 90% for PE and the lowest retention rate of 78% for business studies and MFL. After 5 years, this retention rate decreases to 62% compared to the highest retention rate of 75% for PE and the lowest retention rate of 56% for classics and MFL.

61. The MAC concluded in January 2017[61] that maths teachers passed their "sensible" test and should remain on the SOL. The evidence above shows that the situation has worsened since then with, for example, ITT recruitment

[55] Source throughout - School workforce census 2015 – tables 2 and 3 in Annex A. A teacher's qualification was deemed as 'relevant' to the subject taught if the subject of their qualification, reported using the Joint Academic Coding System (JACS), appeared in the list of JACS codes in the Department's subject mapping. The full mapping used is available on the same web page as this school workforce census. Available from:https://www.gov.uk/government/statistics/school-workforce-in-england-november-2015

56 Department for Education. 2018. A level and other 16 to 18 results: 2017 to 2018 (provisional).

[57] HESA. 2018. Higher Education Student Statistics: UK, 2016/17. Figure 14.

[58] HESA. 2018. Higher Education Student Statistics: UK, 2016/17. Figure 18.

[59] Initial teacher training: trainee number census - 2015 to 2016. Available from: https://www.gov.uk/government/statistics/initial-teacher-training-trainee-number-census-2015-to-2016

60 Department for Education. 2018. Initial teacher training: trainee number census - 2018 to 2019.

[61] Migration Advisory Committee (MAC) report: teacher shortages in the UK https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-teacher-shortages-in-the-uk

against target continuing to fall. We therefore believe that there is a compelling case for maths teachers to be retained on the SOL.

Physics (including general science where an element of physics will be taught)

62. The government's industrial strategy highlights the need to increase numbers studying STEM subjects. This includes A level science and particularly encouraging more girls to study physics. We also want to see more pupils studying GCSE triple science as pupils who study this option are more likely to study science at A level[62]. Increasing the number of specialist biology, chemistry and physics teachers is vital if we are to achieve this.

63. We have also introduced a more challenging curriculum and more demanding science GCSEs from September 2016 – these policies are reflected in the TSM's projections for the number of science teachers needed, including an increase of 7% (around 756) between 2018/19 and 2023/24 in the number of physics teachers required. Annex A sets out details of a range of initiatives to increase the recruitment and retention of physics teachers domestically.

64. Current availability: At the time of the School Workforce Census in 2017, 38% of physics teachers did not hold a post A level qualification in a relevant subject. This is similar to the previous two years (37.3% in 2016 and 37.5% in 2015). In 2017 approximately 24.8% of the total hours taught in physics were taught by teachers with no post A level qualifications in a relevant subject compared to 24.6% in 2016 and 25.4% in 2015.

65. Pipeline: The number of students gaining an A level at grades A*-E in physics increased by 5% between 2014/15 and 2017/18[63]. HE level data is available only for 'physical sciences' which includes both physics and chemistry (among other scientific disciplines) but does not include biology. The number of students in their first year of 'physical sciences' first degrees in English institutions fell by 2% between 2013/14 and 2016/17[64]. The number of HE qualifications overall decreased by 1% over the same period, but increased by 2% when considering those obtaining a first degree[65].

66. ITT recruitment: Recruitment against target in 2018/19 for physics was 47%, a shortfall of over 600 places against a target of 1,219 recruits. The proportion of physics ITT trainees recruited against target has shown a significant drop over the past three years, falling from

a high of 79% recruited in 2016/17 to 66% in 2017/18 and 47% in 2018/19. Recruiting physics teachers has been, and remains, challenging. Six percent of new trainees in physics in 2018/19 were of non-EEA nationality, compared with 3% for all secondary subjects[66].

62 Institute of Physics. 2018. Why not physics? A snapshot of girls' uptake at A-level. National Audit Office. 2010. Educating the next generation of scientists.
63 Department for Education. 2018. A levels and other 16 to 18 results: 2017 to 2018. Department for Education. 2018. A levels and other 16 to 18 results: 2014 to 2015.
64 HESA. 2018. Higher Education Student Statistics: UK, 2016/17. Figure 14.
65 HESA. 2018. Higher Education Student Statistics: UK, 2016/17. Figure 18.
66 Department for Education. 2018. Initial teacher training: trainee number census - 2018 to 2019. 18

67. Retention rates: 80% of newly qualified physics teachers are still in service after 1 year, compared to the highest retention of 90% for PE and the lowest retention of 78% for business studies and MFL. After 5 years, this retention rate decreases to 60% compared to the highest retention of 75% for PE and the lowest rate of 56% for classics and MFL.

68. The MAC concluded in January 2017[67] that physics and general science teachers passed their "sensible" test and should remain on the SOL. The evidence above shows that the situation has worsened since then with, for example, ITT recruitment against target dropping by 32 percentage points between 2016/17 and 2018/19[68]. We believe therefore that there is a compelling case for physics and general science teachers to be retained on the SOL.

67 Migration Advisory Committee (MAC) report: teacher shortages in the UK https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-teacher-shortages-in-the-uk
68 Department for Education. 2018. Initial teacher training: trainee number census - 2018 to 2019.

Computer science

69. Computer science, like its predecessor information communication technology (ICT), is a statutory national curriculum subject at all four key stages. A new computer science curriculum was introduced into schools in September 2014 to provide a stronger foundation for further academic and vocational study, and to better prepare students for higher education. The new A levels were introduced for first teaching from September 2015 and GCSEs from September 2016. This new curriculum places a much stronger emphasis on teaching the technical aspects of computer science, such as programming and coding, and will require teachers being able to teach mathematical principles and concepts such as data representation and Boolean logic.

70. This change in curriculum thus creates a demand for teachers with a different knowledge and skill set from those needed to teach the previous ICT curriculum. This new knowledge falls within the area of STEM and, as with other STEM-related knowledge, is in high demand. This means that, as with maths and physics, efforts to recruit graduates with relevant qualifications for teaching the new curriculum occur in a competitive and challenging environment. Annex A sets out details of our initiatives to increase the recruitment and retention of computer science teachers domestically.

71. As with the other subjects discussed we have set out below the current supply, pipeline and projected need for new teachers along with initiatives to increase teacher supply domestically. The school workforce data is captured in a way that does not allow the department to separate computer science from an overall information technology total and

so we have provided data for computer science from other sources where possible, for example the ITT census.

72. Current availability: In 2017, 65.2% of computing teachers held no relevant post A level qualification. This has not changed significantly since 2013 when it was at 55%. Just over half (54.3%) of the total computing time was by a teacher who did not hold a post A level qualification in a relevant subject.

73. Pipeline: The number of students gaining an A level at A*-E grade in computer science has increased considerably from around 4,680 in 2015 to around 8,900 in 2018 (a 90% increase)[69]. HE qualifications in computer science include a range of topics such as software design and games programming. Between 2012/13 and 2015/16, the number of people obtaining a first degree in English universities fell by 8%, before increasing by 11% over the following year to 13,130. Meanwhile, the number of HE qualifications in these subjects overall rose by 1% over the period 2013/14 to 2016/17[70]. The number of first year first degree students in universities in these subjects increased by 17%, to 22,960, between 2013/14 and 2016/17.

74. Recruitment against ITT**:** Recruitment against target for computing was 73% in 2018/19, a shortfall of almost 200 places. This is an increase over the past few years compared to 62% in 2017/18 and 67% in 2016/17. 6% of new trainees in computing in 2018/19 were of non-EEA nationality, compared with 3% for all secondary subjects[71].

75. Projected need: We have introduced a new, more challenging curriculum and qualifications – for example, the new computer science GCSE, which has been taught from September 2016. While the TSM does not project an overall increase in the number of computing teachers required (remaining at around 6,500 between 2018/19 and 2023/24), we expect these changes to affect the knowledge and experience required of teachers. This may sometimes require new staff with differing skills to be appointed. The TSM nevertheless projects a requirement for 755 teachers to enter the profession in 2018/19, rising to 831 in 2023/24, to replace those who leave.[72]

76. Retention rates: 79% of newly qualified computing teachers are still in service after 1 year, compared to the highest retention of 90% for PE and the lowest retention of 78% for business studies and MFL. After 5 years, this retention rate decreases to 63% compared to the highest retention of 75% for PE and the lowest rate of 56% for classics and MFL.

77. The MAC concluded in January 2017[73] that computer science teachers passed their "sensible" test and should be added to the SOL. The evidence above shows that while there has been some recent improvement in ITT recruitment, this is still significantly below target. We therefore believe there is still a compelling case for computer science teachers to be retained on the SOL.

69 Department for Education. 2018. A levels and other 16 to 18 results: 2017 to 2018. Department for Education. 2018. A levels and other 16 to 18 results: 2014 to 2015.
70 HESA. 2018. Higher Education Student Statistics: UK, 2016/17. Figure 18.
71 Department for Education. 2018. Initial teacher training: trainee number census - 2018 to 2019.
72 Department for Education. 2018. Teacher Supply Model 2019 to 2020.
73 Migration Advisory Committee (MAC) report: teacher shortages in the UK https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-teacher-shortages-in-the-uk 20

Mandarin teachers

78. All state-maintained schools are required to teach a language at key stage 2 and key stage 3. The Mandarin Programme is for pupils in key stage 3 and 4 and will contribute to the improvement in the uptake and attainment in Mandarin.

79. A CBI/Pearson report published in November 2018 set out that 37% of the UK businesses cited Mandarin as useful to their business – this is up from 28% in 2016[74].

80. We do not intend to rely on temporary teachers from China to achieve our commitment to the expansion in the number of Mandarin teachers. In the short term, however, we will need to increase current teacher numbers by opening up opportunities to overseas Mandarin speakers who wish to teach or train as Mandarin teachers in the UK. This will help to expand the ITT pipeline domestically as more pupils will study Mandarin and can go on to train and teach the language themselves.

81. Current availability: 4% of new trainees in MFL in 2018/19 were of non-EEA nationality, compared with 3% for all secondary subjects[75].

82. Pipeline: The number of students gaining an A level at grades A*-E in Chinese increased by 8% between 2014/15 and 2017/18, to around 2,790[76]. However, only small numbers of people currently take Chinese studies at university in the UK[77]. In 2016/17 there were only 265 entrants to undergraduate programmes in Chinese studies in England. Therefore, it is important to start earlier and encourage more pupils to study Mandarin to a high standard at school.

83. Projected need: The Government committed in its 2015 election manifesto to increase the number of teachers able to teach Mandarin in schools in England. Separately, the then Chancellor of the Exchequer in September 2015 agreed to £10m funding for an additional 5,000 students to be learning Mandarin by 2020 through the Mandarin Excellence Programme. This new funding is designed to increase the quality and quantity of Mandarin teaching in schools, and therefore give even more young people the opportunity to learn a language that will help them succeed in our increasingly global economy. This will also help forge closer economic and cultural relationships between the UK and China, a relationship which is vital to our growing economy. The £10 million of funding will include recruiting and training more teachers in state schools in England. To deliver on this commitment the programme will train an additional 80 teachers of Mandarin by 2020 and we are reliant on overseas Mandarin speakers to achieve this. More details are set out at Annex A.

[74] CBI. 2018. Educating for the Modern World.
[75] Department for Education. 2018. Initial teacher training: trainee number census - 2018 to 2019.
[76] Department for Education. 2018. A levels and other 16 to 18 results: 2017 to 2018. Department for Education. 2018. A levels and other 16 to 18 results: 2014 to 2015.
[77] HESA data (quoted elsewhere in this paper) indicates around 600 individuals gain a HE qualification in Chinese studies each year. It is unknown what proportion of these will be Mandarin as a language. 21

84. The MAC concluded in January 2017[78] that Mandarin teachers passed their "sensible" test and should be added to the SOL. The evidence above shows that we continue to need to boost current teacher numbers, by opening up opportunities to overseas Mandarin speakers who wish to teach and/or train as Mandarin teachers. We therefore believe that there is a compelling case for Mandarin teachers to be retained on the SOL.

[78] Migration Advisory Committee (MAC) report: teacher shortages in the UK https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-teacher-shortages-in-the-uk
[79] Migration Advisory Committee (MAC) report: teacher shortages in the UK https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-teacher-shortages-in-the-uk
[80] The UK's future skills-based immigration system https://www.gov.uk/government/publications/the-uks-future-skills-based-immigration-system
[81] International teacher recruitment: understanding the attitudes and experiences of school leaders and teachers https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/713859/International_teacher_recruitment-_attitudes_and_experiences_of_school_leaders_and_teachers.pdf

Modern foreign language teachers

85. In their partial review of the SOL in January 2017[79] the MAC concluded that the evidence indicated that teachers of MFL could be considered to be in shortage. They did not consider there was sufficient evidence to indicate that French, German and Spanish teachers were recruited from outside the EEA and concluded that MFL teachers did not pass their "sensible" test for inclusion on the SOL. They added that this might be different if there was any change to EEA freedom of movement rules.

86. We understand that the scope of the MAC's current review does not cover arrangements post EU Exit. If it did and the government's plans for a new single immigration system, as set out in the future skills-based immigration system white paper[80], were in place, the case for including MFL teachers on the SOL would be clear. The department believes, however, that there is also a compelling case for including MFL teachers now.

87. In their June 2018 report, Sheffield Hallam University and the University of Brighton[81] found that the impact of the EU Exit vote had been unsettling, with schools reporting EU teachers leaving or pulling out of appointments. In 2017/18, 3,525 qualified teachers from the EEA were awarded QTS in this country. This was a 25% decrease from 2016/17. While it should be noted that an international teacher applying to have their teaching qualifications recognised as equivalent to QTS does not necessarily mean that they intend to come and work in England (the same Sheffield Hallam University and the University of Brighton report found that 44% of the international teachers they surveyed who had obtained QTS in this country had never taught in England), this still represents a potential decrease in the number of EEA teachers available to schools.

88. Annex A sets out details of our initiatives to increase the recruitment and retention of MFL teachers domestically.

89. Current availability: At the time of the School Workforce Census in 2017, 23% of French teachers, 28% of German teachers and 48% of Spanish teachers did not hold a post A level qualification in a relevant subject. This is similar to the previous year where the figures were 22% for French teachers, 29% for German and 48% for Spanish. In 2017 16% of the total hours taught of French were taught by teachers with no post A level qualifications in a relevant subject. The figure for German was 19% and for Spanish 37%. This again is similar to the previous year when the figures were 16% for French, 19% for German and 37% for Spanish.

90. Pipeline: Between 2014/15 and 2017/18, the number of 16 to 18-year-olds achieving an A level at grades A* to E decreased by 15% for French, 24% for German and 4% for

Spanish. Whilst HESA data for European language course trends are not published, according to UCAS figures, the number of acceptances on to higher education courses in England institutions for European languages, literature and related courses fell from 3,890 in 2010 to 3,045 in 2014. Despite an upturn in 2015, it was 2,825 in 2017 (a fall of 27% on the 2010 level)[82]. Within this, there were considerable falls across this period in French studies (from 620 in 2010 to 285 in 2017), German studies (240 to 90) and Spanish studies (330 to 220)[83].

91. ITT recruitment: Teacher recruitment against target in 2018/19 for MFL (including Mandarin) was 88%, a shortfall of 204 places. This was down from the 91% of target achieved in 2017/18[84].

92. Retention rates: 78% of newly qualified MFL teachers are still in service after one year, compared to the highest retention rate of 90% for PE. This, together with Business Studies, is the lowest retention rate of any subject. After five years, the retention rate decreases to 56% compared to the highest retention rate of 75% for PE. This is the lowest retention rate of any subject.

93. Projected need: The Russell Group has named languages as one of the facilitating subjects that open doors to more degrees at universities and we know that employers value languages, as they are increasingly important in enabling the UK to compete in the global market. This is why we have included MFL in the EBacc. The TSM forecasts that the stock of teachers for all EBacc

82 UCAS. 2017. Applications and acceptances for types of higher education course — 2017. Table DR3_025_01. Available at: https://www.ucas.com/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-end-cycle-data-resources/applications-and-acceptances-types-higher-education-course-2017

83 UCAS. 2017. Applications and acceptances for types of higher education course — 2017. Table DR3_031_01. Available at: https://www.ucas.com/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-end-cycle-data-resources/applications-and-acceptances-types-higher-education-course-2017

84 Department for Education. 2018. Initial teacher training: trainee number census - 2018 to 2019. Data from ITT Census Table 1c. This table shows the relevant time series data; it includes Classics as part of figures for MFL, so differs slightly from other figures on MFL ITT recruitment cited in this report.

subjects will need to grow steadily to 2023/24 but that the most rapid rate of growth is expected to be for MFL teachers with an increase of 32%, from around 15,000 qualified teachers in 2018/19 to around 19,900 in 2023/24[85]. With our ITT entrant data showing that 30% of entrants to MFL ITT in 2018/19 were EEA nationals, compared to 5% of ITT entrants overall, any reduction in students from the EU studying in England is likely to reduce the number of MFL trainees[86].

94. Conclusion: The MAC concluded in January 2017[87] that the evidence indicated that teachers of MFL were in shortage but that there was insufficient evidence to indicate that French, German and Spanish teachers were recruited from outside the EEA. The evidence above shows that the pressures on schools recruiting MFL teachers have increased since then. We therefore believe that there is now a compelling case for MFL to be added to the SOL.

85 Department for Education. 2018. Teacher Supply Model 2019 to 2020.

86 Department for Education. 2018. Initial teacher training: trainee number census - 2018 to 2019.

87 Migration Advisory Committee (MAC) report: teacher shortages in the UK https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-teacher-shortages-in-the-uk

Teacher pay

95. In 2018/19, the teachers' main pay range – on which most new teachers will start – was £23,720 minimum/£35,008 maximum in England and Wales (excluding the London Area), £29,664/£40,372 in Inner London, £27,596/£38,963 in Outer London, and £24,859/£36,157 in the London Fringe.

96. When the £30,000 salary threshold for Tier 2 applicants was announced in March 2016, the government said that in order to reflect ongoing public sector pay and specific recruitment challenges it would exempt a number of occupations from these changes until July 2019. This included a lower threshold of £22,022 for secondary school teachers in maths, physics, chemistry, computer science and Mandarin.

97. Given the current pay ranges set out above, we argue that this exemption should be extended beyond July 2019 and applied to all teacher occupations. It should, however, be raised from £22,022 to £23,720 to reflect the new pay scales.

Annex A – initiatives to increase teacher recruitment and retention

Bursaries and scholarships

A1. We have put in place a range of measures, including generous bursaries, worth up to £26,000. These bursaries are available for post-graduate teacher trainees in physics, chemistry, MFL, computing, geography, biology, classics, English, design & technology, history, music and religious education trainees.[88] We also offer post-graduate scholarship bursaries worth up to £28,000 in physics, maths, chemistry, computing, geography and MFL.

A2. For maths, we are also piloting financial incentives which encourage retention. For maths trainees starting ITT in 2019 we are continuing to offer a £20,000 tax-free bursary (or a £22,000 scholarship bursary), followed by two early-career payments of £5,000 each after tax (or £7,500 after tax if teaching in local authority areas of greatest need) in their third and fifth year of teaching.

A3. A new ITT bursary was introduced in 2015/16 for trainees undertaking identified undergraduate ITT courses in shortage subjects. For standard courses in secondary mathematics and physics that lead to QTS, a bursary of £9,000 is available and is paid to eligible trainees in the final year of their course. The bursary is available to undergraduate trainees who have enrolled on a QTS course since the 2015/16 academic year. The £9,000 training bursary is also available to eligible trainees on opt-in secondary undergraduate mathematics, physics, computing or MFL courses that lead to QTS. The bursary is reviewed annually as part of the ITT incentives package.

88 Bursaries and scholarships: https://getintoteaching.education.gov.uk/funding-my-teacher-training/bursaries-and-scholarships-for-teacher-training

Subject knowledge enhancement (SKE)

A4. We are continuing to fund SKE programmes in all priority EBacc subjects. SKE programmes give potential trainees the depth of knowledge needed to teach priority subjects and meet the Teachers' Standards. SKE continues to be well used; of the new entrants to ITT studying in SKE subjects, 37% have taken a SKE course. Uptake in MFL was particularly high at 55%, followed by maths (47%) and physics (46%). To support recruitment for 2018/19, SKE funding covers biology, chemistry, design & technology, computer science, languages, physics, maths, primary maths, religious education, English and geography.

Loan Reimbursement

A5. The Teachers' Student Loan Reimbursement Pilot is available for teachers of biology, chemistry, computing, languages and physics in years 1 to 5 of their career or starting ITT in 2018/19 or 2019/20. It is available in 25 local authorities that are most in need.

Career changers

A6. Two new programmes are being funded for ITT 2019 to attract career changers into teacher training, support their transition prior to and during ITT and continue to support them in their NQT year. 25

A7. Now Teach and Transition to Teach launched recruitment in November 2018. They will both be working with accredited ITT providers to deliver the programmes to participants following an existing postgraduate ITT route.

A8. Now Teach is recruiting across the South East, London, Norfolk and Birmingham. Transition to Teach is recruiting across the North West, North East, Yorkshire and West Midlands.

Reducing workload

A9. The department's actions to reduce teacher workload include:

- Establishing a Workload Advisory Group to look at what unnecessary data and evidence schools are collecting, and what (and who) drives that behaviour;
- Publishing a workload reduction toolkit;
- Ensuring a period of stability, beyond any changes already announced before March 2018, with no new tests or assessment for primary schools and no changes to the national curriculum, GCSE or A Levels for the remainder of this parliament;
- Running 10 collaborative regional workload events since November 2017, which were sector-led and focused on practical approaches to remove unnecessary workload at school level;
- Funding 11 research and development projects undertaken by groups of schools into efficient and effective approaches to reduce workload related to marking, planning and resources and data management;
- Publishing, in February 2017, the results of the 2016 Teacher Workload Survey and our action plan which sets out the next steps for the department;
- Establishing three independent review groups to address the three biggest issues emerging from our 2014 Workload Challenge – ineffective marking, use of planning and resources, and data management and published their reports in March 2016; and
- Publishing advice for ITE Providers that will help providers address workload issues as part of their provision, and within their wider partnership - both in programme design and in the requirements being made of trainees and partner schools.

A10. We are now planning to update the workload reduction toolkit during the spring and autumn 2019 to respond to the recommendation from the Making Data Work report which asked for an additional section on behaviour management. We are currently conducting user research to inform these updates and again working with school leaders and others to develop new material.

A11. In terms of outcomes, we know that more schools are taking action to tackle workload and remove unnecessary practices. 73% of teachers and head teachers report their schools have reviewed or updated school policies, 67% had reduced or changed their approach to marking and 49% had reduced or changed their approach to planning to reduce workload. Of those that had taken action on workload, 47% said unnecessary workload had been effectively reduced[89].

89 IFF Research, 2018

Subject specific initiatives

Maths and Physics

A12. We are funding a wide range of initiatives aimed at attracting and retaining the highest quality candidates to maths and physics these include:

- Maths and physics teacher retention pilot: the Budget provided funding for a £10 million regional pilot to test how to improve retention of early career maths and physics teachers.
- Future Teaching Scholars: This programme is for high-achieving maths and physics A level students planning to study a maths or physics-related degree, who want to teach. The programme is also open to maths and physics undergraduates in the first year of a four-year degree. Participants benefit from a £15,000 bursary and the chance to gain classroom experience whilst at university, followed by bespoke employment-based teacher training, allowing

them to earn while they study. They also receive additional support for two years post-qualification. Recruitment is currently open for those starting university in autumn 2019.

- Teaching Internships (previously paid internships): The programme aims to provide STEM undergraduates with experience of teaching maths or physics before they commit to it as a career. The programme consists of a four week internship mainly for undergraduates in their penultimate year at university. Interns receive £300 per week. The programme takes place in schools across England and offers interns the chance to gain a deep experience of teaching. The department is currently assessing bids from school-led partnerships to deliver the summer 2019 programme.
- Maths and Physics Chairs Programme: The Maths and Physics Chairs programme is an ITT scheme that recruits high calibre post-doctoral researchers who have detailed subject knowledge and passion, to teach maths and physics in the schools and to transfer their subject expertise to other STEM teachers. Chairs train to teach and receive additional training to help them add value to schools by championing university access, disseminating subject expertise and raising awareness of research. For 2019 onwards, the programme is open to both School Direct salaried and School Direct fee participants in order to widen eligibility. In addition to maths and physics participants, recruitment is for chemistry, biology, English, geography, languages, history and classics. Recruitment to the 2019 cohort is now underway.
- STEM Returners: Since April 2015, the department has supported former teachers of maths and physics to return to the profession. Returning teachers are able to register for support from an experienced adviser who can help them to find training, classroom experience and improve their job application skills.
- Teacher Subject Specialist Training (TSST): The programme launched in July 2015 to upskill 15,000 non-specialist maths and physics teachers over the next five years (3,000 a year). There are training courses available across the country provided by over 100 lead schools. Delivery models include online training, classroom-based training and mentoring.

A13. For physics we fund a range of additional programmes to equip existing teachers including:

- Science Learning Partnerships: providing high quality, local, continued professional development for science teachers. This includes bespoke practical support and guidance to schools wishing to offer a Triple Science option.
- Stimulating Physics Network: provides support at regional level to increase progression to A level physics. The network provides two strands of support, in addition to work aimed ultimately at increasing girls' A level take up:

i. Universal support for all schools which offers programmes of workshops, networking opportunities and other professional development events though a team of Physics Network Co-ordinators; and

ii. Developing intensive partnerships with selected schools provided through a team of mentors who facilitate tailored programmes of CPD.

- Isaac Physics (also known as Cambridge Physics): offers support and activities in physics to teachers and to students transitioning from GCSE, through to Sixth Form, to university. It combines an online study tool with face-to-face events at partner schools and institutions across the UK.
- Enthuse bursaries: which provide funding for teachers to attend residential CPD at the National STEM Learning Centre in York.

Computer Science
A14. We have several initiatives aimed at both increasing the conversion rate from the relevant graduate pools and broadening the pool from which we recruit:

- We provided seed funding to support some universities to develop and pilot new 'opt-in' undergraduate courses, providing a new pathway for physics, maths and computer science students to train to teach alongside their undergraduate degrees.
- A National Centre for computer science Education, supported by £84 million of new funding, announced in November 2017, to improve the teaching of computer science. The programme will provide resources and training to teachers to support them in delivering the curriculum as well as the computer science GCSE and A levels.

Mandarin
A15. The department has a contract with UCL/Institute of Education to deliver a Mandarin Excellence Programme in secondary schools. The purpose of the programme is to deliver a minimum of 5,000 students studying Mandarin on track to a high level of fluency by 2020. The first tranche of 14 schools started in September 2016, the second tranche of 23 schools joined in 2017 and the latest tranche of 27 schools joined in 2018 making a total of 64 schools in the programme and approximately 3,000 students currently studying Mandarin. The programme will:

 deliver Mandarin ITT placements for trainees recruited and trained by UCL/Institute of Education;

 embed effective, sustainable teaching practices that will continue to increase the number of students studying Mandarin beyond the funding of this project;

 increase PGCE and School Direct tuition fee places at the Institute of Education (IOE) to 20 in September 2019. Subject to demand a target of at least 100 new qualified Mandarin teachers will have been trained by the end of the programme;

 increase School Direct tuition fee and salaried places in response to demand from the programme hubs, with student teachers being trained through the hub clusters (six per year); and

- establish cooperation with other Initial Teacher Education (ITE) providers across the country to train more Mandarin teachers both with respect to support for Mandarin specific training and school placements (at least 10 per year).

Modern Foreign Languages
A16. As well as the cross cutting initiatives targeted at all priority subjects set out at the start of this annex we have several other initiatives to specifically target MFL recruitment and retention:

- Scholarships: an MFL scholarship scheme run by the British Council, selects high calibre ITT candidates and offers tailored subject specific support alongside ITT training. Scholarships aim to raise the status of teaching to create a cadre of subject expert teachers and to attract high quality graduates.
- MFL Returners: the returners programme was extended to MFL in 2016 to encourage former MFL teachers back into the classroom. Returning teachers are able to register for support from an experienced adviser who can help them to find training, classroom experience and improve their job application skills.

- Qualified Teacher Status (QTS) option for MFL undergraduate degrees: we have provided seed grant funding for Higher Education Institutions to develop an offer for MFL degree students to opt-in to complete QTS alongside their undergraduate degree.
- Teacher Subject Specialist Training (TSST): the programme was extended to cover MFL in 2016. There are training courses available across the country provided by over 100 lead schools. Delivery models include online training, classroom-based training and mentoring.

A17. We recognise that securing our future supply of teachers necessitates the increase of those studying MFL now. Therefore to improve uptake and attainment in languages at secondary schools, we have:

- Recently launched an MFL Pedagogy Programme, appointing nine lead hub schools and an MFL Centre for Excellence.
- Launched a digital languages mentoring pilot to explore the potential for educational technology to increase pupil demand for languages at GCSE.
- Started planning a package of communications activities to promote the benefits of EBacc and languages to Y9 pupils and parents as they begin to make their GCSE choices.

A18. We also supplement these domestic initiatives by working in partnership with the Spanish government to recruit visiting teachers from Spain through Spain's Visiting Teachers Programme to teach MFL in England.
30

Annex B - Table 1: Rates (percentage) of full-time classroom teacher vacancies and temporary filled posts in state funded secondary schools by subject[90].

England

		VACANCIES AS A PERCENTAGE OF TEACHERS IN POST							
		Note 2							
	Notes	2010	2011	2012	2013	2014	2015	2016	2017
ALL VACANCIES		0.4	0.3	0.5	0.8	1.1	0.9	1.1	1.1
MAIN TEACHING SUBJECT									
Mathematics		0.7	0.5	0.7	1.1	1.4	1.2	1.3	1.4
Information technology		0.5	0.4	0.5	1.0	1.5	1.4	1.7	1.8
Computing		..	..	..	..	..	..	..	1.2
All sciences		0.4	0.4	0.6	1.0	1.4	1.3	1.6	1.5
Languages		0.3	0.4	0.5	0.3	0.7	0.7	0.7	1.0
English		0.5	0.4	0.7	1.0	1.3	1.2	1.2	1.2
Drama		0.3	0.1	0.1	0.4	0.4	0.4	0.6	0.2
History		0.2	0.3	0.2	0.4	0.8	0.7	0.6	0.6
Social sciences		0.6	0.3	0.6	0.7	1.4	0.7	0.8	0.8
Geography		0.2	0.2	0.4	0.6	1.2	1.2	1.3	1.2
Religious education		0.3	0.2	0.4	0.7	0.6	0.4	1.0	0.7
Design and technology		..	..	..	..	..	..	2.1	1.2
Commercial/business studies		..	..	..	..	..	..	0.8	1.1
Art/craft/design		0.2	0.1	0.2	0.5	0.5	0.3	0.4	0.4
Music		0.2	0.2	0.5	0.3	1.0	0.5	0.5	0.6
Physical education/sport/dance		0.2	0.1	0.1	0.3	0.4	0.3	0.2	0.4
Careers		-	-	-	-	-	-	-	-
Other main and combined subjects		..	..	..	..	..	..	1.3	1.5
Unknown subjects		.	.	.	.	.	.	.	.

90 Source: School Workforce Census, November 2010-2017

Department for Transport I (Letter)

I am writing in response to your call for evidence relating to the Shortage Occupation List, and have enclosed several reports for consideration by the MAC. Thank you for the opportunity to provide input into this important piece of work.

As you will be aware, investment in transport infrastructure is at record levels. Modern, safe and reliable transport networks and services are essential in supporting wider improvements in productivity across the economy.

In 2016, in recognition of rising investment and long-standing skills shortages underpinned by an ageing workforce, lack of diversity and poor perceptions of the industry, DfT worked alongside industry to produce a Transport Infrastructure Skills Strategy. The Strategy makes recommendations to increase capacity and capability within the sector. Through the work of its main delivery body, The Strategic Transport Apprenticeship Taskforce (STAT), industry has been brought together to improve understanding of skills needs and address gaps. It sets out ambitious measures to increase apprenticeships and improve diversity.

These measures are part of our long-term approach to creating a pipeline of skilled workers within the sector. So far, we have seen real success in meeting ambitions for the creation of apprenticeships. Since 2016, we have welcomed over 5,000 apprentices into training in road and rail bodies and employers across the sector are making ambitious pledges to create thousands more apprenticeships. The strategy has strong support from leading employers across transport.

Beyond our work on skills, strategies are also in place to drive efficiencies and to work with the sector to support the adoption of technological changes that enhance productivity. These will, in time, allow the sector to reduce its reliance on low skilled migrant workers to plug skills gaps. Whilst industry works to drive change, and as new migration arrangements are being developed, we see the need for the sector to access workers of all skill levels to enable the delivery of our investment programme and of vital transport services.

As part of this latest MAC call for evidence, we have brought together the work undertaken by STAT and other employers to outline critical skills shortages and EU worker reliance in 2017 and 2018 that is pertinent to the Shortage Occupation List:

- 2017 STAT response to the MAC call for evidence;
- 2018 STAT response to the MAC recommendations;
- 2018 DfT labour market analysis.

In addition, we have encouraged employers from across the sector to submit responses to you. It is worth setting out that across the sector, granular, high-quality data on current skills shortages, EU worker reliance and EU worker turnover can be difficult to obtain and the timescales for this Call for Evidence in particular have been very tight. This may result in lower engagement with businesses than we would like to see.

Evidence to date leads us to anticipate:

- a decrease in net migration from the EU which will impact particularly on low-skilled roles, with imminent shortages in LGV drivers, seasonal warehouse workers, construction workers, bus drivers, rail operatives and rail customer service assistants;
- strong regional and modal trends across the country that reflect the location of industries and investment, that may impact at the national level.

As part of this call for evidence, we welcome your request for information on shortages at all skill levels. This will help to provide a more complete picture of anticipated shortages. As we await the impacts of future immigration policy, we would be keen that the Shortage Occupation List be kept open for review at a later date.

We are aware of a number of submissions from the transport sector, and across Whitehall in areas of overlapping skills requirements:

- The impact of shortages in freight and logistics cuts across government, with, notably the reliance on haulage in the agri-food sector. The Road Haulage Association, Freight Transport Association, Food Storage & Distribution Federation, and British Retail Consortium have highlighted qualified LGV drivers and warehouse personnel as essential labour for inclusion on the shortage occupation list through correspondence with the Home Office.

- The response for rail has been led by the National Skills Academy for Rail, in conjunction with the Railway Industry Association. The previous iteration of the SOL included a number of roles in rail. The latest evidence expands this further and includes operatives, engineers, software developers and construction workers.

- In maritime British Marine have highlighted marine engineers, painters, carpenters and fabricators.

- Transport Infrastructure also competes with other sectors for the same labour pool, such as construction workers. Both BEIS and The Civil Engineering Contractors Association have responded to the call for evidence, identifying a number of construction roles that are necessary to deliver infrastructure.

My officials would be happy to answer any queries you may have in relation to the information submitted. They are in contact with your team and appreciate the guidance provided to date.

Yours sincerely,

Bernadette Kelly CB

Permanent Secretary

Department for Transport II (Analysis)

The UK transport labour market: analysis

Introduction

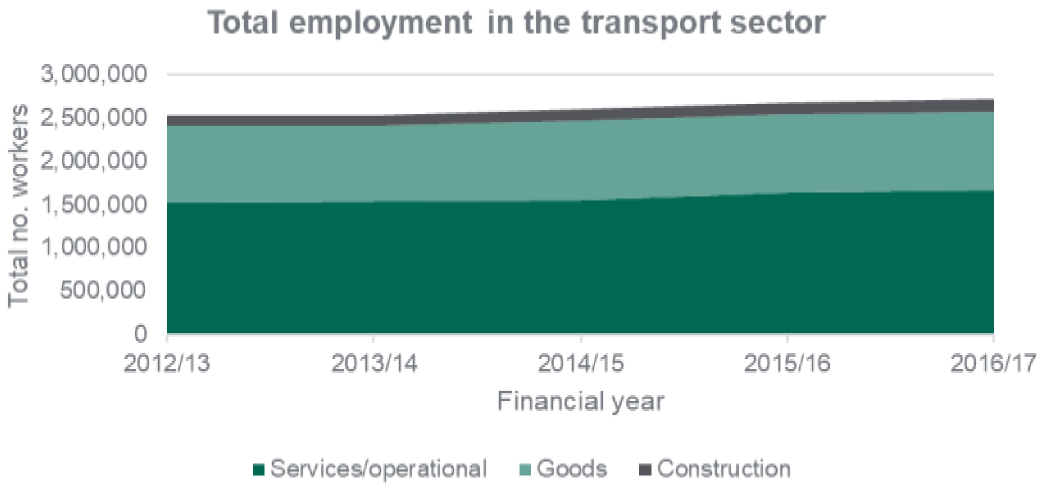
The Migration Advisory Committee (MAC) set out its recommendations to Government on 18th September. A key recommendation of the MAC is to extend the Tier 2 Visa to include medium-skill workers and restrict access to low-skilled workers. Whilst extending Tier 2 to medium skills is welcomed, as transport embraces increasingly digital roles, the sector is reliant on access to lowskilled EU workers, particularly lower down the supply chain and in infrastructure construction.

In September 2018 the DfT EU exit analysis team presented analysis on the potential impact of increased migration restrictions. The analysis suggested that increased migration restrictions could:

- Lead to skills shortages that could affect the delivery of transport services, and transport investment schemes.
- Potentially lead to higher wage rates than would otherwise be the case, leading to financial pressures.

Context

In 2017/18 there were a total of 2.7 million people employed in the transport sector according to the Annual Population Survey:



EU nationals in the transport sector numbered 241,000, or 9% of the total workforce, as of 2016/17. This is nearly double the proportion for 2012/13, when they constituted just 5%. However this reliance varies by sector.

According to the ONS Migration Statistics Quarterly Report, in 2017/18 there was a net migration inflow of 256k. Of this 81k was made up of EU citizens, however total net migration from the EU fell by 40% in the year following the EU referendum. This may be in part due to changing perceptions of the UK, as well as the depreciation of sterling relative to European currencies.

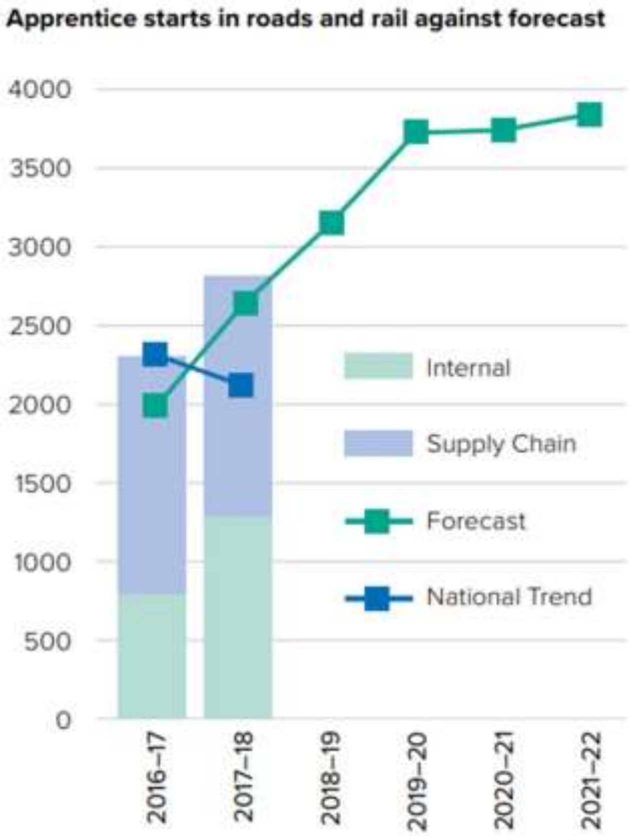
Policy context

In broad terms, the Immigration White Paper proposes the end to free movement of people from the EU, the extension of the Tier 2 visa to include medium skills roles and a temporary low-skilled worker route.

We expect that overall restrictions will lead to a significant decrease in net migration from the EU.

Mitigation measures

The Transport Infrastructure Skills strategy[25] has a trajectory to create 27-35,000 new apprenticeships by 2022, in roads and rail, through the use of procurement levers. As of 2018, >5,000 apprentices had been recruited in roads and rail, ahead of the forecasted trajectory. This skills strategy was however not designed to meet the challenge posed by the UK exit from the EU. The 'Two Years On' report makes a commitment to continue to consider the impact of the UK exit from the EU and respond accordingly.



There are also a range of wider government and industry measures, such as the government's 'Year of Engineering' and the road freight industry's 'Think Logistics' programme.

Longer term Mitigations

25 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/727052/t ransport-infrastructure-skills-strategy-two-years-on.pdf

The Transport Infrastructure Efficiency Strategy adopts the presumption for offsite construction in transport, from end 2019, alongside DfE, MoJ, MoD, DoH. The adoption of off-site construction is expected to reduce labour demand, however the degree to which remains uncertain.

A McKinsey report found that ‘jobs carried out in predictable settings’, including transportation jobs, are among the most susceptible to automation and will see a net decline by 2030[26]. Similarly, PwC findings suggest that the risks of automation displacing human jobs in the UK appear highest in the transportation and storage sectors[27]. There is already existing evidence of the efficiencies technology can bring. Strong productivity growth and the adoption of technology in the aviation industry has kept employee numbers steady as passenger numbers have grown.
Automation can therefore help alleviate some of the labour shortfall challenges. The likely rise in labour costs in migrant-reliant industries may create further incentive for businesses to invest in labour-augmenting or replacing technologies. Estimates vary as to the degree by which technology will replace jobs in the transportation sector. McKinsey and Oxford Economics / Cisco vary from an estimated 22% contraction in transportation jobs to a 34% contraction by 2030.

However the timing of the roll out and take up of new technologies is highly uncertain. Neither of the studies discussed above provide visibility of their assumptions in this area, making it difficult for us to judge how appropriate these estimates are. Fully automated cars may not penetrate the market until the early 2030s or later, suggesting that that automated LGVs may be unable to replace human drivers within similar timescales. Therefore there may be a transitional period of worker shortages as EU citizens leave, but technology is still in development. The development and uptake of automation technologies (including automated vehicles) will inevitably lead to the creation of new types of jobs. The nature and volume of these new jobs are still uncertain.

Conclusion

- Many transport occupations, particularly those classed as low-skilled, will face shortages with the end to free movement with the EU.
- Immediate mitigation strategies (mainly apprenticeships) are insufficient to fill the gap, whilst mitigations such as new technology and automation have large uncertainties over time-scales, uptake and impact.
- Wage inflation may increase at an accelerated rate in the transport sector as a result of these shortages.

[26] McKinsey (2017): Jobs Lost, Jobs Gained: Workforce transitions in a time of global automation, p67
[27] PwC (2017): Will robots really steal our jobs?, p18

Department of Health and Social Care

Shortage Occupation List: Health and Social Care Response to call for evidence

Joint response from Department of Health and Social Care, NHS England, NHS Improvement and Health Education England

January 2019

Executive Summary

The Department of Health and Social Care (DHSC) works with its Arms' Length Bodies to deliver and implement workforce policies with the aim of ensuring that the NHS and social care sector has access to the right mix and number of staff who have the skills, values and experience to deliver high quality, affordable care.

This joint submission on behalf of the DHSC, NHS England (NHSE), NHS Improvement (NHSI) and Health Education England (HEE) presents the evidence base for the health and care professions experiencing staff shortages and a shared view of which health and care professions should be on the SOL under the current immigration arrangements through to the end of the European Union Exit Transition Period, at which point a new Immigration System will come into effect.

This review comes at a critical time for the health and social care system, and there have been numerous developments across the system since the last full review in 2014. Most notably, demand has continued to outstrip supply of staff at an unprecedented rate - this is despite the workforce growing consistently during this period. Workforce shortages are widespread, covering nursing, medical specialties, allied health professions and social care workers. Factors which have contributed to increased demand include:

Increasing numbers of patients, due to rising life expectancy, population structural changes (significant increases in those aged 85 and over) as well as increases in the number of people living with multiple, long-term and complex conditions. This has had a significant impact on demand for both health services and social care.

The 2013 Francis review which led to a greater system-wide focus on safety and a push for higher staffing levels, especially in nursing, which were not anticipated five years ago. This has been vital to improve the safety of the system, but has had a knock-on impact in terms of demand for staff; and

Changes in expectations, both of the public with rising expectations for more convenient and personalised care and of the workforce with more staff wanting flexible careers. This was recognised by the Government in June 2018 when it agreed to a new funding settlement, increasing the rate of growth of NHS spending. There has also been increased demand outside the NHS, with estimates of the number of nurses working in the independent sector also rising to meet growing demands of an ageing population. Shortages are evident across all components of the sector.

Immigration is neither the primary nor the most sustainable solution to filling these supply gaps, and the national NHS bodies have put in place a series of measures to expand domestic supply. Since the last full review of the SOL in 2014 and partial review in 2015, DHSC and system partners have implemented system reforms and a wide range of targeted recruitment and retention initiatives to increase domestic supply in the NHS. This will be accelerated this year with the publication of the NHS Long Term Plan (and the workforce implementation plan that will follow) and the Department’s Social Care Green Paper, which will outline measures to improve the attractiveness of working in social care.

There will also be greater collaboration between the bodies responsible for NHS service, financial and workforce planning. As announced on 23 October 2018, NHSI will work jointly with HEE through the new Chief People Officer Function, to develop and agree the workforce priorities and deliverables to be included within HEE’s future mandates. This new role will in turn have responsibility for providing a cohesive approach to recruiting, retaining, deploying and developing the current NHS workforce.

The role of NHS pay in recruitment and retention of staff has been addressed in recent pay settlements, reflecting a more flexible approach to public sector pay. For example, staff at the top of pay bands 2 to 8c will be receiving a cumulative pay increase over the next three years (up to 2021) of 6.5% and staff below the top of their pay band will be receiving pay increases of between 9% and 29% over the same period. These pay deals have rewarded staff dedication and productivity improvements, as well as supporting recruitment and retention. For doctors, the Doctors and Dentists’ Review Body will make recommendations later this year, which the Government will respond to in the summer. Skills for Care, the DHSC delivery partner for workforce issues within the Social Care sector, has also increasingly focussed on improving retention alongside recruitment by encouraging employers to develop and embed values-based recruitment and retention policies.

Whilst it is clear that substantial progress has been made, the increase in demand has meant that the recruitment and retention initiatives have not been sufficient to close the gap between supply and demand in the short to medium term. The supply gap is larger than had been modelled three years ago, and it will fall significantly short of future demand. The natural conclusion to this is that the health and social care roles currently on the Shortage Occupation List should remain in place, as we continue to work on our domestic supply chain and seek to manage demand.

This response to the MAC’s commission covers four broad professional groups, each with its own unique characteristics – nurses, medical practitioners, allied health professionals and social care workers, including both social workers and those who work in direct care. The response applies the three tests that the MAC has set out to determine whether staff groups should remain or be added to the Shortage Occupation List. At the MAC’s request, the response also provides evidence on supply and demand for lower skilled workers to inform an evidence base for the future.

The SOL is only a short to medium-term solution for the occupations listed and the recommendations here should be considered in the context of continued efforts to increase the domestic supply of staff. They should also be seen in light of plans to address the longer-term workforce challenges through the Long Term Plan (and its subsequent workforce implementation plan) and Adult Social Care Green Paper which will set how the health and social care systems will build and develop the health and care workforces needed to deliver care in a better way for patients in the future.

The plans are underpinned by a Government commitment to increase funding with the announcement in 2018 of a five-year budget settlement for the NHS that will deliver increases in its budget of over £20 billion in real terms by 2023-24. In social care, councils have access to up to £9.64 billion more dedicated funding over the three years from 2017/18, including the Local Government Finance settlement announcement of a further £150million for social care.

As the timelines for responses to the review have been short, we have not been able to conduct the level of stakeholder engagement we would ordinarily hope to do. Furthermore, it has meant we have been unable to identify clear quantitative evidence to demonstrate a shortage of Dental Practitioners and some Health Care Scientists, where we understand from stakeholders there is a clear argument for them to be included on the Shortage Occupation List. This submission represents our first high level summary. We are keen to engage with the MAC over the coming months to provide further evidence and clarity to inform the assessment of the international recruitment requirements of the health and care sector.

Nursing and Midwifery

Our most significant area of concern is nursing. Adding nurses to the shortage occupation list has been critical in alleviating workforce pressures and ensuring safer staff levels and it is our highest priority that they remain on the SOL.

Many of the pressures on the nursing workforce are also applicable to the midwifery workforce which is also experiencing staff shortages. Whilst birth rates have declined in the last few years, Office of National Statistics data suggests women are now giving birth later in life, adding a risk of more complicated labours which could increase demand for midwives.

Around half of nurses in the NHS earn under £30,000, meaning that without the specific lower salary threshold for nurses that currently exists, many of the vacant posts across the sector could not be filled by nurses and midwives from the rest of the world who would require a tier 2 visa.

Nurses and midwives form the backbone of the NHS and social care – there are over 350,000 full time equivalent nursing and midwifery staff working in the system in

England alone, roughly 10% of whom work in social care, with many others working in private and charitable providers, devolved administrations or taking career or parental breaks. Despite the high numbers of nurses there are still almost 46,000 unfilled posts in the health and care sector in England, with another 4.5% absent at any one time – the equivalent of another almost 16,000 FTEs. While around 33,000 FTE of these roles are filled through bank and agency staffing, there remains an estimated shortage of around 13,000 nurses across both health and social care. However, this is likely to be an underestimate given that temporary staff cover absences for a variety of reasons such as maternity/paternity leave and career breaks. As demand is rising and new interventions will take time to bear fruit, it is likely the gap will get worse before it gets better, reinforcing the need for migration to fill short-to-medium term gaps.

Several years ago, around the time that nurses were included on the Shortage Occupation List, the Government put in place substantial plans to boost the domestic supply of nurses. These interventions will go some way to narrowing the gap in nurse supply but it will not eliminate it entirely. The implementation of planned supply boosts will vary in effectiveness in different age groups and different parts of the country, so will vary in their impact.

An additional pressure to workforce supply has been the reductions in the numbers of EEA nurses joining the NMC register since June 2016. There are multiple and complex factors at play here, including but not limited to the introduction of language tests for those joining the NMC register, uncertainty around the UK's exit from the EU and wider economic changes across the EEA. Similarly, leavers from the register have been increasing steadily. This has increased NHS Trusts reliance on recruitment from outside of the EEA.

DHSC and its Arms' Length Bodies are committed to boosting domestic supply and will continue to work exhaustively in the delivery of the Long Term Plan (and subsequent workforce implementation plan) and follow up to the social care green paper to design and implement more radical measures to increase supply. A concerted programme of action has already been put in place to increase nursing workforce supply, covering improving staff retention, return to practice, overseas recruitment, expanding nursing associates, improving sickness absence and ensuring appropriate professional regulation systems.

However, there are limits to how quickly new nurses can be trained. Nursing, midwifery and allied profession students are required to complete 2,300 hours of clinical placements during their degree in order to obtain professional registration. These nursing and midwifery students are supernumerary in clinical practice in order to learn the clinical skills necessary for entry to the workforce. Ensuring that nurses and midwives have appropriate levels of supervision through mentoring is key for the training of them in the NHS workforce. Employers are responsible for ensuring their staff have the right skills and clearly having sufficient mentors in an organisation is a key component of ensuring local workforce needs are met. For these reasons, training new nurses and midwives effectively reduces existing nursing and midwifery capacity in the short term.

The education funding system has been reformed to allow the education sector to react more efficiently to growing demand by moving away from centrally imposed number controls and financial limitations, creating a sustainable model for universities and the healthcare workforce supply. In support of the reforms, the DHSC announced an increase in available funding for 5,000 additional nurse training places every year from September 2018 and 3,000 additional midwifery training places over the next four years.

Under the new system students on the loans system are typically at least 25% better off than they were under the previous system. In addition, students can claim extra non repayable grants to support them whilst undertaking their clinical placements including a £1,000 childcare allowance, reimbursement of additional travel to placement costs and an exceptional hardship fund.

However, these changes have coincided with a slight fall in applications to nursing and midwifery courses over the last two years, and HEIs have not filled the expanded places available. HEE and NHSI are monitoring the situation closely and are taking action to encourage applications to nursing courses in the next recruitment round. Furthermore, from 2020/21, funding will be provided for as many clinical placements as there are places filled by universities, up to 50% increase. And every nurse or midwife graduating will also be offered a five-year NHS job guarantee within the region where they qualify.

A £10,000 golden hello initiative was announced by the Government in May 2018 and will attract post-graduate nurse trainees to particular shortage specialties including learning disability and mental health nursing. The Long Term Plan also include plans for a new online nursing degree for the NHS, linked to guaranteed placements at NHS trusts and primary care, aiming to widen participation. This could be launched from 2020 depending on the speed of regulatory approvals. And to both minimise student debt and incentivise mature applicants, it will be offered for substantially less than the £9,250-a-year cost to current students

Plans to improve retention and sickness absence for nurses working in the NHS have been put in place and will contribute to meeting the Long Term Plan commitment to improve staff retention by at least 2% by 2025, the equivalent of 12,400 additional nurses.

The targeted direct support programme is a clinically-led programme aimed at supporting trusts in cohorts of 30 to 40 at a time to improve their retention rates. The focus on retention has helped drive a national improvement in nursing turnover rates of 0.5% in the first eight months of the programme. This is estimated to equate to around 1,000 additional nurses working in the NHS.

The HEE nurse Return To Practice programme (RTP) was launched in 2014 with the purpose of returning and recruiting nurses back into the NHS Workforce. Since its inception 5,320 nurses have started the programme of which, 3,374 have completed and have been made available for employment with the remainder still on the programme working towards completion. The RTP nursing programme is seen as a blueprint for other professions and a proposal has been accepted to incorporate a consistent approach to RTP for Midwives.

Developing new roles is a key part of supporting a richer skill mix in multi-disciplinary teams across health and care. HEE created the new role of the nursing associate in December 2015. Nursing associates work alongside healthcare support workers and registered nurses to deliver hands-on care to patients. HEE is supporting rapid growth in this new role, training up to 5,000 nursing associates through the apprentice route in 2018 and up to 7,500 in 2019. There will be continued to investment in the growth of nursing apprenticeships which offer important opportunities for widening social participation in the NHS workforce.

It is clear that a range of interventions have been implemented to increase the domestic supply of nurses and midwives and the Long Term Plan and subsequent workforce implementation plan set out further measures to address the longer term workforce supply issues facing the sector. However, it remains the fact that at the present time there are significant workforce shortages and international recruitment is required to fill these gaps in the short term.

Allied Health Professionals

There are over 89,000 Allied health professionals (AHPs) employed in the NHS and around 3,100 Occupational Therapists in social care who play a key role in treating, supporting and rehabilitating patients across the NHS and social care. Their work supports many of the strategic aims of the sector to transform care and to improve quality of life. The range of roles is broad and each recommended to be prioritised are covered in more detail in the annexes. The most critical point, however, is that a number of these roles sit at pay scale bandings at or below the £30,000 threshold, therefore it is recommended that the same salary exemption should apply to these roles. Many are also of strategic importance because they contribute to priority areas for the NHS, for instance in cancer care, mental health and rehabilitation of stroke patients – all areas that the Government and NHS leaders have chosen to prioritise over the last few years.

AHPs employed in the NHS have increased by almost 7,500FTE (12.8%) over the past five years. However, there has also been substantial growth in the number of posts required to meet demand which has resulted in an increased number of vacancies totalling 4,400 as at March 2017, an average of 5.1%. There is in addition, significant variation between the 14 different professions with vacancy rates highest for professions such as Paramedics and Radiographers.

Between 2012 and 2017 HEE broadly maintained the level of AHP training places, thereby supporting strong growth in the number of registered AHPs, which grew by 22%, or 35,000 professionals over the period. In 2017, AHP courses were included in the funding reforms and the cap on the number of training places that universities could offer was removed making these courses more responsive to student demand for training places. The Department also increased the funding available to support clinical placements that students take as part of their course. One AHP course - physiotherapy – has seen a significant increase in student numbers since the change in undergraduate funding models. However other AHP undergraduate courses have seen decreases in applications and acceptances for course places; courses in operating department practice, podiatry, prosthetics and orthotics and radiography are particularly vulnerable.

AHPs can significantly support the demand profile the NHS faces and NHSI has recently published 15 studies demonstrating how AHPs currently support patient flow across the whole system. NHSI, HEE and NHSE will establish a national workforce group to ensure that workforce actions in the workforce implementation plan are delivered quickly. The national workforce group will build on the AHP studies to make specific recommendations for AHPs in short supply. The Chief Allied Health Professions Officer will further develop the national AHP strategy AHPs into Action to focus on the delivery of the Long Term Plan.

In August 2017, HEE launched an allied health profession return to practice programme. This provides support for those that left the profession enabling them to return to the Health and Care Professions Council (HCPC) Register. To December 2018 127 people have re-registered with the HCPC.

Doctors

Ensuring sufficient supply of doctors across all grades and specialties is key to excellent patient care. The medical profession has seen significant and consistent growth in the last five years. However, this aggregate position masks more acute shortages in specific specialties and regions. Notable areas affected by workforce shortages include primary care, accident and emergency, mental health and some cancer services.

Working with system partners HEE has put in place measures to increase domestic supply, including a 25% increase in medical school places which started to be rolled out from 2018 and will be completed by 2020. This expansion will also deliver five brand new medical schools in Sunderland, Lancashire, Chelmsford, Lincoln and Canterbury. The new schools will help to deliver these additional places, alongside existing medical schools which have demonstrated a commitment to sending more trainees to rural or coastal areas and increasing the number of doctors working in specialties experiencing workforce shortages such as general practice and mental health.

HEE is continuing to improve training so that attrition is reduced, doctors can move between specialties more easily and so that flexibility within training programmes encourages doctors to stay in the NHS.

The way doctors are trained and the way they work will be a key component of the workforce implementation plan. A quarter of adults currently live with two or more long-term conditions, and medical training needs to support doctors to manage comorbidities, alongside single conditions. The plan will test a wide range of new incentives to ensure the balance between specialist and generalist doctors, and the balance of specialties within medicine, better matches patient needs. It will also consider how specialty choices made by doctors are better aligned to geographical shortages.

The long training pipelines and the difficulties of planning this workforce so far ahead are compounded by new technologies, changing demographic needs, and innovations in care models. This makes it difficult to tackle variations in workforce supply in the short term through domestic supply alone. This is particularly true in some smaller specialties which can be hardest hit by any reduction in numbers. This means that continued migration is required to fill short-to-medium term gaps.

The decision to remove doctors from the scope of the Tier 2 visa cap was very much welcomed and a critical factor in ensuring safe staffing levels in Trusts. This has meant that it is highly likely that doctors will be able to secure Certificates of Sponsorship by virtue of their salary and skill level regardless of being on the shortage occupation list. However, remaining on the list would act as additional reassurance to employers that they can recruit quickly from overseas by avoiding the resident labour market test. It also makes England an attractive prospect to overseas applicants when considering their chance of securing a role and in comparison to other countries such as Canada and Australia who also have doctors on their shortage occupation lists.

Social Care

The adult social care workforce in England comprises around 1.6 million jobs across more than 20,000 organisations. Vacancy rates (8% overall increased from 5.5% in

2012/13) across the care workforce are high. Care providers have difficulty recruiting and retaining workers, particularly to the roles of Care Worker, Social Worker, Registered Manager and Nurse.

The MAC has previously acknowledged that social care needs will continue to grow and that work in the sector needs to be made more attractive.[28] The DHSC Social Care Green Paper will outline measures to improve the attractiveness of working in social care, alongside existing work carried out by Skills for Care to build sector capability and the skills of the workforce, a national recruitment campaign to improve the perception of care work and the funding of the Social Work bursary and for Social Work practice placements.

As the relative levels of vacancy are high for RQF6 roles in social care it is our view that they should be included in the shortage occupation list to make it easier for health and care organisations to recruit international workers to these high skilled roles. In addition to Nurses (adult social care vacancy rate 12.3%) and Occupational Therapists (9.0%) described above it is recommend adult Social Workers (vacancy rate 10.2%) are added to the SOL.

This covers the current minimum skill level of RQF6. As the MAC has also requested information on skill levels below RQF6 these roles are included in the social care section below.

In summary DHSC recommends the following professions and specialties should either remain, or be added to the SOL:

Area	Healthcare occupation and Standard Occupational Classification (SOC) code	On the SOL presently?	Propose to add to / retain on the 2019 SOL?
Nursing and Midwifery	Nurses (2231)	Y	Y
	Midwives (2232)	N	Y
Allied health professionals	Diagnostic radiographers and Sonographers (2217)	Y	Y
	Paramedics (3213)	Y	Y
	Prosthetists and Orthotists (2229)	Y	Y
	Occupational Therapists (2222)	N	Y
	Operating Department	N	Y

[28] Migration Advisory Committee (2018) EEA Migration in the UK: Final report

Area	Healthcare occupation and Standard Occupational Classification (SOC) code	On the SOL presently?	Propose to add to / retain on the 2019 SOL?
	Practitioners (2219)		
	Podiatrists (2218)	N	Y
	Speech and Language Therapists (2223)	N	Y
	Therapeutic Radiographers (2217)	N	Y
	Clinical psychologists (2212)	N	Y
Medical and dental specialties	Medical practitioners (2211) – Consultants: Clinical radiology	Y	Y
	Medical practitioners (2211) – Consultants, SASO medical staff posts and CT3, ST4-ST7 trainees: Emergency medicine	Y	Y
	Medical practitioners (2211) – Consultants and SASO medical staff posts: Old age psychiatry	Y	Y
	Medical practitioners (2211) – Consultants and SASO medical staff posts: General Adult Psychiatry, Child and Adolescent Psychiatry, Learning Disabilities Psychiatry and Forensic Psychiatry	N	Y
	Medical practitioners (2211) – Psychiatry core trainees (CPT1)	Y	Y
	Medical practitioners (2211) – SASO medical staff posts: Paediatrics	Y	Y
	Medical practitioners (2211) – General practitioners	N	Y
	Medical practitioners (2211) – Consultant General and Acute Medicine	N	Y
	Medical practitioners (2211) – Consultant Histopathology	N	Y

Area	Healthcare occupation and Standard Occupational Classification (SOC) code	On the SOL presently?	Propose to add to / retain on the 2019 SOL?
	Medical practitioners (2211) – Consultant Geriatric medicine	N	Y
	Medical practitioners (2211) – Consultant Gastroenterology	N	Y
	Dental practitioners (2215)	N	Y
Health Care Scientists	Biological scientists and biochemists (2112) – Neurophysiology healthcare scientists Medical and dental technicians (3218) – Neurophysiology practitioners	Y	Y
	Physical scientists (2113) – Nuclear medicine scientists Medical and dental technicians (3218) – Nuclear medicine practitioners	Y	Y
	Physical scientists (2113) – Radiotherapy physics scientists Medical and dental technicians (3218) – Radiotherapy physics practitioners	Y	Y
Social Care	Social Workers (2442)	N	Y

Nurses and midwives

Specialty/profession

Nurses; MAC Reference: Nurses (2231) - Currently on the SOL

Midwives; MAC Reference: Midwives (2232) - Not on the SOL

What do you think are the main reasons for job shortages?

All branches of nursing are currently on the Shortage Occupation List (SOL) and the evidence suggests that nursing should remain on the list as a high priority. The evidence also suggests that midwives should be added.

The nursing and midwifery profession is facing a range of pressures which are contributing to shortages despite a range of interventions by government designed to increase supply, including:

High vacancy rates;

Flat workforce supply making it challenging to fill vacancies;

Increasing demand for nurses and midwives.

As a result of:

Retention issues;

Over 1,500 fewer EEA nurses and midwives which may be attributed to the introduction of language tests and uncertainty around EU Exit;

Decreasing numbers of applicants and acceptances to nursing and midwifery courses;

Lack of campaigns promoting NHS careers historically;

A growing and ageing population with multiple comorbidities creating additional demand.

Supply and demand

Demand for nursing has grown by 7% between 2009 and 2018 and will continue to grow driven by projected increases in the ageing population[29].

NHS Digital data shows that there has been little growth in nursing supply in the NHS hospitals in England since 2009, the workforce grew by only 1% over the last 9 years (278,470 as of Sept 2009, 281,789 as of August 2018).

Qualified registered midwives employed in the NHS hospitals in England increased by 12% in the last 9 years (from 18,859 in September 2009 to 21,280 as of August 2018). Whilst birth rates have declined in the last few years, according to ONS, women are now giving birth later in life, which is likely to lead to more complicated labour and increased demand for midwives.

Vacancies

There are a significant number of nursing vacancies across the NHS and social care.

[29] Population projections, Office for National Statistics

NHSI collect, and publish, information on nursing vacancies as part of its quarterly performance report[30]. The latest data, shows almost 41,000 (11.6%) nursing and midwifery vacancies in provider trusts, an increase of 1,700 compared to the same period last year.

Figure 1 - Time series of nursing and midwifery vacancies

	17/18 Q1	17/18 Q2	17/18 Q3	17/18 Q4	18/19 Q1	18/19 Q2
Vacancy rate	10.9%	11.2%	10.2%	10.2%	11.7%	11.6%
FTE Vacancies	38,328	39,154	35,934	35,794	41,337	40,877

Source: NHS Improvement

Skills for Care data shows that vacancies for nurses in social care also increased from 1,900 to 5,000 between 2012 and 2017, adding further pressure to the profession.

Figure 2 - Time series of nursing vacancies in Social Care

		12/13	13/14	14/15	15/16	16/17	17/18
Registered nurse	Employees	44,000	45,000	43,000	41,000	38,000	36,000
	Vacancy rate (%)	4.1%	7.9%	9.5%	9.4%	9.0%	12.3%
	Vacancies	1,900	3,900	4,500	4,200	3,800	5,000

Source: Skills for Care

HEE data suggests that there are currently around 1,200 (5.1%) midwifery vacancies in England.

Figure 3 - Midwifery vacancies

	2016 vacancy rate	2017 vacancy rate	2016 vacancy volume - FTE	2017 vacancy volume - FTE
Midwives	6.1%	5.1%	1,530	1,213

Source - Health Education England

Data from NHSI shows that currently around 80% of the 41,000 nursing vacancies in the NHS are being covered by a combination of Bank (64%) and Agency (36%) staff. However, temporary staff are also used for other circumstances including sickness absence, maternity cover and those on career breaks, so we expect that the vacancy cover is likely to be an overestimate.

[30] https://improvement.nhs.uk/resources/quarterly-performance-nhs-provider-sector-quarter-2-201819/

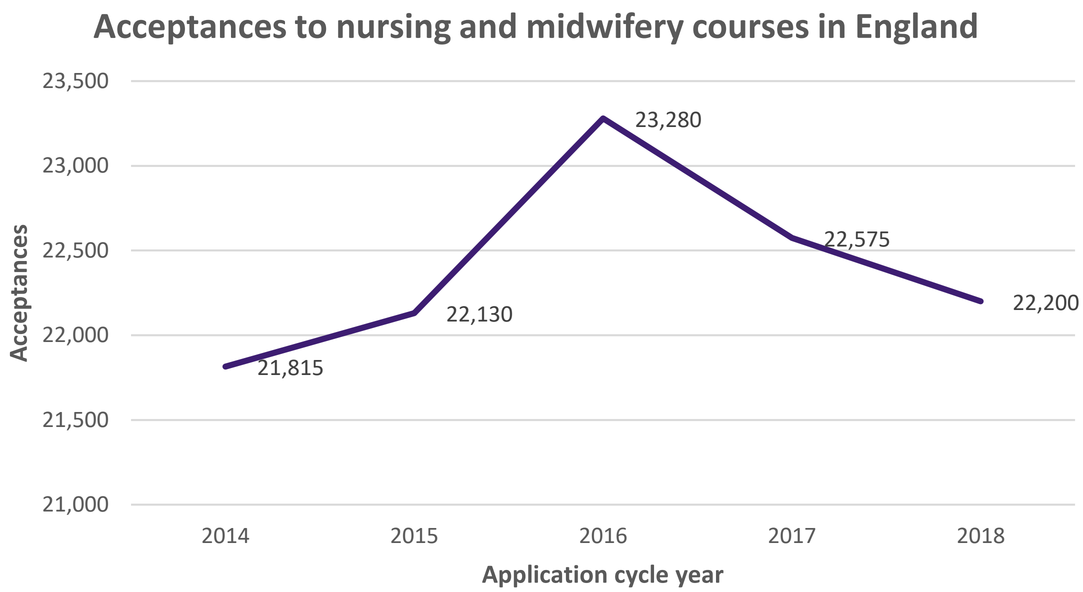
Applications and acceptances to nursing and midwifery courses

Applicants and acceptances to nursing and midwifery courses has fallen in the last two years, limiting the domestic supply expansion through this route in the next few years.

The number of applicants to nursing and midwifery courses in England has decreased by 12% in 2018 when compared to 2017; the first intake of students affected by bursary reform.

Similarly, there has been a 1.7% decrease in acceptances to nursing and midwifery courses when compared to last year and a 4.6% decrease when compared to 2016, the final year before bursary reform, as shown in figure 4 below.

Figure 4 - Acceptances to nursing and midwifery courses in England between 2014 and 2018



Source: UCAS end of cycle data 2018

Nurses and midwives, whether they work in the NHS, social care, on in other forms of provision (either privately or charitably funded) are all recruited through the same training routes: undergraduate or postgraduate degrees, or nursing apprenticeships.

The clear majority of trainee nurses still follow the degree based training routes. While far more people apply to a course each year than there are places available, the number of applicants is decreasing, and proportionately the scale of the decrease is sharper than the overall fall in the number of university applicants.

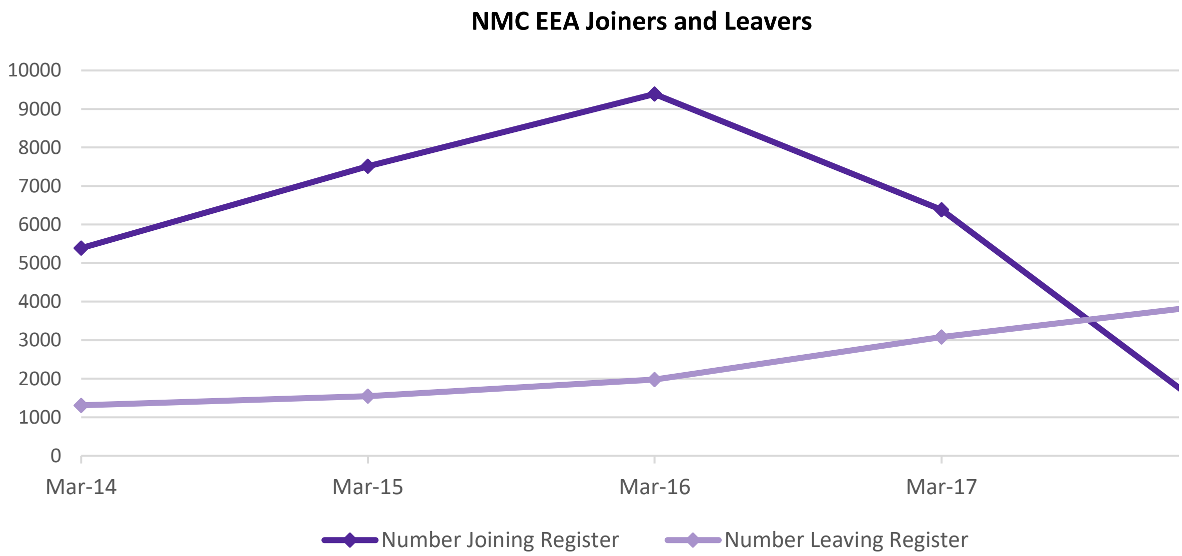
EEA supply

The nursing and midwifery workforce rely heavily on EEA workers. NHS Digital statistics show that 7% of nurses and 6% of midwives in the HCHS sector are EU27 nationals.

The total number of nurses working in the NHS has dropped over the past year, and the number of new nurses from the EEA joining the NMC register have plummeted since June 2016: from over 9,000 in 2016 to 800 in 2018. There are multiple and complex factors at play here, including but not limited to the introduction of language tests for those joining the NMC register, uncertainty around the UK's exit from the EU and wider economic changes across EEA. Similarly, leavers from the register have been increasing steadily.

If the number of nurses joining the register do not return to 2016 levels, the EEA nursing workforce is likely to continue to decline, adding further pressure to the workforce supply position.

Figure 5: Number of first time nursing and midwifery joiners and leavers from the NMC register



Nursing and Midwifery Council - published data

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

Education & Training Funding Reforms

In 2015, following the Spending Review, the Government decided that new pre-registration undergraduate and postgraduate nursing, midwifery and allied health professional students would receive their tuition funding and financial support through the standard student support system, rather than NHS bursaries. These changes came into effect in 2017, and most new undergraduate and postgraduate pre-registration healthcare students now receive student loans from the Student Loans Company.

The move from the NHS Bursary to the standard student loans system means that most students will typically receive an increase of up to 25% in the up-front financial resources provided whilst they study, compared to previous arrangements.

Based on current student loan re-payment thresholds a newly qualified nurse will not pay back their loan on earnings up to £25,000. They repay 9% of their earnings above this amount.

The move to bring the funding of pre-registration nursing degrees and Allied Health courses into line with other undergraduate courses through the student support system removed the "cap" of centrally imposed number controls and financial limitations, which a fixed envelope of Government funding for fees and bursaries represented. This change has allowed the Government to increase nurse training places by 25% - that is 5,000 additional nurse training places every year from September 2018 and an increase of 3,000 midwifery places over the next four years, with 650 available this year.

In support of this reform, the Government also announced additional clinical placement funding to provide up to 10,000 placements. This presents an opportunity to further increase the future supply of registered nurses, as well as that of other clinical professionals. DHSC, HEE and the wider system are continuing to work closely with Higher Education Institutions and partners, to continue to attract high calibre applicants to take up these additional places, and to ensure the provision of high quality clinical placements to support expansion.

Having a nursing degree increases the probability of being employed compared to the average graduate and once qualified, healthcare provides a wide range of career and development possibilities. There is still strong demand for nursing courses, as UCAS data from 2018 shows that there are still more applicants than places available. However, there are a range of complex issues as to why applicant numbers have fallen slightly further than university applicants overall.

The Long Term Plan reports that a number of universities have entry tariffs well above the levels set by other universities and deemed to meet appropriate standards by the Nursing and Midwifery Council. In other cases, the rationalising factor has been that HEE hasn't been able to guarantee the clinical placements needed to give hands-on experience. Both reasons will be addressed. To facilitate the DHSC's intended 25% increase in nurse undergraduate places, clinical placements for an extra 5,000 places will be funded from 2019/20, a 25% increase. From 2020/21, funding will be provided for clinical placements for as many places as universities fill, up to a 50% increase. In addition, every nurse or midwife graduating will also be offered a five-year NHS job guarantee within the region where they qualify.

Improving retention

NHSI in collaboration with NHS Employers have over the last twelve months been delivering a direct support programme to improve nurse retention and sickness absence, this will contribute to meeting the Long Term Plan commitment to improving staff retention by at least 2% by 2025, the equivalent of 12,400 additional nurses.

The programme whilst still relatively new has seen some encouraging results. The DHSC and NHSI are agreeing proposals to expand this support to all trusts. So far:

110 NHS trusts with some of the highest turnover rates have received direct support from NHSI in partnership with NHS Employers. This equates to almost half of all trusts.

500 NHS delegates have attended retention masterclasses where NHSI share best practice across England.

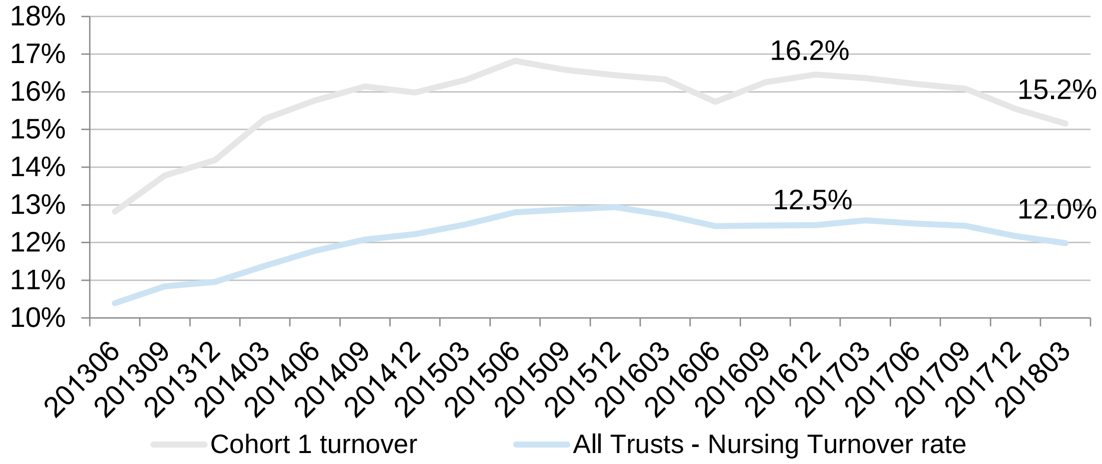
Staff turnover rates are going down, where cohorts are engaging fully with the programme.

71% of the nursing and mental health first cohort trusts (25 out of 35 trusts) are seeing an improvement in their staff turnover rates since starting the programme.

NHS Trusts in cohort 1 of the programme are seeing larger reductions in their turnover so far.

NHS Trusts in cohort 1 (nursing) have improved their staff nursing turnover rates by 1.0 percentage point on average (average turnover has fallen from 16.2% in June 2017 when NHSI started the programme to 15.2% in March 2018) — compared with trusts not receiving direct support, where the improvement was on average 0.4%. See figure 6:

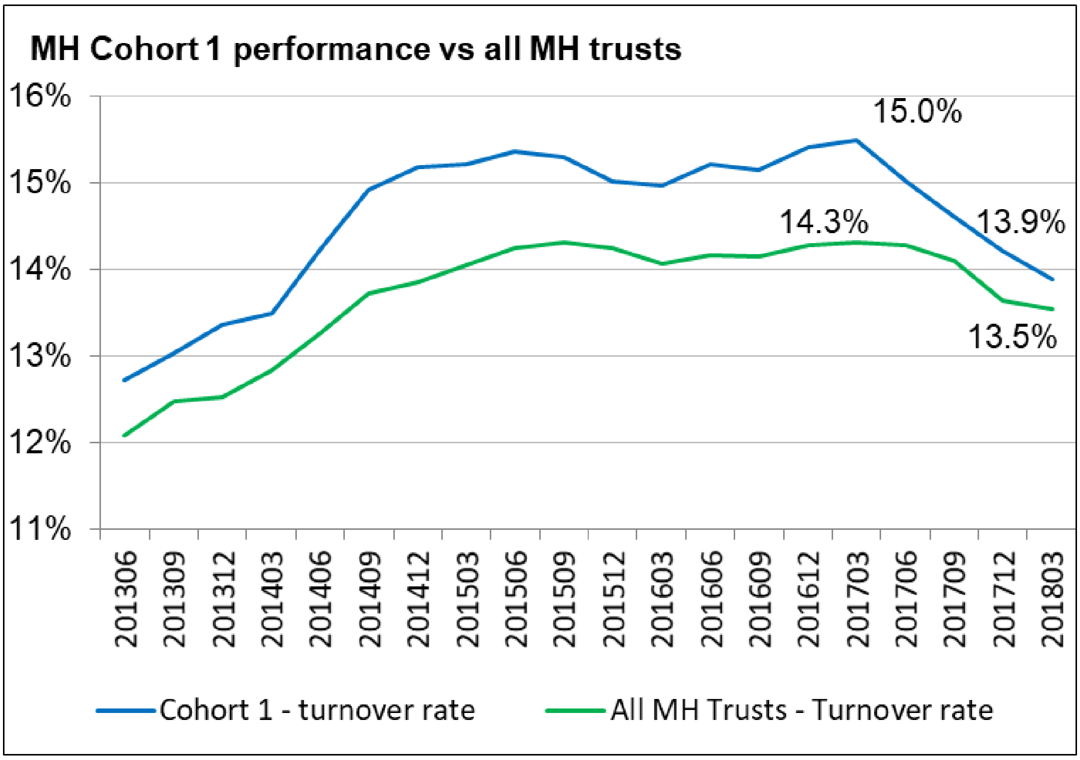
Figure 6: Nursing Staff turnover in cohort 1 of NHS Improvement Retention Programme



Source: NHS Improvement, unpublished

Mental health cohort 1 trusts have improved their clinical staff turnover rates by 1.1 percentage points on average (13.9% turnover in March 2018 vs. 15.0% in June 2017) — compared with all Mental Health trusts, where the improvement was on average 0.7%. See figure 7:

Figure 7: Mental Health Clinical Staff turnover rates (all Mental Health Trusts and Cohort 1 Mental Health Trusts)



Source: NHS Improvement unpublished

Return to Practice

HEE's National Return to Practice (RTP) programme was launched in 2014 with the purpose of returning and recruiting nurses back into the NHS Workforce. Since its inception 5320 nurses have started the programme out of this 3374 have completed the programme and have been made available for employment with the remainder still on programme working towards completion[31].

The scope of the programme also covers nurses looking to return to general practice nursing and building capacity in social care through nursing homes. This is complex as it requires the nursing infrastructure for pre-registration students to ensure quality, safety and a continuous learning environment is provided to create a sustainable workforce in this area. This work is pivotal to support the delivery of care closer to home.

HEE have aligned RTP to workforce hotspots and have a targeted approach specifically for Mental Health and Learning Disability RTP Nurses.

The RTP nursing programme is seen as a blueprint for other professions with a pilot scheme to bring 300 AHPs back into the NHS before 2019. In addition, a proposal has been accepted to incorporate a consistent approach to RTP for Midwives.

Social Care Nurses

Whilst all NHS initiatives to recruit, retain and develop nurses are welcomed, positive developments in the NHS can adversely impact the attractiveness of social care nursing jobs, which pay on average £3,000 less p/a and where employment decisions, including pay, terms and conditions and training and development are the responsibility of individual providers who offer variable packages.

DHSC sponsors Skills for Care (SfC) to design initiatives and run programmes aimed at finding and keeping workers, including social care nurses. SfC are currently piloting a return to work initiative to encourage nurses to join care homes in the Midlands. SfC have also produced a guide for owners, managers and education facilitators of care homes with nursing, which can be used to develop and educate their workforce on how to support a Return to Practice student.

Broadening routes into nursing is a priority for DHSC and the new Nursing Associate role and the Nurse Degree Apprenticeship which will open up routes into the registered nursing profession for thousands of people from all backgrounds and allow employers to grow their own workforce. These are for nurses across clinical and non-clinical settings including community and social care.

[31] Data is from Sept 2014 to sept 2018.

Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points - based visa system?

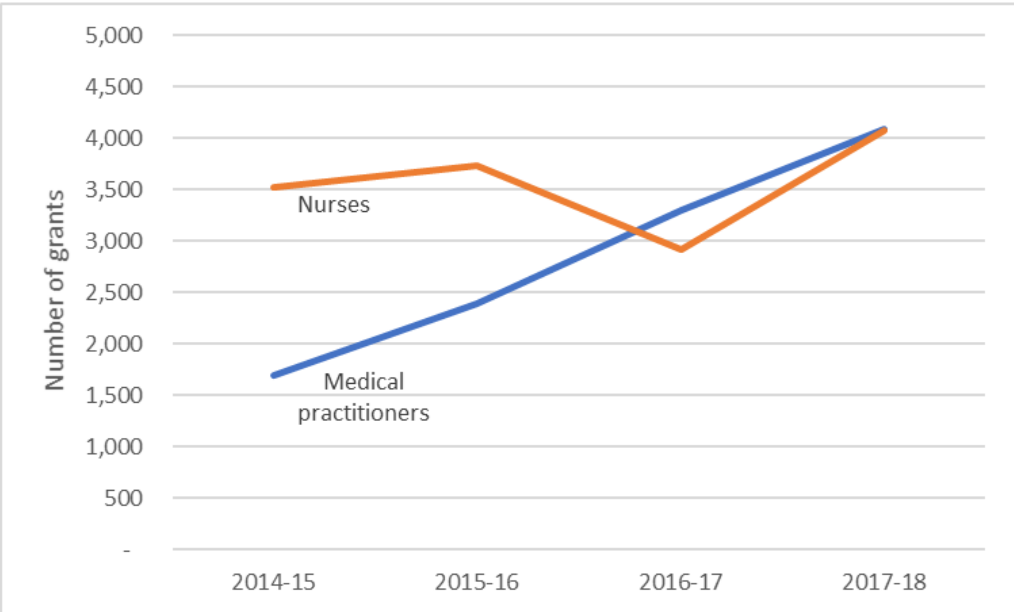
Yes

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

Over the last few years, number of Tier 2 Certificate of Sponsorship grants has grown, particularly for medical practitioners and nurses, as indicated in Figure 8. These health professions account for about 85% of all health grants.

Demand for overseas nurses is expected to continue to grow, as EEA workforce becomes less available.

Figure 8: Number of Tier 2 Certificate of Sponsorship grants

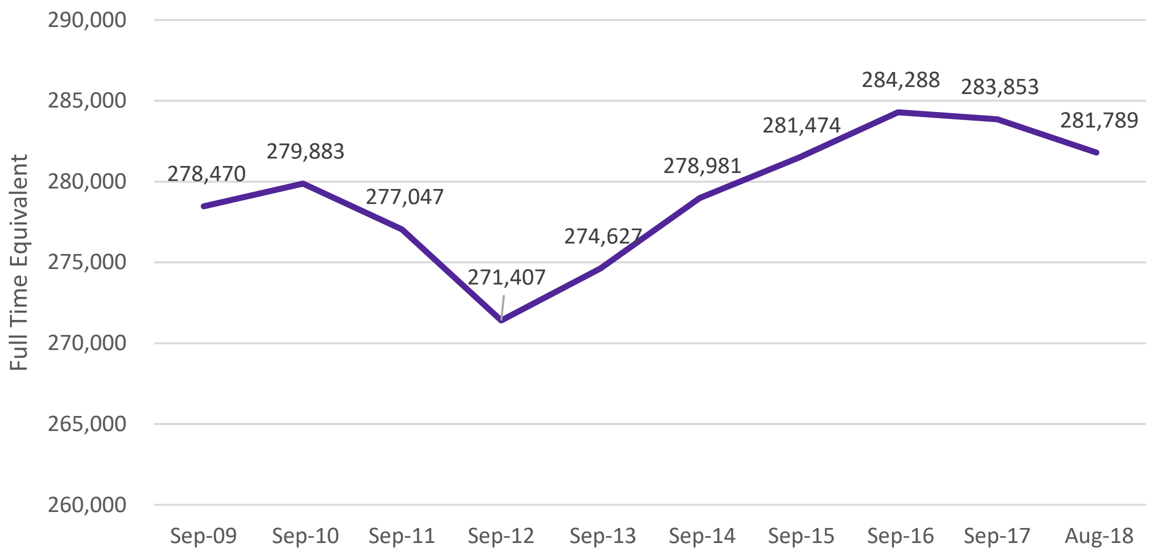


Home Office – not published

There have been no tier 2 Certificate of Sponsorship grants for midwives over the last 2 years.

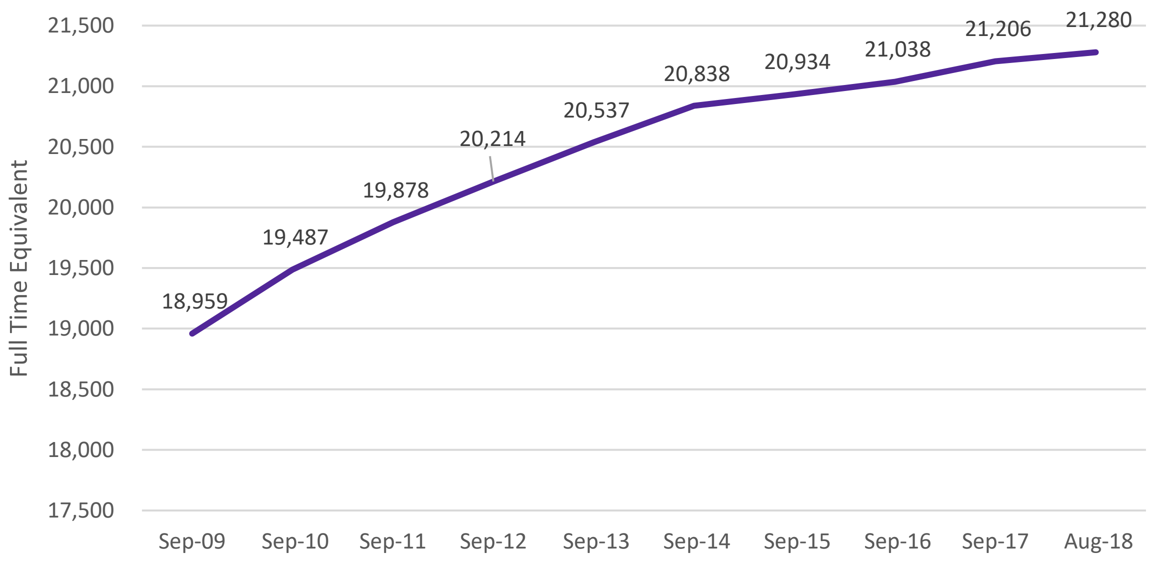
If you have any other information that might be useful for our call for evidence please use the space below to explain.

Figure 9: Time series of nursing workforce in Hospital and Community Health Services



Source: NHS Digital

Figure 10: Time series of midwifery workforce in Hospital and Community Health Services



Source: NHS Digital

Allied Health Professionals

The Allied Health Professions (AHPs) are the third largest workforce in the NHS. In the main they are degree level professions, and are professionally autonomous practitioners. 13 of the 14 AHPs are regulated by the Health and Care Professions Council (HCPC) with Osteopaths regulated by the General Osteopathic Council (GOC).

AHPs provide system-wide care to assess, treat, diagnose and discharge patients across social care, housing, education, and independent and voluntary sectors. Through adopting a holistic approach to healthcare, AHPs are able to help manage patients' care throughout the life course from birth to palliative care. Their focus is on prevention and improvement of health and wellbeing to maximise the potential for individuals to live full and active lives within their family circles, social networks, education/training and the workplace.[32]

Professions covered as part of this evidence submission

Healthcare occupation and Standard Occupational Classification (SOC) code	On the SOL presently?	Propose to add to / retain on the 2019 SOL?
1. Diagnostic radiographers and Sonographers (2217)	Y	Y
2. Paramedics (3213)	Y	Y
3. Prosthetists and Orthotists (2229)	Y	Y
4. Occupational Therapists (2222)	N	Y
5. Operating Department Practitioners (2219)	N	Y
6. Podiatrists (2218)	N	Y
7. Speech and Language Therapists (2223)	N	Y
8. Therapeutic Radiographers (2217)	N	Y

The following sections for each of the above professions set out where there is evidence of shortage.

All of the professions set out in the table above are open to eligible workers from the Tier 2 points - based visa system. A summary table on the levels of EEA reliance is included at the end of this section.

[32] About Allied Health Professionals, NHS England (2018) https://www.england.nhs.uk/ahp/about/

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

Reforms to healthcare education funding announced in November 2015, started to take effect from 1 August 2017, with students moving from a bursary-based funding model to loans-based. This means that HEE moved away from centrally imposed number controls and financial limitations, creating a sustainable model for universities and the healthcare workforce supply, reducing reliance on overseas and agency staff.

The move to student loans enables all nursing, midwifery and allied health profession students to typically receive at least 25% more funding for living cost support, in addition these students also have access to the Learning Support Fund i.e. £1000 child dependents allowance, access to an exceptional hardship fund and reimbursement of all additional travel costs to attend clinical placements.

In August 2017, HEE launched an allied health profession return to practice programme. This provides support for those that left the profession enabling them to return to the Health and Care Professions Council (HCPC) Register. To December 2018, 127 people have re-registered with the HCPC.

Diagnostic Radiographers and Sonographers

MAC Reference

Diagnostic radiographers; MAC Reference: Medical radiographers (2217)

Sonographers; MAC Reference: Medical radiographers (2217)

What do you think are the main reasons for job shortages?

Diagnostic Radiographers and Sonographers are currently included on the SOL and it is recommended they are retained on the SOL.

These professions are facing a range of pressures which are contributing to shortages, including:

1. High demand - Cancer services in particular

High vacancy rates

Retention issues and concerning patterns of leaver rates

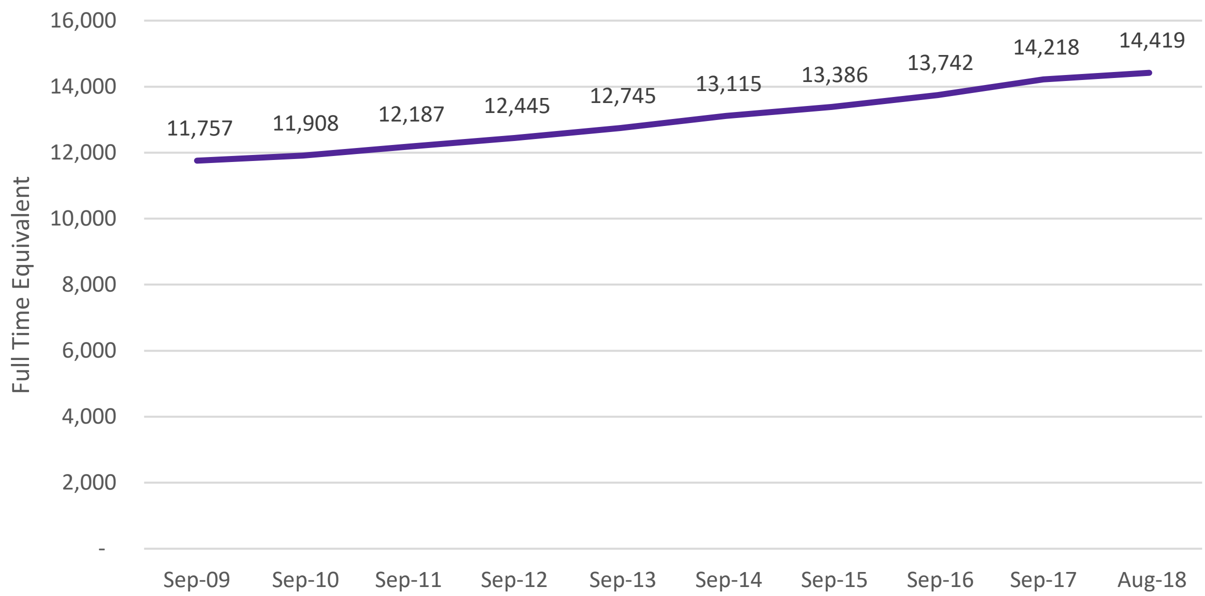
Both of these professions play a critical role in the detection and diagnosis of disease. Clinical images are also used to plan and monitor cancer treatments, and this workforce can experience high levels of attrition (28% leave for non-retirement reasons). There continues to be strong demand for this workforce and there are concerns from Cancer Alliances regarding shortages now and in the future[33].

Supply and demand

Diagnostic radiographers operate highly sophisticated equipment, using x-ray, ultrasound and magnetic resonance imaging technology to capture detailed clinical images of inside the body.

Sonographers specialise in the use of ultrasonic imaging devices to produce diagnostic images, scans, and videos, and usually provide sonography as a core service. Most sonographers first train as diagnostic radiographers, creating a drawdown from the already stretched diagnostic radiography workforce. Diagnostic radiographers must be registered with the Health and Care Professions Council (HCPC) to practise. To gain entry to the register, it is necessary to successfully complete an approved degree in diagnostic radiography, which could take three years for a BSc degree course and two years for a postgraduate MSc programme.

Figure 11: Number of Diagnostic Radiographers working in England



NHS Digital monthly workforce statistics

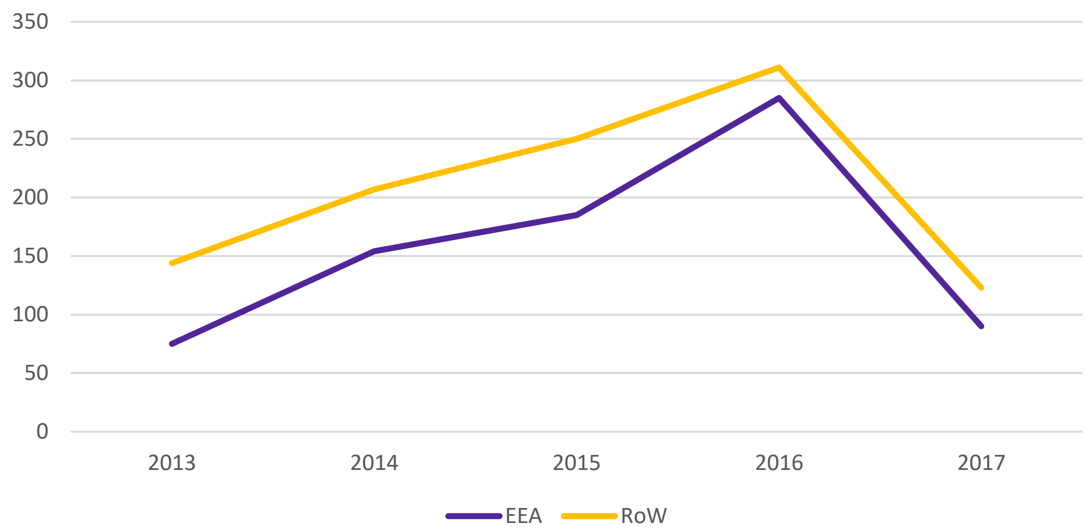
NHS Digital data shows that there has been a steady increase in diagnostic radiographers since 2009. There are over 2,600 (22%) more diagnostic radiographers since 2009. Since 2015, there has been an 8% increase in diagnostic radiographers. Diagnostic radiographer numbers have grown at an average of 3% per annum since

[33] NHS Cancer Workforce Plan, 2017

2015. However, HEE estimates up to 2021[34] there are pressures ahead with leaver and retirement rates.

As at November 2018, there are currently 34,286 radiographers who are registered on the HCPC, of which 4,670 are international registrants (EEA or RoW). These figures also include majority of statutorily registered sonographers. Although there is currently no requirement for a sonographer to be state registered in the UK, the majority are statutorily registered with the Health and Care Professions Council (HCPC) as a radiographer.

Figure 12: Diagnostic Radiographers International New Joiners



Source: Health and Care Professions Council Both EEA and Rest of the World new joiners to the HCPC register have followed a similar trend over the past five years. New international joiners reached a peak in 2016, followed by a sharp decline, reasons for this are unclear.

Vacancies

HEE have provided data on the current level of vacancies which shows that there are currently over 1,000 vacancies which is equivalent to a vacancy rate of 6.9%.

[34] ibid

Figure 13: Diagnostic Radiographer vacancies 2016-2017

	2016 vacancy rate	**2017 vacancy rate**	**2016 vacancy volume - FTE**	**2017 vacancy volume - FTE**
Diagnostic Radiographers	10.6%	6.9%	1,441	1,038

Source: Health Education England vacancy data base don NHS Provider returns

The latest NHSI performance report indicates slightly reduced other non-medical staff vacancies as at September 2018 compared to last year. This includes non-medical and non-nurse professions, such as AHPs, Health Care Scientists and other support staff. In particular, other non-medical vacancies reduced slightly from 8.0% (55k) in Q2 2017/18 to 7.5% (53k) in Q2 2018/19. NHSI report that approximately 10-15% of vacancies are not filled by bank or agency staff. It should be noted the HEE and NHSI vacancy collections are based on different sources, so inconsistencies exist.

Undergraduate Training

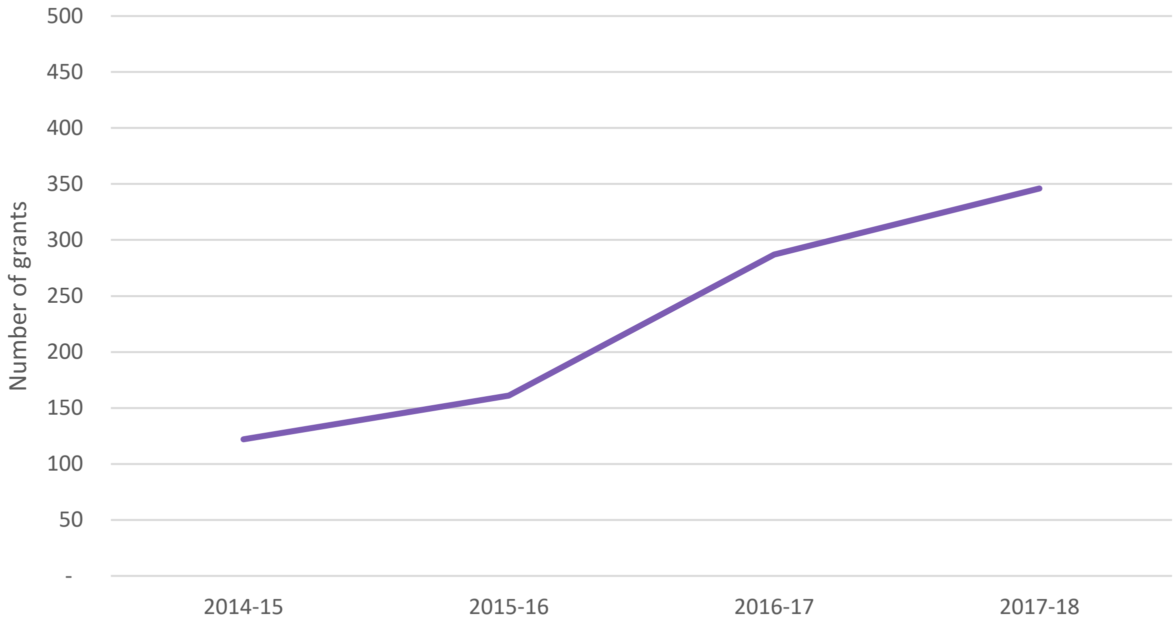
In 2016, the final year before the reforms 3,625 students applied to study diagnostic radiography. Following the reforms in 2017, this decreased by 19% with 2,925 students applying. This trend continued in 2018 with a further decrease of 8% and 2,680 student applications being submitted.

Despite the fall in demand for diagnostic radiography courses the number of students who accepted places in 2017 increased by 3% when compared to the previous year (2016). Although this increase is positive, the lack of demand for places at university is concerning and raises questions about how easy it will be to increase the number of diagnostic radiographers in future.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

Number of Tier 2 Certificate of Sponsorship granted for medical radiographers has been increasing steadily over the last four years, reaching nearly 350 grants in 2017/18. Note these figures include diagnostic radiographers and sonographers.

Figure 14: Number of tier 2 Certificate of Sponsorship grants for medical radiographers



Source: Home Office, not published

Paramedics

MAC Reference

Paramedics; MAC Reference: Paramedics (3213)

What do you think are the main reasons for job shortages?

Paramedics are currently listed on the SOL and it is recommended that they remain on the SOL.

The paramedic profession is facing a range of pressures which are contributing to shortages, these include:

1. Rapid growth in demand for ambulance services (calls, NHS 111 transfers, increasing numbers of elderly patients with multiple conditions, alcohol and mental health issues etc.) with challenges hitting response time target and performance levels;

Recruitment and retention issues;

As a result of the above, high vacancy rates.

Supply and demand

Paramedics are the senior ambulance service healthcare professionals at an accident or a medical emergency. Often working by themselves, paramedics are responsible for assessing the patient's condition and then giving essential treatment. They use high-tech equipment such as defibrillators, spinal and traction splints and intravenous drips, as well as administering oxygen and drugs.[35]

Paramedics are employed by Ambulance trusts in different parts of the UK. Demand for ambulance services continues to grow rapidly. Between 2009-10 and 2015-16, the number of ambulance calls and NHS 111 transfers increased from 7.9 million to 10.7 million, an average year-on-year increase of 5.2%. The NAO report[36] shared that:

> *"Contributing factors to this rising demand may include: increasing numbers of elderly patients with multiple conditions; an increasing number of alcohol- and mental health-driven issues; the availability of primary care services in the community and how patients seek help".*

Ambulance trusts report that they are struggling to recruit and retain staff, with the vacancy rate continuing to be around 10%. The reasons people cite for leaving are

[35] About Allied Health Professionals, NHS England (2018) https://www.england.nhs.uk/ahp/about/

[36] National Audit Office, NHS Ambulance Services (2017)

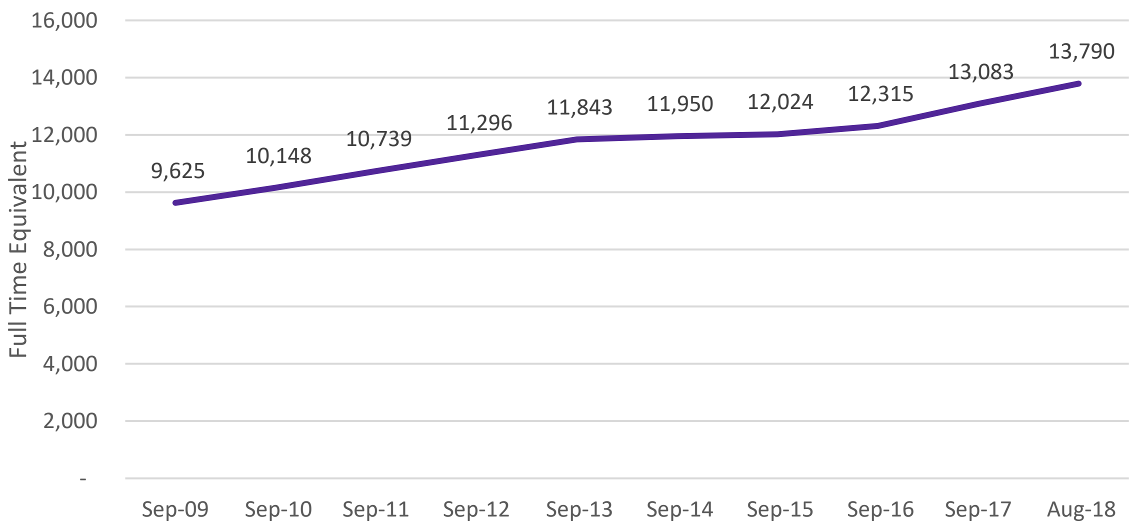
varied and include pay and reward, and the stressful nature of the job. The NAO highlighted that:

> *"Ambulance staff, compared with other NHS staff, are more likely to experience physical violence, and bullying, harassment or abuse from patients and other members of staff; work extra hours and feel pressure to work when unwell; and experience work-related stress."*

This is against the backdrop of trying to cope with the increased demand, the introduction of new models of care and performance challenges to hit response time targets (ibid).

NHS Digital workforce statistics show that since 2009, the number of ambulance paramedics have increased by over 4,100. There was a period of no growth from 2013 - 2016, but workforce numbers have increased over the past two years. Since 2015, there has been a 15% increase in ambulance paramedics.

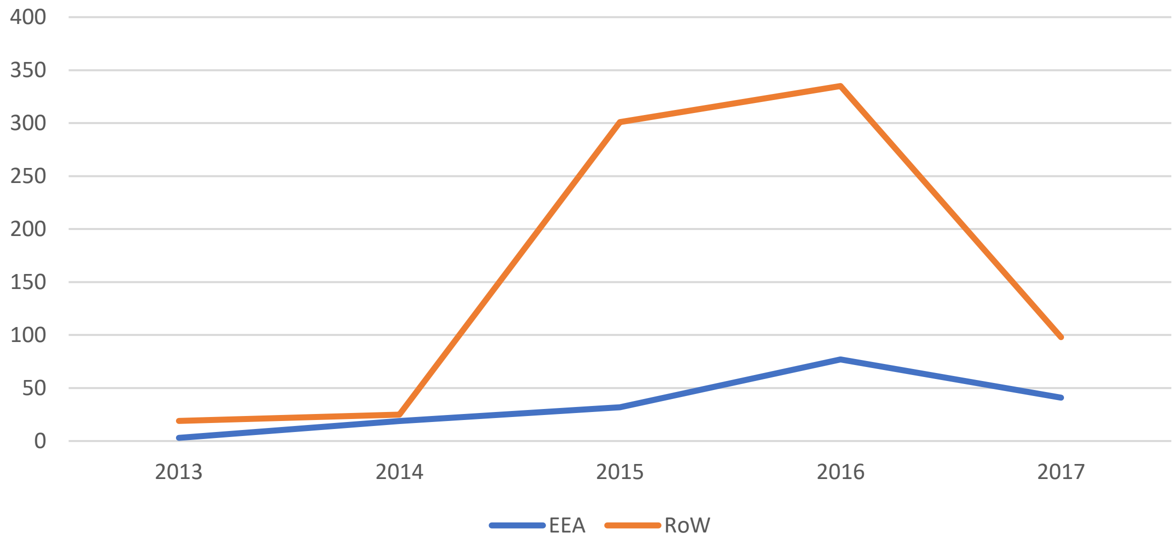
Figure 15: Total number of ambulance paramedics working in England 2009-18



Source: NHS Digital workforce statistics

As at November 2018, there are currently 27,210 paramedics on the Health & Care Professions Council (HCPC) register, of which 1,423 are international registrants (EEA and RoW).

Figure 16: Ambulance paramedic International Joiners 2013-17



Source: Health and Care Professions Council website

The numbers of Rest of the World (RoW) paramedics rose significantly between 2014 and 2015. Following this, numbers of international paramedics joining the register declined sharply between 2016 and 2017. Overall, there were 79 RoW new joiners to the register compared to 2013. EEA new joiners in comparison have increased but at a much slower pace and there are only 39 more new joiners compared to 2015.

Vacancies

Data from HEE shows the number of vacancies, and vacancy rate, for the previous two years as shown in Figure 17:

Figure 17: Ambulance Paramedic vacancies 2016-17

Year	Vacancies (FTE)	Vacancy Rate (%)
2016	2,721	13.1%
2017	1,571	9.9%

Source: Health Education England vacancy data base don NHS Provider returns

This data suggests that the number of vacancies has reduced by 3.2 percentage points, or 1,100 FTE, over the past year.

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

The DHSC and NHS have taken steps to ensure a strong growth of the ambulance workforce. Record numbers of new paramedics are now being trained, and there are almost 3,900 more paramedics working in the NHS than in 2010 – an increase of 39%.

With the support of HEE, DHSC, and Unions, the national band 6 pay agreement has been delivered which has re-banded NHS paramedics from band 5 to band 6 on the pay scale. This moves paramedics significantly up the pay scale (c£21-28K to c£26-35k) to help ensure improved recruitment and retention of staff in the future.

Additionally, there are a range of workforce related measures presently underway:

The Ambulance Improvement Programme (AIP) has established a work programme to tackle key ambulance workforce issues, including an initial assessment of existing work programmes designed to improve and support the health and wellbeing of the sector's workforce. All ambulance trusts have internal debriefing support services and through occupational health, staff have access to professional counselling services.

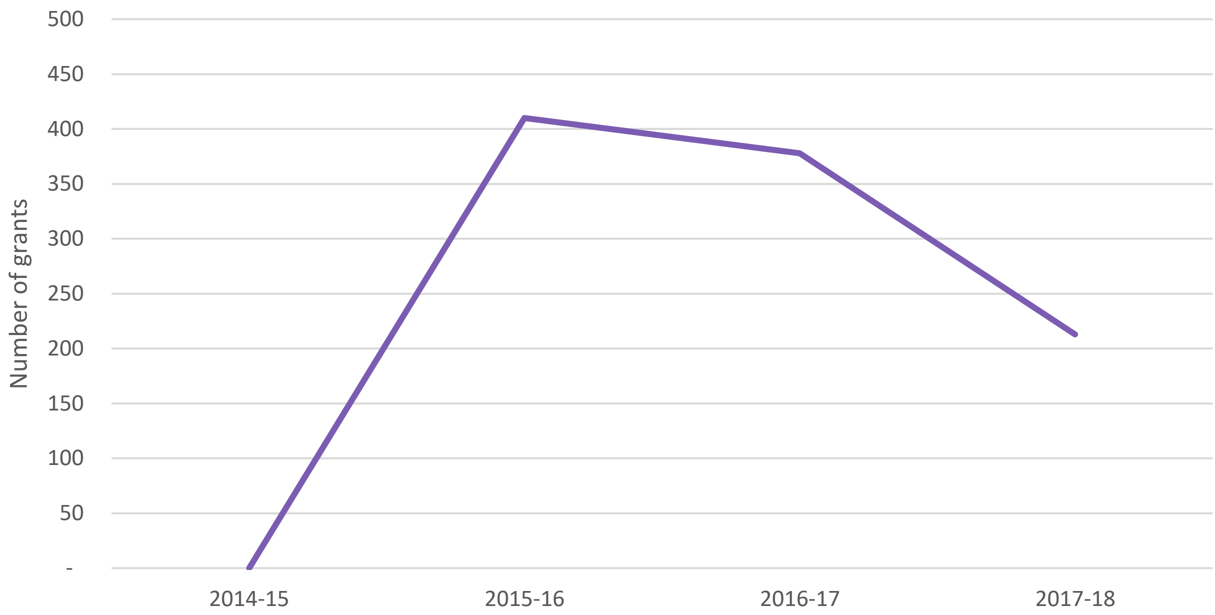
The first ever national job description for a professional group has been developed. This job description is designed to build enhanced skills in the profession so that paramedics can appropriately and safely leave patients at the scene without needing to convey them to hospital. This is intended to further reduce hospital conveyances and is supported by work with NHS Digital to improve access to technology for frontline ambulance staff.

HEE has led a major piece of work stemming from the Paramedic Evidence based Education Project (PEEP) which recommends bringing paramedic training into line with other Allied Health Professions that are degree level entry. This work is part of a wider drive across the new health and care system to maximise the skills and competencies of clinicians and their effective contribution to multidisciplinary working, delivering flexible services that meet the needs of patients.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

410 tier 2 Certificate of Sponsorships were granted for paramedics in 2015/16, however, this has decreased in the last couple of years to 213 in 2017/18.

Figure 18: Number of tier 2 Certificate of Sponsorship grants for Ambulance Paramedics



Source: Home Office, not published

Prosthetists and Orthotists

MAC Reference

Orthotists and Prosthetists and; MAC Reference: Therapy professionals not elsewhere classified (2229)

What do you think are the main reasons for job shortages?

The Prosthetists and Orthotists profession is currently on the SOL and it is recommended that they remain on the SOL.

The primary reasons for retaining this workforce on the SOL are:

1. Increasing demand and an ageing workforce;

A fragile and limited supply / training pipeline;

Interventions are underway but need further time to take effect to grow and stabilise supply.

Supply and demand

Prosthetists are autonomous registered practitioners who provide gait analysis and engineering solutions to patients with limb loss. Orthotists are autonomous registered practitioners who provide gait analysis and engineering solutions to patients with problems of the neuro, muscular and skeletal systems.[37]

This is a small and vulnerable profession with approximately 184 FTE employed within the NHS. There are only 1,000 individuals registered with the HCPC, and has most individuals being employed in the private sector but providing services to the NHS. Because most of the roles are in the private sector there is limited information on the size, shape and number of vacancies in the sector.

Using the information provided by the NHS Providers and Commercial Providers, the estimated total combined numbers for the Orthotic workforce working in clinical practice across England is shown in Figure 19.

Figure 19: Overall estimates of the commercial and NHS Orthotics and Prosthetics workforce

Role Title	**Numbers Employed (FTEs)**
Orthotist	125.86
Dual Role Prosthetist and Orthotist	2.87
Orthotic Technician	50.24
Orthotic Assistant/Support worker	4.4
Trainee Orthotic Technician/Apprentice	1

Source: HEE, The Future of the Orthotic and Prosthetic Workforce in England (2017)

NHS England[38] have described that demand for Orthotists is likely to rise in line with increases in the ageing population and rising prevalence of obesity, diabetes, cardiovascular and peripheral vascular diseases. There are also a reported significant demand pressures for military rehab and diabetic/vascular increased amputation rates.

[37] About Allied Health Professionals, NHS England (2018) https://www.england.nhs.uk/ahp/about/
[38] NHS England (2015) Improving the Quality of Orthotic Services in England. https://www.england.nhs.uk/commissioning/wp-content/uploads/sites/12/2015/11/orthcs-final-rep.pdf

The British Health Care Trades Association (BHTA) view that there will need to be a 30% to 50% increase in the number of orthotists to meet current and future demand.

Vacancies

Vacancy data is not easily available for this small profession. NHS Digital does provide data on the number of job advertisements placed on the NHS Jobs website, which can be used as a proxy for vacancies. The number of adverts placed has ranged from 37 to 17, which represent a significant proportion of the 184 FTE employed within the NHS. This data is presented in figure 20.

Figure 20: Prosthetist and Orthotist job adverts placed on NHS Jobs

2016			**2017**				**2018**
Apr - Jun	Jul - Sept	Oct - Dec	Jan - Mar	Apr - Jun	Jul - Sept	Oct - Dec	Jan - Mar
19	37	13	16	18	17	25	18

Source: NHS Digital data from NHS Jobs website

EEA reliance

As at November 2018, there are 1,098 P&O registrants to the HCPC register, of which 72 are international registrants (EEA and RoW).

There are only a few new P&O registrants to the HCPC register from outside the UK each year. Whilst these figures are small, proportionally they are significant when considering the small size of this workforce. To remove the option of recruiting from abroad via the SOL would negatively affect the already limited supply options for this workforce.

Undergraduate Training

There are only two universities in the UK (University of Salford and University of Strathclyde) that offer courses in the profession. Approximately 30 to 40 Orthotists and Prosthetists are trained each year in England therefore workforce supply is fragile especially when considering demand.

In 2016, the final year before the reforms 140 students applied to study prosthetics and orthotics. Following the reforms in 2017, this decreased by 32% with 95 students applying. This trend continued in 2018 with a further decrease of 5% and 90 student applications being submitted.

Despite the decrease in applications the number of students who accepted places to study prosthetics and orthotics remained steady at 30 in 2017. Data on the number of acceptances to prosthetics and orthotics courses in 2018 are not available yet.

Given the small number of people studying this subject and the potential for increased demand for prosthetics and orthotics in future, the fact that the number of students hasn't increased following bursary reform is concerning.

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

HEE has been working in collaboration with the British Association of Prosthetists and Orthotists (BAPO) patient representatives and a broad range of other stakeholders, on a significant piece of work to examine the workforce challenges faced within the orthotic and prosthetic profession and investigate possible solutions to overcome them. Additionally, direct experimental programmes into schools have been run and evaluations of this route attracting people into the NHS workforce have been undertaken.

This work is ongoing and whilst there has been progress across several areas[39] there remains a fragile supply of this essential workforce and efforts to stabilise supply remain a high priority.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

There were 131 health professionals 'not elsewhere classified' in 2016/17, of these, five Prosthetist/ Orthotists were granted a tier 2 Certificate of Sponsorship. However, note, this is not based on a complete dataset, as for 1,900 (41%) professions job titles were missing. Note this information is not published.

Occupational Therapists

MAC Reference

Occupational therapists; MAC Reference: Occupational therapists (2222)

What do you think are the main reasons for job shortages?

Occupational therapists (OTs) are not currently on the SOL and it is recommended that they are added.

The occupational therapy profession is facing a range of pressures which include:

[39] The Future of the Prosthetic and Orthotic Workforce in England: One year on. https://www.hee.nhs.uk/sites/default/files/documents/The%20future%20of%20the%20prosthetic%20and%20orthotic%20workforce%20in%20England%20-%20one%20year%20on.pdf

Increasing demand and widening roles across multiple areas e.g. social care and mental health in particular;

Decreasing numbers of applicants and acceptances to courses;

Retention issues.

Supply and demand

Occupational therapists work in the NHS, local authority social care services, housing, schools, prisons, voluntary and independent sectors, and vocational and employment rehabilitation services as well as in education and research. Occupational therapists work with people of all ages with a wide range of problems resulting from physical, mental, social or developmental difficulties.[40]

The Royal College of Occupational Therapists and employers indicates that there are shortages throughout England. They describe how this profession is starting to be recognised as having the skill set which enables people to stay safe and well at home and as such many new models of care are utilising their skill set e.g. falls, paramedic support etc. There is also growing use of this profession in ward based roles (in rehabilitation/reablement type wards) which were former nursing posts as a response and solution to nurse shortages experienced across many regions.

Occupational therapists have a fundamental role to play in the delivery of the NHS Five Year Forward View for Mental Health and the Long-Term Plan which is driving demand, particularly in the following areas:

Occupational therapists are particularly concerned with the individual and the environment. They consider this within the framework of the wider determinants of health such as housing, employment, education, and family and friends.

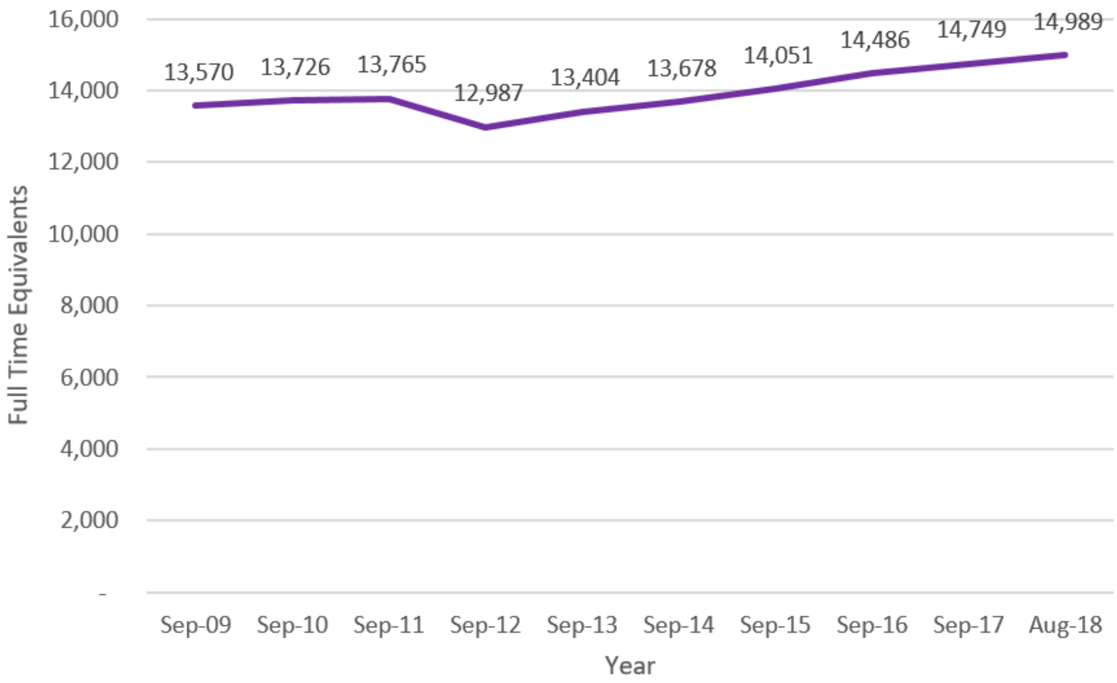
Occupational therapists are crucial in delivering the roll out of Individual Placement with Support (IPS), to increase the numbers of people with a range of mental health conditions supported to obtain and retain suitable work. They also work to break down stigma Around mental health conditions in the workplace.

Occupational therapists are skilled in assessing and modifying the home environment (including assistive technologies) to ensure that people can live in the community or in a suitable residential environment as independently as possible. They also provide support and consultation to third sector providers in managing people with complex needs in residential settings.

[40] About Allied Health Professionals, NHS England (2018) https://www.england.nhs.uk/ahp/about/

Occupational Therapists are trained in both physical and mental health, so are confident in raising physical health issues with people. They are therefore well placed to contribute to the improving physical health agenda as required by the Five Year Forward View for Mental Health and aims set out in the Long-Term Plan.

Figure 21: Overall number of Occupational Therapists 2009-18

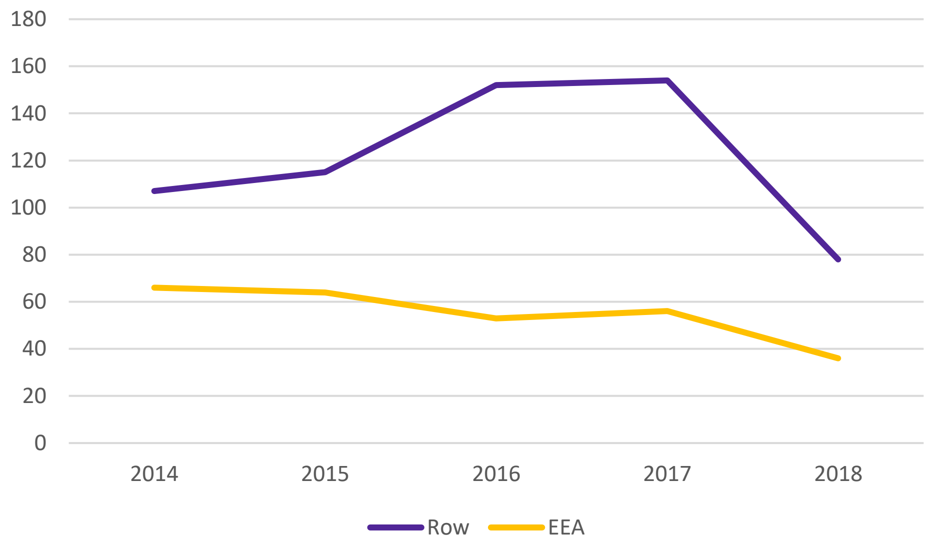


Source: NHS Digital monthly workforce statistics

There were more Occupational Therapists in August 2018 than there were in September 2009 but growth has been limited.

As at November 2018, there were 39,669 registrants to the HCPC register, of which 2,844 were international registrants. The lower salary distribution of this workforce means that international mobility as well as meeting salary thresholds can be challenging.

Figure 22: Occupational Therapist International joiners (England registrants)[41]



Source: Health and Care Professions Council register

Initial joiners from the EEA (excluding the UK) and RoW are relatively small in numbers each year, with EEA workers smaller in numbers than those from the RoW. It is apparent that there has been a large drop in RoW joiners between 2017-18, from 154 to 78.

Vacancies

Data from HEE shows the current number, and rate, of vacancies based on analysis from the Electronic Staff Record which is the HR and Payroll system used across the NHS. It shows that there are just over 1,000 vacancies which equates to a rate of approximately 6%.

Figure 23: Occupational Therapist vacancies 2016-17

Year	**Vacancies (FTE)**	**Vacancy Rate (%)**
2016	1471	8.8%
2017	1024	5.9%

Source: Health Education England vacancy data base on NHS Provider returns

[41] Source: Health and Care Professions Council Unpublished, new registrants with England home address

It is important to highlight that some regions such as London struggle significantly to fill vacancies and rates can be as high as 20 to 40%[42].

The latest NHSI performance report indicates slightly reduced other non-medical staff vacancies as at September 2018 compared to last year. This includes non-medical and non-nurse professions, such as AHPs, Health Care Scientists and other support staff. In particular, other non-medical vacancies reduced slightly from 8.0% (55k) in Q2 2017/18 to 7.5% (53k) in Q2 2018/19. NHSI report that approximately 10-15% of vacancies are not filled by bank or agency staff Data from the NHSI monthly collection shows the number of vacancies for qualified Occupational Therapists. It shows that in the most recent collection there were just over 1,100 vacancies which is in line with the data from HEE. NHSI report that approximately 10-15% of vacancies are not filled by bank or agency staff.

Figure 24: Recent data on Occupational Therapist vacancies

Staff group	**June 2018**	**September 2018**
Qualified Occupational Therapist Vacancy FTE	1,165	1,126

Source: NHS Improvement monthly collection

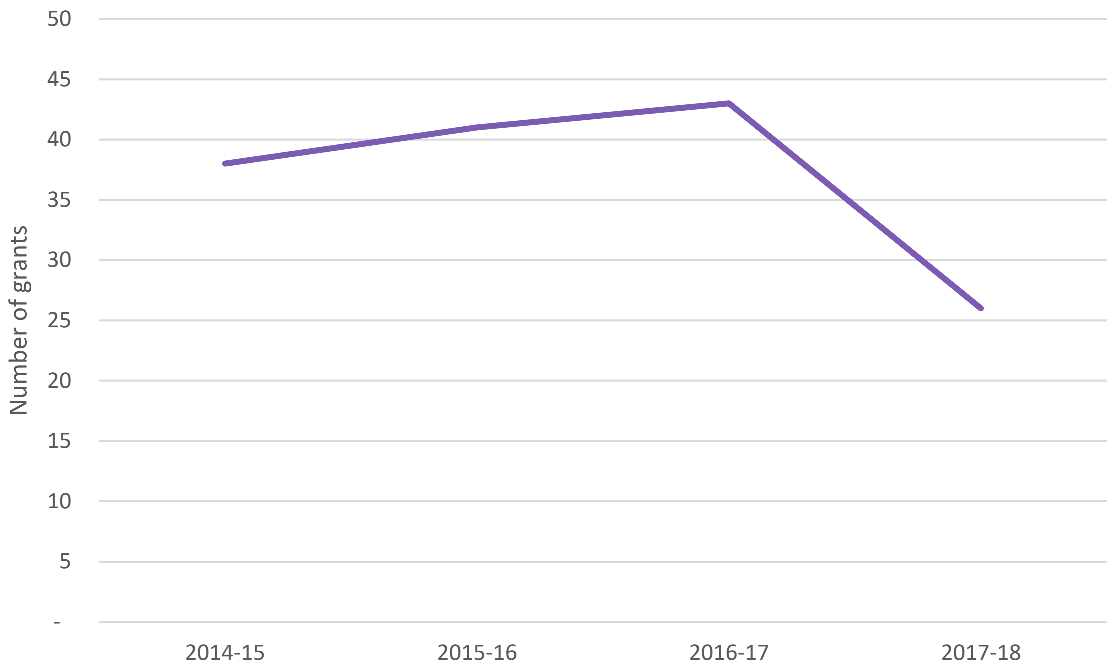
Please note the NHSI and HEE collections are based on different sources, so inconsistencies exist.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

Tier 2 Certificate of Sponsorship granted for occupational therapists has dropped in the last year from 43 to 26.

[42] An Investigation into the Occupational Therapy Workforce in London (2016) https://www.rcot.co.uk/file/22/download?token=jf-B8rtW

Figure 25: Number of tier 2 Certificate of Sponsorship grants for occupational therapists



Source: Home Office, not published

Operating Department Practitioners

Operating Department Practitioners; MAC Reference: Health professionals n.e.c. (2219)

What do you think are the main reasons for job shortages?

Operating Department Practitioners (ODP) are not currently on the SOL and it is recommended that this profession is added.

The ODP profession is facing a range of pressures which are contributing to shortages, including:

1. Increasing demand;

Increasing scope of practice;

A reduction in applicants to education and training courses.

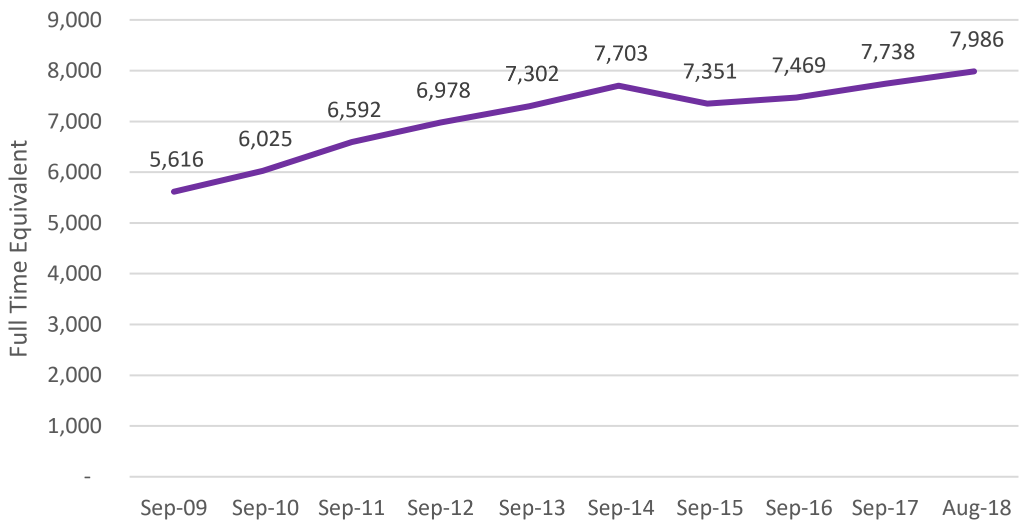
Supply and demand

Operating department practitioners (ODPs) carry out many different roles within operating theatres as well as other critical care departments in hospitals. They typically support a surgical team during the anaesthetic, surgical and recovery phase of a patient's care. This means any hospital discipline that requires patients to have surgery or involves delivering critical care is reliant to some extent on the supply of ODPs.

One example of how other hospital disciplines and government policy priorities rely on ODPs is given by the 2016 Better Births review. This was a review of maternity services that outlined plans to halve the rate of stillbirths, neonatal mortality, maternal death and serious brain injuries in babies. The plans led to the maternity transformation program which involved training 200 extra people to work in interdisciplinary teams from a range of professions, including operating department practitioners.

Additionally, this workforce is often a key route for professionals who choose to extend their practice by training as Advanced Clinical Practitioner's to support urgent and emergency care.

Figure 26: Overall number of Operating Department Practitioners 2009-18

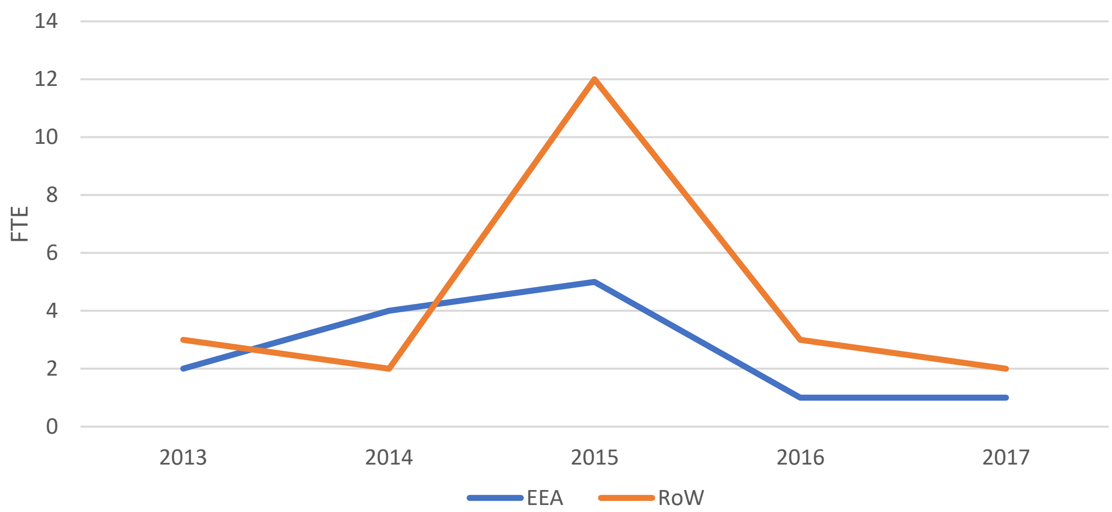


Source: NHS Digital monthly workforce statistics

Operating Department Practitioners have increased steadily from 2009 to 2012, followed by a small dip between 2014 and 2015 and then a period of consistent growth. In the past year, operating department practitioners have increased to a peak of 7,986 FTE. Since 2009, the overall numbers of operating department practitioners have increased by 42%. Since 2015, there has been a 9% increase in operating department practitioners. Operating Department Practitioners numbers have grown at around 3% per annum since 2015.

As at November 2018, there are currently 13,731 ODP registrants on the HCPC register, of which 60 are international registrants (EEA or RoW).

Figure 27: Operating Department Practitioners international new joiners 2013-17



Source: Health and Care Professions Council

Data from the HCPC shows a small number of new international registrants to operating department practitioners each year compared to the size of the rest of the workforce. This suggests that restrictions will have little impact to the ODP workforce.

Vacancies

Data from HEE shows the volume of vacancies, and vacancy rate, for the last two years is as follows. The vacancy rate for 2017 was 1.2% and has reduced from 3.7% in 2016.

Figure 28: Operating Department Practitioner Vacancies 2016-17

Year	Vacancies (FTE)	Vacancy Rate (%)
2016	303	3.7%
2017	97	1.2%

Source: Health Education England vacancy data base don NHS Provider returns

Undergraduate Training

In 2016, the final year before the reforms 2,500 students applied to study operating department practice. Following the reforms in 2017, this decreased by 26% with 1,850 students applying. This trend continued in 2018 with a further decrease of 20% and 1,480 student applications being submitted.

The decrease in applications was reflected in the number of students who accepted places to study operating department practice at university in 2017 with 875 students accepting places, a decrease of 5% when compared to 2016. Data on the number of acceptances to operating department practice courses in 2018 are not available yet.

Operating department practitioners are essential for the delivery of treatment across many medical specialties and any potential decrease in the future workforce is concerning. The decrease in the number of students accepting training places means the supply of operating department practitioners could be at risk in future and this may require more practitioners to be recruited from overseas.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

There were 131 health professionals 'not elsewhere classified' in 2016/17, of these, 1 Operating Department Practitioner was granted a tier 2 Certificate of Sponsorship. However, note, this is not based on a complete dataset, as for 1,900 (41%) professions job titles were missing. Note this information is not published.

Podiatrists

MAC Reference

Podiatrists; MAC Reference: Podiatrists (2218)

What do you think are the main reasons for job shortages?

Podiatrists & Chiropodists are not currently on the SOL and it is recommended that they are added.

This profession is facing a range of pressures which are contributing to shortages, including:

1. A small and fragile supply of workforce;

High vacancy rates;

Dropping applicants and acceptances to podiatry courses;

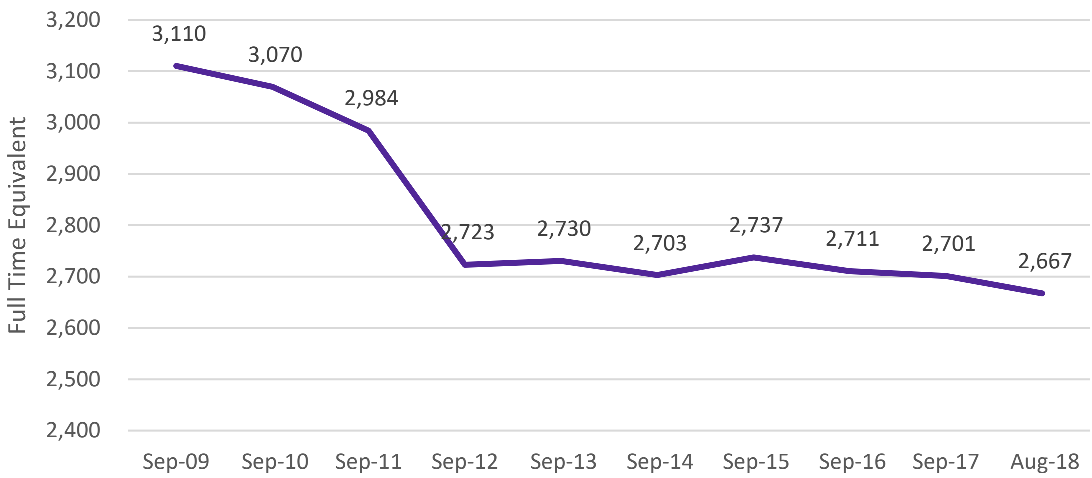
Retention issues.

Supply and demand

As a vulnerable profession, the numbers of podiatrists continue to be declining over the last few years due to retirement of the existing workforce, highlighting the challenge for this workforce it being an aged profession.

In addition to this pressure, the supply of undergraduates continues to be limited and fragile demonstrated a decrease in applications. The number of students who accepted places to study podiatry at university in 2017 with 230 students accepting places, a decrease of 25% when compared to 2016.

Figure 29: Overall Podiatrist numbers 2009-18

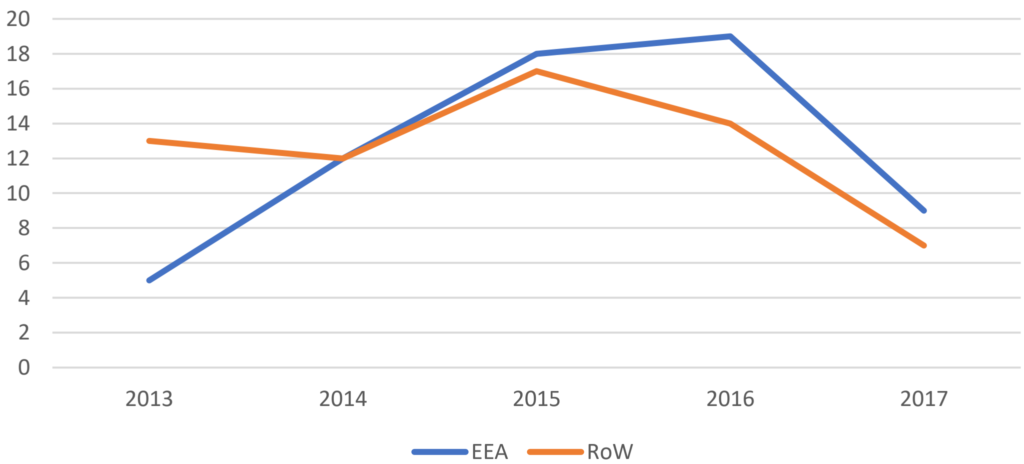


Source: NHS Digital monthly workforce statistics

There have been annual decreases in podiatrists between 2009 and 2018. From 2009 to 2012, there was a sharp decline of 12% in the numbers of podiatrists. From 2012 to 2018, the number of podiatrists have been relatively flat. Podiatrists numbers have declined at an average of around 1% per annum since 2015. Between 2015 and 2018, there has been a 3% decline in podiatrist numbers.

As at November 2018, there are currently 12,842 Chiropodists/Podiatrists who are registered on the HCPC, of which 191 are international registrants (EEA or RoW).

Figure 30: Podiatrist international new joiners 2013-17



Source: Health and Care Professions Council

Initial joiners (EEA and RoW) registrants to the HCPC register have followed a similar trend over the past five years. EEA registrants reached a peak in 2016, followed by a sharp decline. Similarly, RoW registrants reached a peak in 2015, followed by a sharp decline.

Vacancies

Data from HEE has been collected from NHS Providers and shows the number of vacancies, and vacancy rate, for both 2016 & 2017 which is shown at figure 31.

Figure 31: Podiatrist vacancies 2016-17

Year	**Vacancies (FTE)**	**Vacancy Rate (%)**
2016	157	5.1%
2017	123	3.9%

Source: Health Education England vacancy data base don NHS Provider returns

The latest NHSI performance report indicates slightly reduced other non-medical staff vacancies as at September 2018 compared to last year. This includes non-medical and non-nurse professions, such as AHPs, Health Care Scientists and other support staff. In particular, other non-medical vacancies reduced slightly from 8.0% (55k) in Q2 2017/18 to 7.5% (53k) in Q2 2018/19. NHSI report that approximately 10-15% of vacancies are not filled by bank or agency staff.

Please note the HEE and NHSI collections are based on different sources, so inconsistencies exist.

Undergraduate Training

In 2016, the final year before the reforms 470 students applied to study podiatry. Following the reforms in 2017, this decreased by 24% with 355 students applying. This trend continued in 2018 with a further decrease of 21% and 280 student applications being submitted.

The decrease in applications was reflected in the number of students who accepted places to study podiatry at university in 2017 with 230 students accepting places, a decrease of 25% when compared to 2016. Data on the number of acceptances to podiatry courses in 2018 are not available yet.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

There were barely any tier 2 Certificate of Sponsorship granted for podiatrists, three in 2016/17 and one in 2017/18. However it should be noted that this is not based on a complete dataset, as for 1,900 (41%) professions job titles were missing.

Speech and Language Therapists

MAC Reference

Speech and Language Therapists; MAC Reference: Speech and language therapists (2223)

What do you think are the main reasons for job shortages?

The Speech and Language Therapist profession is not currently on the SOL and it is recommended that it is added.

This profession is facing a range of pressures which include:

1. Increasing demand - mental health in particular;

2. Limited education and training course output.

Supply and demand

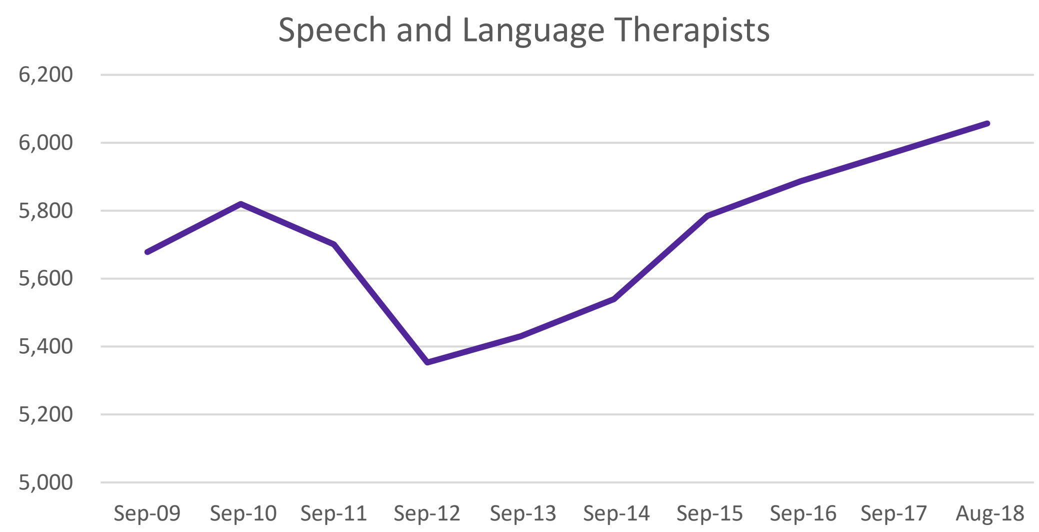
Intelligence indicates that there is a shortage, specifically to respond to growing demand in relation to paediatric and adult mental health, learning disabilities and autism.

Speech and language therapists(SLTs) work in interdisciplinary teams with other health professionals and consequently any shortage has a knock-on effect on many areas of patient care. They work with children and adults that have difficulty communicating as well as some who have difficulty eating, drinking and swallowing. Patients range from children whose speech is slow to develop, to older people whose ability to speak has been impaired by illness or injury.

The proportion of elderly people is increasing and this group is at a greater risk of degenerative neurological conditions such as strokes, Parkinson's disease and dementia. SLTs work with other health professions to provide support and treatment to these patients and any shortfall in this profession is likely to cause pressures elsewhere in the system.

SLTs also play a key role in supporting people with mental health conditions. As outlined in the five year forward view they will be required to work alongside the psychological therapy professions to deliver government objectives around mental health.

Figure 32: Overall number of Speech and Language Therapists 2009-18

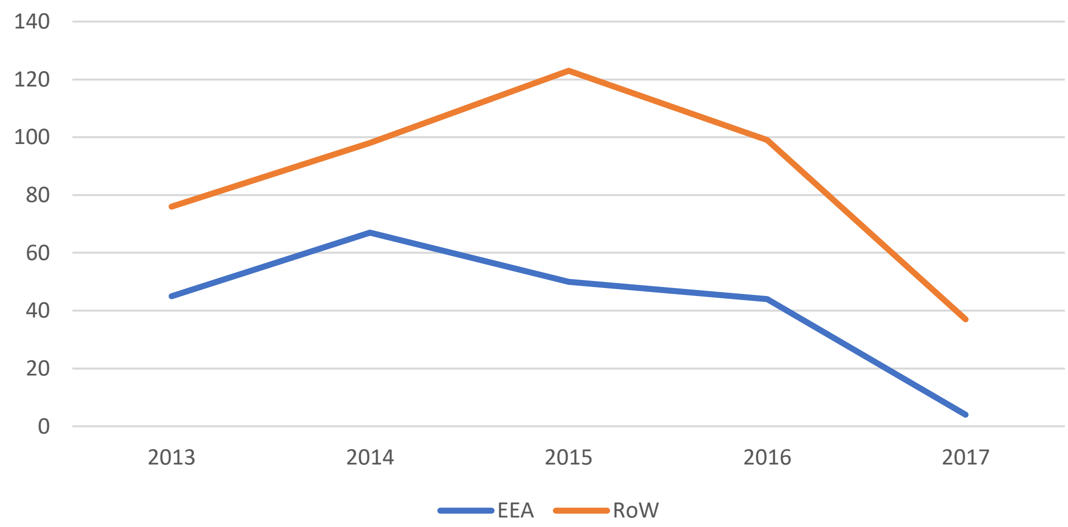


Source: NHS Digital monthly workforce statistics

Since 2009, Speech and Language Therapists have increased by almost 400 (7%). There was a period of decline from 2010 to 2012, but workforce numbers have increased consistently over the past six years. Since 2015, there has been a 5% increase in Speech and Language therapists. Speech and Language therapist numbers have grown at an average of 2% per annum since 2015.

As at November 2018, there are currently 16,505 Speech and Language Therapists on the Health & Care Professions Council (HCPC) register.

Figure 33: Speech and Language Therapist international new joiners 2013-17



Source: Health and Care Professions Council

EEA and Rest of the World registrants onto the HCPC register have shown a similar trend since 2013.

Vacancies

Data from HEE has been collected from NHS Providers and shows the number of vacancies, and vacancy rate, for both 2016 & 2017 which is shown figure 34

Figure 34: Speech and Language Therapist vacancies 2016-17

Year	Vacancies (FTE)	Vacancy Rate (%)
2016	208	3.6%
2017	82	1.2%

Source: Health Education England vacancy data based on NHS Provider returns

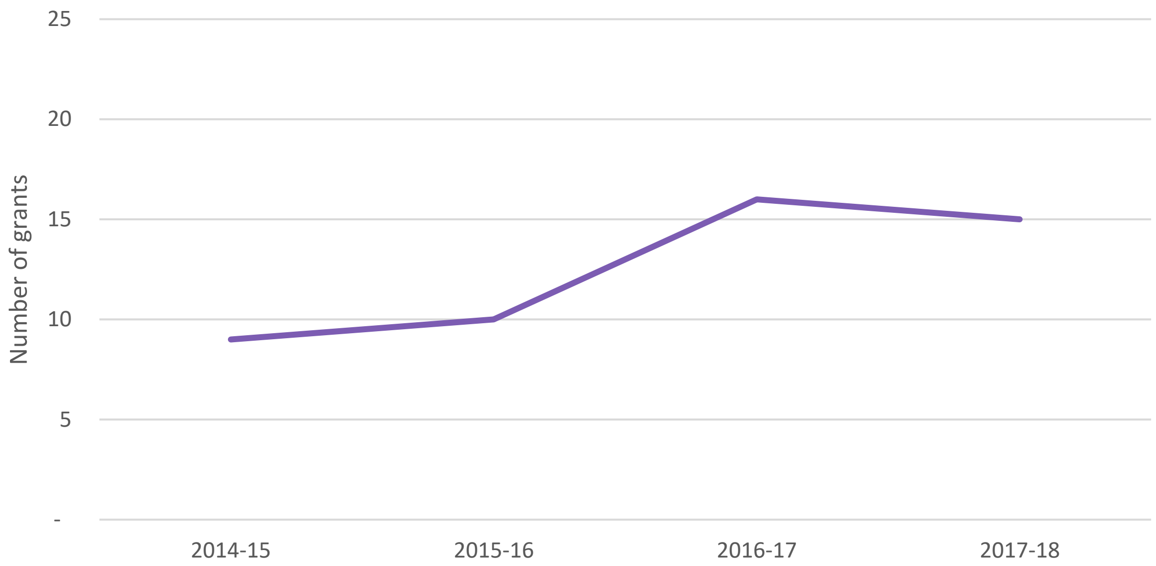
Undergraduate Training

Since the funding reforms in 2017 the number of students who accepted places to study speech and language therapy at university was 445 students, an increase of 13% when compared to 2016. Data on the number of acceptances to courses in 2018 are not available yet.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

Tier 2 Certificate of Sponsorship granted for speech and language therapists has increased slightly in the last year couple of years from 9 in 2014/15 to 15 in 2017/18.

Figure 35: Number of tier 2 Certificate of Sponsorship grants for occupation therapists



Source: Home Office, not published

Therapeutic radiographers

MAC Reference

Therapeutic radiographers; MAC Reference: Medical radiographers (2217)

What do you think are the main reasons for job shortages?

Therapeutic radiographers are not currently included on the SOL and it is recommended that this profession is added.

This profession is facing a range of pressures which are contributing to shortages, including:

1. High demand - Cancer services[43] in particular;

A comparatively small workforce;

A reduction in applicants and acceptances to therapeutic radiographer courses;

High attrition rates from education and training courses.

Supply and demand

Therapeutic radiographers operate highly sophisticated equipment, planning and delivering radiotherapy – high-energy ionising radiation, to treat cancer.

[43] NHS Cancer workforce plan (2017)

Therapeutic radiographers were on the SOL before the 2015 review and subsequently removed due to increases in the workforce and predictions that training output would exceed attrition. However, whilst this workforce has grown somewhat, demand for this workforce (to meet cancer targets) is greater than supply. Additionally, there are concerns that training output is decreasing.

Therapeutic radiographers are classed as a vulnerable profession due to:

limited availability of education programmes as well as challenges each year to fill training places[44] and concerns over decreases in training places since 2016,

higher on average attrition from education[45] when compared to other courses,

existing vacancies and increasing levels of shortage due to developments in new technologies such as proton beam therapy (NHSI).

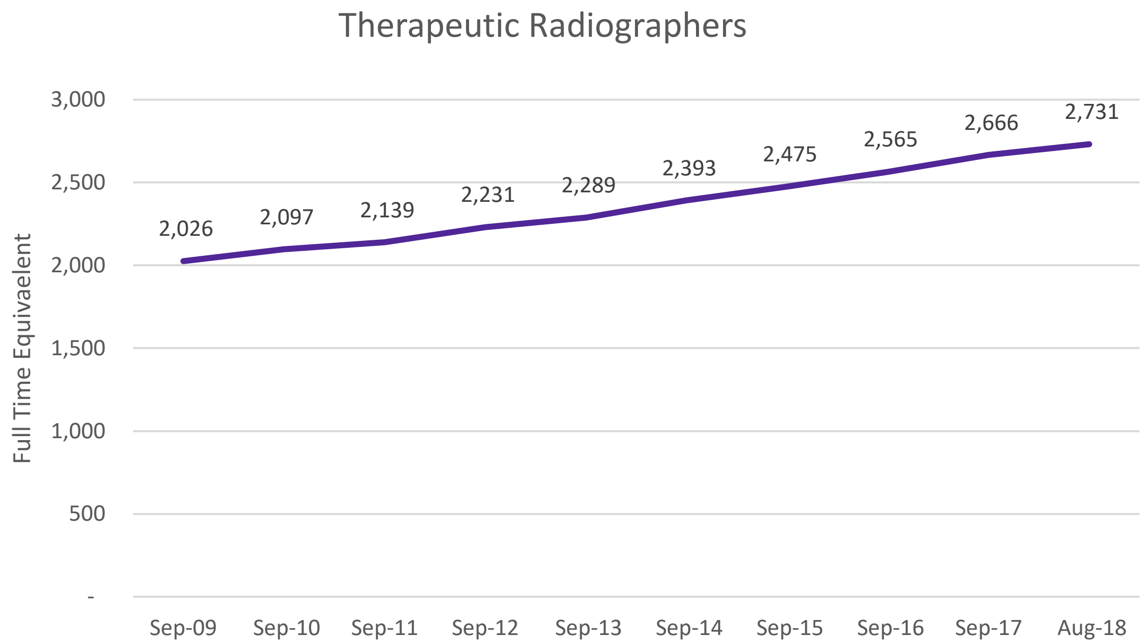
The NHS Cancer Workforce Plan (2017) aims to grow this workforce by 18% by 2021 due to the dependency on this workforce to deliver overall cancer service targets. A specific requirement included in the Workforce Implementation Plan for cancer will require an additional 1,500 new clinical and diagnostic staff across seven priority specialisms between 2018 and 2021. Since 2017, there has been a net increase of 833 FTE staff across the seven priority specialisms.

In addition, radiographers are extending their scope of practice to respond and fill gaps caused by a shortage of radiologists. Whilst this is providing a solution to the radiologist shortage it creates shortage risks and issues for the Therapeutic radiographer workforce.

[44] NHS England (2018). Facing the Facts, Shaping the Future, a draft health and care workforce strategy for England to 2027.

[45] HEE RePAIR (2018)

Figure 36: Total number of Therapeutic Radiographers 2009-18

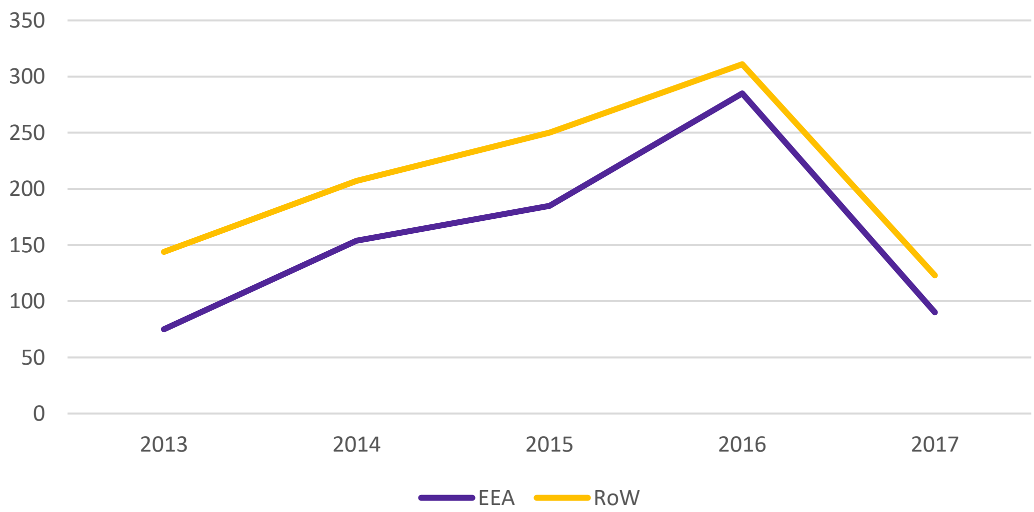


Source: NHS Digital monthly workforce statistics

There has been a steady increase in therapeutic radiographers since 2009. There are over 700 (35%) more therapeutic radiographers since 2009. Since 2015, there has been a 10% increase in therapeutic radiographers. Therapeutic radiographer numbers have grown at an average of 3% per annum since 2015.

As at November 2018, there are currently 34,286 radiographers who are registered on the HCPC, of which 4,670 are international registrants (EEA or RoW).

Figure 37: Therapeutic Radiographer international new joiners 2013-17



Source: Health and Care Professions Council register

Both EEA and Rest of the World registrants to the HCPC register have followed a similar trend over the past five years. International registrants reached a peak in 2016, followed by a sharp decline.

Vacancies

HEE have provided data on the current level of vacancies which shows that there are around 48 vacancies which is equivalent to a vacancy rate of 1.8%. The number of vacancies and rate has declined over the past 12 months.

Figure 38: Therapeutic Radiographer vacancies 2016-17

	2016 vacancy rate	**2017 vacancy rate**	**2016 vacancy volume - FTE**	**2017 vacancy volume - FTE**
Therapeutic Radiographers	4.5%	1.7%	184	48

Source: Health Education England vacancy data based on NHS Provider returns

Undergraduate Training

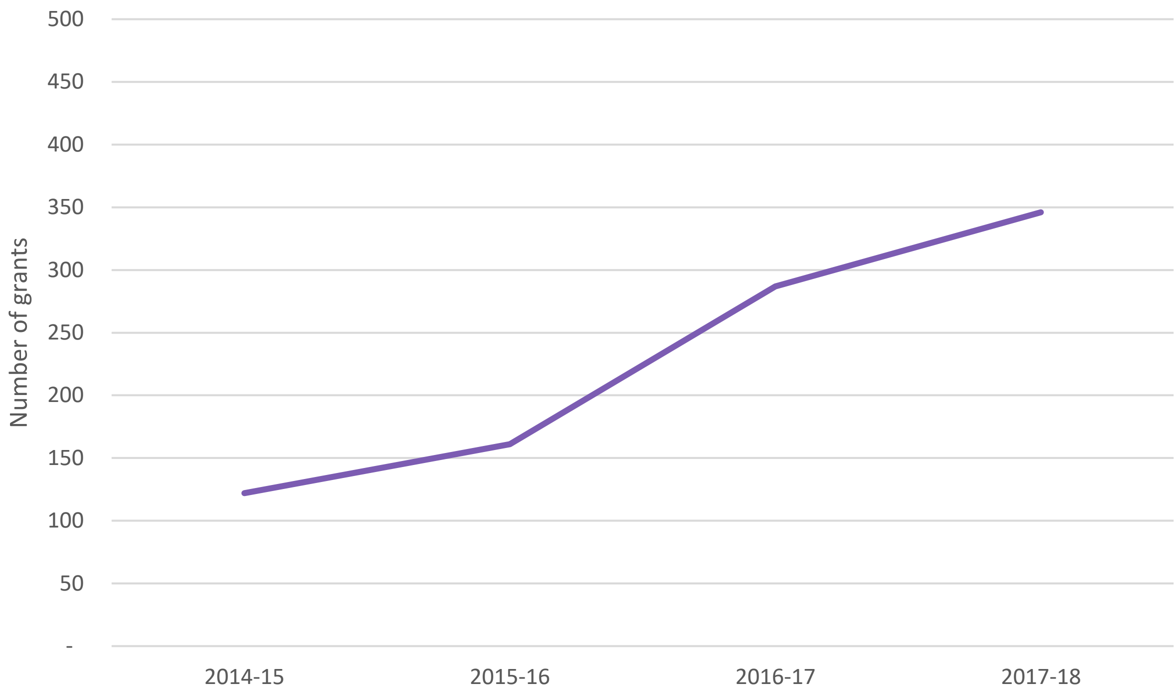
In 2016, the final year before the reforms 850 students applied to study therapeutic radiography. Following the reforms in 2017, this decreased by 31% with 585 students applying. This trend continued in 2018 with a further decrease of 19% and 475 student applications being submitted.

The decrease in applications was reflected in the number of students who accepted places to study therapeutic radiography at university in 2017 with 290 students accepting places, a decrease of 8% when compared to 2016. Data on the number of acceptances to therapeutic radiography courses in 2018 are not available yet.

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

Tier 2 Certificate of Sponsorship granted for medical radiographers has been increasing steadily over the last four years, reaching nearly 350 grants in 2017/18. Note these figures include diagnostic and therapeutic radiographers including sonographers.

Figure 39: Number of tier 2 Certificate of Sponsorship grants for medical radiographers



Source: Home Office, not published

EEA Reliance

If you have any other information that might be useful for our call for evidence please use the space below to explain.

Internal analysis from HEE show that AHPs on average have 3% of EEA staff, as indicated in the figure below.

Figure 40: AHP reliance on EEA staff, Health Education England

	EEA reliance, 2018 %
AHP - Podiatry	2%
AHP - Occupational Therapy	2%
AHP - Orthoptics / Optics	2%
AHP - Physiotherapy	3%
AHP - Radiography Diagnostic	5%
AHP - Radiography Therapeutic	2%
AHP - Art / Music / Drama Therapy	5%
AHP - Speech & Language Therapy	1%
AHP - Psychology (Clinical Psychology)	5%
AHP - Psychological Therapies (Psychotherapy)	6%
AHP - Operating Department Practioners	3%
AHP - Paramedics	2%
AHP - Dietetics	3%
AHPs - All	**3%**

Source: Health Education England, not published

Clinical Psychologists

MAC Reference

Clinical psychologists; MAC Reference: Psychologists (2212)

What do you think are the main reasons for job shortages?

Clinical psychologists are not currently on the SOL and it is recommended that this profession is added.

This profession is facing a range of pressures which are contributing to shortages, including:

1. Limited increases in supply and significant increases in demand[46];

High vacancy rates.

Supply and demand

Psychologists and psychological therapists fill a range of roles in mental health services. They deliver evidence-based psychological therapies, including through IAPT services. They also use psychological theory and evidence to help teams understand and respond to people with mental health challenges, through formulation, supervision, consultation, training, and research.

The Five Year Forward View for Mental Health requires significant expansion of the psychology and psychological therapies workforce to deliver greater access to psychological healthcare with a particular focus on:

Children and Young Peoples' Mental Health

Adult Mental health: Common Mental Health problems

Adult Mental Health (including older people): Community, Secondary and Crisis Care.

[46] NHS mental health workforce plan (2017)

Figure 41: Number of Psychologists in the NHS

Source: NHS Digital

There are over 700 more psychologists in August 2018 than there were September 2009. Overall numbers saw limited change between September 2009 and 2015. Since 2015 the number of clinical psychologists increased at faster rate, with an average annual increase of 2.6% each year, however the number of vacancies still remains high at around 12%.

Vacancies

Data from HEE has been collected from NHS Providers and shows the number of vacancies, and vacancy rate, for both 2016 & 2017 which is shown in the table below.

Figure 42: Clinical Psychologist Vacancies 2016-17

Year	**Vacancies (FTE)**	**Vacancy Rate (%)**
2016	698	12.9%
2017	694	12.2%

Source: Health Education England vacancy data based NHS Provider returns

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

The NHS Mental Health Workforce plan highlights the challenges presently faced and the priorities ahead. As part of this plan there are a number of agreed actions to grow and enhance the workforce in mental health, these include:

Retaining and supporting existing staff;

Employers supporting clinical staff to release more time for those who access mental health services;

Encouraging qualified staff to return to practice in the NHS;

International recruitment to help fill short-term gaps;

New skills, roles and ways of working;

Expanding the talent pool of future staff;

Attracting people to work in mental health;

Increasing the number of applicants for clinical training courses;

Supporting and retaining our trainees;

Better intelligence about the mental health workforce and a Compendium of Best Practice;

Establishing robust local workforce plans to grow and transform the Mental Health workforce, aligned with finance and service plans.

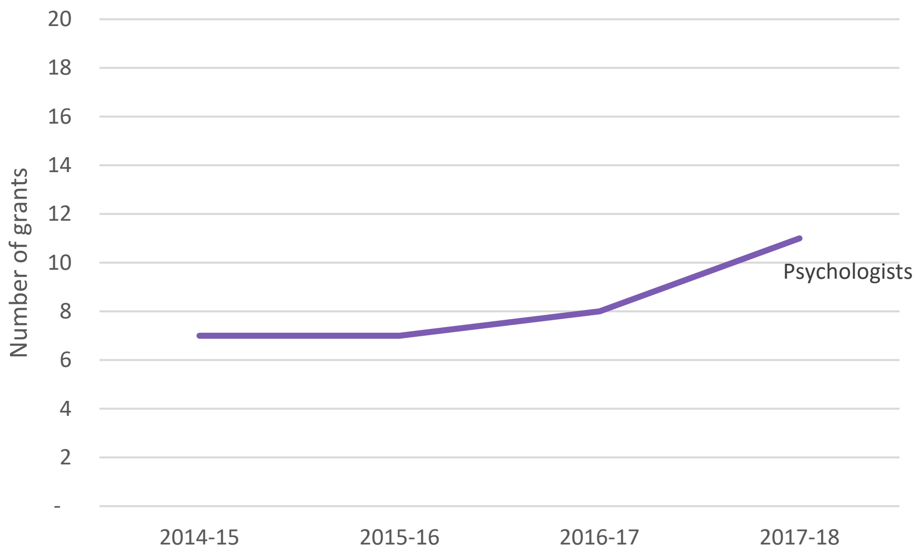
Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points - based visa system?

Yes

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

Tier 2 Certificate of Sponsorship granted for psychologists have been low, roughly 10 psychologists arrive through the tier 2 Certificate of Sponsorship route each year.

Figure 43: Number of tier 2 Certificate of Sponsorship grants for psychologists



Source: Home Office, unpublished

Doctors

Introduction

The NHS has a long history of employing, training and learning from overseas doctors. In many parts of the country, and in many specialties, doctors from overseas provide the backbone of high quality care for patients. This is not simply a matter of the NHS recruiting from abroad to fill vacancies - the NHS is an institution of choice for clinicians from all over the world to learn from and grow skills. However, we also recognise the need to do more at growing our own doctors, especially in shortage specialties. This is challenging, given the length of time it takes to train a doctor and the growing, and changing, demands of the UK population. This means that, in the short to medium term, there will be a need to recruit doctors from overseas and our response represents our current view of these challenges.

General and Acute Medicine, Emergency Medicine, Clinical Radiology, Geriatric Medicine and Gastroenterology are recommended for inclusion on the SOL due to the large proportion of Consultant jobs that are funded but unfilled, recruitment to training posts in these specialities is high and should go some way to addressing the issue over time. Histopathology has a significant number of consultant vacancies and struggles to recruit to specialist training posts and will, without overseas recruitment, be unable to match demand for consultants. Psychiatry has long been recognised as a shortage speciality and there are ongoing challenges to fill core and higher specialty psychiatric trainee posts and this specialty is most reliant on non-UK sources. The issues in psychiatry are most pressing outside of the London area. Paediatrics Specialist and Associate Specialist and other (SASO) doctors are currently on the SOL and based on the Tier 2 visa analysis still heavily rely on the supply of international doctors to fill workforce shortages at the middle grades. Therefore, they are also recommended to remain on the SOL.

The data tables in this section contain information for all specialties where available rather than just those proposed for the SOL. This is to provide context within the whole medical workforce. DHSC in collaboration with HEE have focussed on the highest priority specialties using the cut-offs of shortfall data of 100 FTE. Other specialties which have also a long-standing problem with recruitment into core and higher specialty trainee posts e.g. psychiatry are also prioritised. This approach is arbitrary but allows to identify priority specialties. Given more time, DHSC and HEE may agree more robust criteria. The data provided shows that other medical specialties are experiencing various degrees of workforce shortages and the MAC may want to consider inclusion of all medical specialties on the SOL until the next review.

Given the time pressures it has not been possible to identify clear quantitative evidence to demonstrate a shortage of dental practitioners and some health care scientists. However, we know that representative bodies representing these groups take a strong view that they should be included on the SOL. We are keen to engage with the MAC over the coming months to provide further evidence and clarity to support the inclusion of dental practitioners and health care scientists and further detail on these professions is included in figure 44.

Specialty

Figure 44: Medical and dental specialties proposed for inclusion on the SOL

Area	Healthcare occupation and Standard Occupational Classification (SOC) code	On the SOL presently?	Propose to add to / retain on the 2019 SOL?
Medical and dental specialties	Medical practitioners (2211) – Consultants: Clinical radiology	Y	Y
	Medical practitioners (2211) – Consultants, SASO medical staff posts and CT3, ST4-ST7 trainees: Emergency medicine	Y	Y
	Medical practitioners (2211) – Consultants and SASO medical staff posts: Old age psychiatry	Y	Y

Area	Healthcare occupation and Standard Occupational Classification (SOC) code	On the SOL presently?	Propose to add to / retain on the 2019 SOL?
	Medical practitioners (2211) – Consultants and SASO medical staff posts: General Adult Psychiatry, Child and Adolescent Psychiatry, Learning Disabilities Psychiatry and Forensic Psychiatry	N	Y
	Medical practitioners (2211) – Psychiatry core trainees (CPT1)	Y	Y
	Medical practitioners (2211) – SASO medical staff posts: Paediatrics	Y	Y
	Medical practitioners (2211) – General practitioners	N	Y
	Medical practitioners (2211) – Consultant General and Acute Medicine	N	Y
	Medical practitioners (2211) – Consultant Histopathology	N	Y
	Medical practitioners (2211) – Consultant Geriatric medicine	N	Y
	Medical practitioners (2211) – Consultant Gastroenterology	N	Y
	Dental practitioners (2215)	N	Y
Health Care Scientists	Biological scientists and biochemists (2112) – Neurophysiology healthcare scientists Medical and dental technicians (3218) – Neurophysiology practitioners	Y	Y
	Physical scientists (2113) – Nuclear medicine scientists Medical and dental technicians (3218) – Nuclear medicine practitioners	Y	Y
	Physical scientists (2113) – Radiotherapy physics scientists	Y	Y

Area	Healthcare occupation and Standard Occupational Classification (SOC) code	On the SOL presently?	Propose to add to / retain on the 2019 SOL?
	Medical and dental technicians (3218) – Radiotherapy physics practitioners		

What do you think are the main reasons for job shortages?

Workforce planning is a complex process. Demand for doctors is rising due to the growing and aging population and changes in the way services are delivered for example a move towards seven-day services. People are also experiencing more comorbidities as they age. Workforce shortages occur as there is sometimes a time lag in boosting the supply by training more doctors or other interventions. It can take six years for a doctor to specialise, and a minimum of 13 from medical school to Consultant. The success and speed of interventions in the medical workforce can vary and this causes additional uncertainty in planning. Doctors are a mobile workforce in an international labour market, international demand and migration will always influence our supply, some of which is unpredictable.

The following data provides evidence of shortages.

Shortfall and vacancies

Hospital Trusts reported Consultant shortfall data by speciality, this shows where funded Consultant posts are unfilled (see table below). There is some uncertainty in the data provided but it can be used as a guide to the overall and relative shortages in England.

Figure 45: Consultant shortfall data (Sept 2017, England, excludes specialties with less than 50 FTE shortfall)

	Establishment wte	Shortfall wte	Shortfall as percent of establishment				
			England	North	Mids&East	London	South
General and Acute Medicine	1455	330	23%	30%	28%	12%	14%
Clinical Radiology	3224	341	11%	12%	13%	11%	6%
Emergency Medicine	2045	340	17%	12%	20%	21%	15%
Psychiatry - General & Adult	2774	301	11%	14%	12%	11%	7%
Geriatric Medicine	1483	197	13%	14%	17%	9%	13%
Histopathology	1398	174	12%	16%	12%	11%	10%
Gastroenterology	1320	132	10%	10%	8%	12%	10%
Respiratory Medicine	1104	104	9%	10%	9%	2%	14%
Dermatology	648	98	15%	19%	12%	12%	19%
Neurology	853	87	10%	15%	8%	6%	11%
Intensive Care Medicine	608	52	9%	16%	3%	10%	4%
Psychiatry - Child & Adolescent	680	62	9%	11%	9%	7%	9%
Endocrinology	723	51	7%	7%	9%	4%	6%

Source: Health Education England (HEE) and NHS Improvement (NHSI)

General and Acute Medicine have the highest shortfall rate (23%). Emergency Medicine has second highest shortfall (17%).

Geriatric medicine (13%), Histopathology (12%), Clinical Radiology (11%) and Gastroenterology (10%) have high shortfall rates and due to the size of the specialties a large combined FTE shortfall.

Vacancies in specialty training

Trainee doctors are the pipeline for future specialist doctors but also provide a significant part of services in hospital and community settings. Unfilled training posts have an impact on both current services and future supply of Consultant specialists. Therefore, it is important to fill all the training positions.

There is also a need for a significant number of SASO doctors to provide service and support rotas.

The table below shows the average fill rate (% of training positions filled) and the proportion of trainee positions filled by doctors with UK medical degrees.

Histopathology struggles to recruit into training posts and is heavily reliant on non-UK trainees.

Doctors with non-UK medical degrees accounted for 19% of new trainees (of which around three quarters are non-EEA) during 2016-18, while about 6% of training positions went unfilled. There are fewer UK trainees available than there are training opportunities and medical school expansion will not change this position significantly until the mid-2020s. While the DHSC and its arm length bodies work to achieve the best balance of trainees across specialities, the country will continue to rely on non-UK doctors to fill training positions.

Figure 46: Recruitment to Core / Specialist training

		England	North	Mids&East	London	South	Scale of recruitment (average ***recruited*** 2016-18)
Ave. fill 2016-18 - **All CT/ST1 recruitment - all PMQ**		94%	87%	94%	100%	97%	
Analysis by specialty	Ave fill 2016-18	Trainees with UK PMQ at CT/ST1 - average 2016-18					
Public Health	100%	**95%**	93%	97%	97%	95%	72
Ophthalmology	100%	**95%**	92%	98%	96%	93%	64
Core Surg	100%	**93%**	90%	94%	96%	94%	505
Neurosurgery	100%	**90%**	77%	100%	96%	94%	28
Clinical Radiology	100%	**88%**	84%	87%	94%	91%	228
O&G	99%	**87%**	84%	79%	98%	90%	232
ACCS Ana/Core Ana	98%	**95%**	95%	92%	99%	97%	537
ACCS EM/EM RT	96%	**83%**	89%	62%	94%	88%	302
General Practice	96%	**74%**	73%	62%	94%	78%	
ACCS Acute/Core Med	94%	**82%**	74%	73%	98%	86%	1340
Paediatrics	88%	**89%**	86%	80%	96%	95%	367
Histopathology	82%	**78%**	88%	72%	69%	82%	61
Core Psych	68%	**72%**	63%	57%	82%	82%	376
All ST/CT1	94%	**81%**	78%	71%	94%	84%	

Source: HEE Recruitment Team (from Oriel recruitment system)

Additional analysis on Psychiatry

Psychiatry has long been recognised as a shortage speciality.

Psychiatry is integral to the delivery of the Government's Mental Health Strategy. Output from specialist training is projected to broadly maintain current numbers of psychiatrists and is not expected to reduce the current shortfall. The Five Year Forward View for Mental Health and the Stepping Forward Workforce Plan identify the need for significant additional psychiatrists to be employed, if mental health services are delivered using current service models. This is in addition to filling the high levels of vacancies in current services.

This means that psychiatry is under pressure from the need to rapidly expand services, a high attrition rate and the early retirement effect from the Mental Health Officer (MHO) scheme. The projected supply of newly qualified consultant psychiatrists will allow only limited workforce growth to 2021.

Following graduation from undergraduate medical school, there are a number of points along the 'pipeline' for psychiatrists where potential supply can be lost.

Not enough newly qualified doctors are choosing or are able to train in psychiatry. The average fill rate for core psychiatry was one of the lowest out of all medical specialties at 68% between 2016-18. The percentage of unfilled training posts in psychiatry is consistently higher than any other specialty. Doctors in postgraduate training programmes contribute significantly to the service by delivering care, as well as getting trained. The impact of poorly filled training programmes therefore directly affects care today as well as risking care tomorrow if too few consultants are produced.

Low direct transition rates from Core to Higher Specialty Training. Historically, for every 100 psychiatrists recruited into core psychiatry, 60 will complete core training and then proceed directly to complete higher psychiatry training. For UK medical graduates, the figure is significantly higher than overseas medical graduates. Trainees may temporarily or permanently step out of training at this transition point to work as locum or non-consultant, non-training grade doctors.

Recruitment into higher psychiatry is therefore reliant on non-UK doctors in training and augmentation from beyond the pool of former core trainees. Between 2016-18, 28% of trainees recruited at CT/ST1 had non-UK Primary Medical Qualification (PMQ). Reliance on trainees from outside of the UK is higher in certain regions e.g. 43% of trainees recruited in to core psychiatry training in the Midlands and East obtained their PMQ outside of the UK.

HEE's combined analysis of the PMQ data as at March 2017 shows that 54% of psychiatrists have a UK medical degree (10% EU, 36% non-EU) compared to 64% of all doctors (9% EU, 27% non-EU). The contribution of overseas doctors to the NHS is highly valued and it is essential that we retain their skills whilst also ensuring we have a sustainable ’homegrown‘ future workforce.

A quarter of recently qualified consultant psychiatrists do not go on to be employed substantively by the NHS (although they may be providing NHS-funded services in other settings or working as a locum for the NHS). This figure rises to a third within five years of registering. The GMC annual report shows over 8000 psychiatrists on the Specialist Register (across the whole of the UK), but the NHS in England employs fewer than 5000.

The psychiatric workforce also relies heavily on SASO doctors (24% of the psychiatric workforce). This staff group is unplanned and therefore does not have a secure supply pipeline, but are a vital and valued part of specialist medical care.

Shortfall and vacancies

HEE and NHSI collect Consultant shortfall data from hospital Trusts. 301 FTE (11%) of funded General and Adult Psychiatry Consultant and 62 FTE (9%) of funded Child and Adolescent Psychiatry posts are unfilled as at Sept 2017. The Old Age Psychiatry specialty group shortfall shows 10% of funded Consultant posts as unfilled (Sept 2017).

The following table shows data for Medical staff working in psychiatry including General & Adult and Child & Adolescent Psychiatry.

Figure 47: Provider expressed shortfall from establishment, September 2017

	Establishment FTE	**Shortfall FTE**	**England**	**North**	**Mids & East**	**London**	**South**
Psychiatry - General & Adult	2,774	301	11%	14%	12%	11%	7%
Child and Adolescent Psychiatry	680	62	9%	11%	9%	7%	9%

Source: HEE shortfall data (unpublished)

Additional analysis on GPs

GPs are not currently on the SOL and it is recommended that this specialty should be added to the list, due to the following reasons:

There is a significant evidence of shortage of GPs in the UK. NHS Digital collected vacancy data from GP practices for the 6 months to September 2017. About 9% of practices responded (687 of 7361 practices), reporting 130 FTE (an implied 145 headcount) of vacancies open for greater than three months.

It is not known whether the 9% of practices that responded are representative of all practices. However, there are clearly a significant number of GP vacancies that practices are finding hard to fill.

In addition, in October 2017, RCGP projected that the workforce needs to expand by 856 whole-time equivalent GPs in Scotland, 485 in Wales and 272 in Northern Ireland by 2021 to meet the needs of their populations [47].

There are more GPs in training than ever before and the average fill rate for General Practice between 2016-2018 is 96%. However, it takes a long time to train a GP

[47] Source: https://www.rcgp.org.uk/about-us/news/2017/october/break-down-the-barriers-stopping-overseas-gps-working-in-the-uk-demands-rcgp.aspx

- at least 10 years from starting medical school- and in the meantime the current supply of GPs is not meeting the demand.

(Small-scale) survey and anecdotal evidence suggest that newly qualified GPs increasingly display a preference for locum working over more established salaried or partner positions.

GPs are increasingly retiring early.

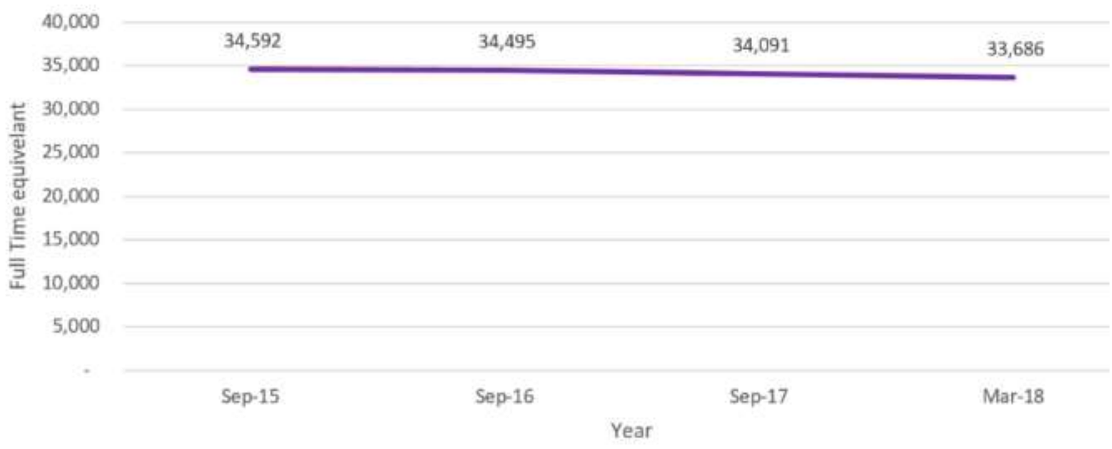
The number of GPs nearing retirement is high. In June 2018, 21% of the FTE GP workforce, whose age was known, were over the age of 55.

The proportion of GPs taking their pension for the first time on a Voluntary Early Retirement (VER) basis has also increased in recent years; in 2017/18, 58% of those taking their pension for the first time took it on a VER basis, compared to 17.2% in 2007/2008 and 22.6% in 2009/10 (NHS Business Services Authority (BSA) data). Although there is anecdotal evidence that some GPs take their pension and return to the workforce ("retire and return") we do not know how many do this or the capacity in which they return.

Historical trends

Each year from September 2015 there have been slight decreases in the number of GPs. The figure in March 2018 is roughly like that of September 2015.

Figure 48: Total Number of GPs 2015-18



Source: NHS Digital General and Personal Medical Services

The net rate of loss of GP FTEs from the workforce is estimated to be well over 7% per year due to retirement, GPs reducing their hours or exiting the workforce completely.

New GPs are slow to enter the established workforce.

Additionally, among younger GPs, both men and women, there is an increasing tendency to work part-time. This tendency has been accelerated by the increasing feminisation of the GP workforce, and the greater likelihood of part-time working by younger female GPs. 65.3% of Practitioners (excluding Registrars, Retainers & Locums) worked part time in September 2015 (of which 63.8% Female) rising to 69.3% in March 2018 (of which 64.8% Female). Participation rates are substantially lower among women GPs and have also declined from September 2015 to March 2018.

Figure 49: Practitioners (excluding Registrars, Retainers & Locums) Participation rates by Age and Gender

	Male		**Female**	
Age band	September 2015	March 2018	September 2015	March 2018
<40	92%	88%	73%	71%
40-<50	96%	94%	72%	71%
50-<60	95%	94%	75%	73%
60+	81%	85%	73%	75%

Source: NHS Digital, General and Personal Medical Services

In addition, GPs report low levels of job satisfaction, with workload being a major contributing factor. For example, 92% of respondents to the 2017 GP Worklife survey reported considerable/high pressure from this factor. GPs regularly cite workload as the reason for leaving the profession or reducing their working hours, which serves to worsen workload pressures.

The resulting impacts on workforce capacity has caused the full-time equivalent (FTE) capacity of the GP workforce in England to fall by 0.4% per annum (approx. 153 FTE per year) from 34,592 FTEs in September 2015 to 34,132 in September 2018 (data to be confirmed in December 2018). Over the same period, the population of patients registered with GP practices in England has increased by 1.3% per annum, from 57.1 million to 59.4

General Practice, for which fill has been improving, is heavily reliant on non-UK trainees to achieve that fill. Between 2016-18, 74% of trainees recruited at CT/ST1 had UK Primary Medical Qualification (PMQ). 26% of trainees recruited into core training obtained their PMQ outside of the UK. Reliance on trainees from outside of the UK is higher in certain regions e.g. 38% of trainees recruited in to General Practice in Midlands and East obtained their PMQ outside of the UK.

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

Psychiatry

In the context of the Five Year Forward View for Mental Health, which seeks to transform and expand mental health services by 2020/21, HEE published Stepping Forward to 2020/21 in July 2017. This set out plans for HEE to attract people to work in mental health through working with the Royal Colleges, trainees and mental health charities to:

Develop an urgent action plan to attract and retain more clinicians to work in mental health services and psychiatry;

Commission focus groups and polls of potential and existing trainees so we can better understand the obstacles, increase the support offered to them and increase the profile and attractiveness of careers in mental health;

Develop and publish a clear career pathway that supports and attracts individuals from wide ranging backgrounds (with a broad range of skills, clinical, research, management etc.); and

Develop a major campaign in advance of the 2018 recruitment round to help attract newly qualified people to training courses, as well as recruiting qualified staff from other sectors. The Royal College of Psychiatrists' Choose Psychiatry campaign was first launched in September 2017 to show that the specialty is unique in requiring doctors to understand a patient's brain, body and background. The autumn 2018 campaign is also focussing on medical students. The number of trainees in psychiatry in Great Britain rose by a quarter (24.6%) from 337 in August 2017 to 420 this August, according to HEE figures, which RCPsych believe demonstrates the success of the campaign.

'Stepping Forward' also set out plans to increase the number of applicants for clinical training courses in psychiatry.

With the expansion of medical student places by 1,500 in England, HEE, the Royal College of Psychiatrists, and partners will:

Work to ensure that the allocation of these places is to universities with a proven track record in producing psychiatrists;

Increase the exposure to psychiatry during training (which can help increase applications for the specialty). HEE has already increased the number of doctors in the Foundation Programme doing a four month psychiatry post to 50%. The Royal College of Psychiatrists will complete the review of this expansion with a view to HEE commissioning a further expansion from 2019;

Ensure all doctors in the Foundation Programme will be required to undertake a 'taster' two week attachment in Psychiatry unless they are doing a four month post from 2019;

Explore bursaries (learning from the GP Target Enhanced Recruitment Scheme (TERs) scheme, funded by NHS England), and opportunities in academic training to increase the popularity of the speciality.

GPs

NHSE and HEE are working with the profession to increase the GP workforce by boosting recruitment, addressing the reasons why GPs are leaving the profession, and encouraging GPs to return to practice.

In 2016 the number of places available for GP training was increased to 3,250. In 2018, there were 3,473 new starters recruited to speciality GP training posts, the highest number recruited ever.

NHSE and HEE funded the Targeted Enhanced Recruitment Scheme to improve GP coverage in hard-to-recruit areas. This is a salary supplement paid to trainees who commit to training in areas of the country which have historically struggled to recruit trainees. To bridge the gap while this training is ongoing, NHSE announced plans in August 2017 to accelerate its international recruitment programme and recruit 2,000 doctors into general practice in England by 2020.

NHSE also has several schemes in place to support GPs to remain in the NHS. These include the GP Health Service, the GP Retention Scheme, and the GP Retention Fund. Recognising that the rising cost of clinical negligence was a source of concern for GPs, the government has also committed to introducing a state-backed indemnity scheme that can provide affordable cover for GPs & patients.

To address workload pressure in general practice, NHSE has invested £30m in the Releasing Time for Care Programme, to enable practices to release an estimated 10 per cent of GP time from admin and other responsibilities to focus on patient care. Other work to release capacity in general practice includes increasing the wider workforce in general practice as well as the skill-mix of staff delivering care. Between September 2015 and June 2018, the total number of non-GP clinical staff in general practice has increased by over 3,300 – this includes 500 more nurses and 2,800 more other staff involved in direct patient care.

These measures have not halted the decline in the GP workforce. In February 2018, the former Secretary of State for Health and Social Care announced a formal review of the partnership model of general practice and how it will need to evolve in the modern NHS. The review is expected to make recommendations by the end of the year jointly to the Secretary of State for Health and Social Care and the Chief Executive of NHS England.

Emergency Medicine

HEE is working with the Royal College of Emergency Medicine and other partners in order to increase the number of trainees. This work includes expanding the emergency medicine branch of the Acute Care Common Stem programme (ACCS) and establishing a run through pilot for speciality training.

HEE has also developed a mechanism whereby doctors working in other clinical areas can transfer into Emergency Medicine with their skills recognised and progress quickly through the early years of Emergency Medicine training.

Due to a number of initiatives developed by HEE and other key organisations within the system, there has been an unprecedented inflow of new A&E doctors.

Working in partnership with the College of Emergency Medicine HEE has taken immediate actions including:

piloting and adoption of a run-through training; further detailed analysis will form part of the Year 2 run-through pilot analysis;

the creation of a direct-entry programme (DREEM) which makes it much easier for qualified doctors to swap into A&E training, if they have decided they want to change speciality once starting in another;

A work learn and return initiative; and

Expansion of training places for Physician Associates.

Similarly, ACCS can help doctors, who decide to specialise in other areas, gain some experience of Emergency Medicine. Not only does this help with building up the understanding of Emergency Medicine across the health system, but can also encourage trainees, who may not have previously considered a career in Emergency Medicine, to make that choice.

General and Acute medicine

Building on the recommendations from Professor Greenaway's Shape of Training report (SoTR), the medical specialties are being pushed to help address the current unmet patient need by including an element of training in internal acute (general) medicine with an expectation that trainees will contribute to the "acute unselected take" during the entire training pathway.

For example, the UK Academy of Medical Royal Colleges supported by the General Medical Council (GMC) coordinated a curriculum mapping exercise. The Academy's constituent bodies (Colleges and Faculties, hereafter referred to as Colleges for simplicity) were asked to describe how their current curricula and training pathways could be modified to incorporate the following key recommendations arising from the Shape of Training report, including to describe how the College would ensure that the training within their discipline was sufficiently broad to fulfil the SoTR recommendation that patients and service providers require more generalists.

Furthermore, building on recommendation 12 from the Shape of Training report - that "doctors must be able to manage acutely ill patients with multiple co-morbidities within their broad specialty areas, and most doctors will continue to maintain these skills in their future careers" - all Colleges have been asked to review their curricula to ensure that they are more generic and will equip doctors with the skills to treat acutely ill patients in the emergency setting and patients with multiple co-morbidities.

Therefore, the curricula for specialty training is currently being reviewed by the GMC and HEE and their counterparts in the devolved administrations, which is expected to be completed by 2020/21. This will ensure doctors have the requisite skills to meet this need and help address the pressures on general and acute medical specialties.

In the longer term, the expansion of undergraduate medical school places by 1,500 which will be rolled out from September 2018 until September 2020 will also help to increase the supply of doctors to the NHS.

Histopathology

HEE published its first ever Cancer Workforce Plan in December 2017, which commits to the expansion of capacity and skills including an ambition to increase improved working practices, attracting qualified people back to the National Health Service through domestic and international recruitment. This included 94 full time equivalent additional histopathologists to support an increase in the capacity for earlier diagnosis. Following the commitment to lower the bowel screening age to 50 and roll out the Faecal Immunology Test, HEE has been engaging with stakeholders to ensure that the cancer workforce, including histopathologists, is sufficient for future cancer services.

Geriatric medicine

HEE is working to support recruitment into all specialties, including geriatric medicine. HEE works closely with the Royal Colleges of Physicians (RCP) on recruitment and retention in geriatric medicine, for example by nominating a lead postgraduate dean to support the RCP's specialist advisory committee's work on training in geriatric medicine.

In the longer term, the expansion of undergraduate medical school places by 1,500 which will be rolled out from September 2018 until September 2020 will also help to increase the supply of doctors to the NHS.

Gastroenterology

Gastroenterologists play a significant role in the cancer treatment pathway.

HEE's Cancer Workforce Plan set out a number of actions to make use of existing supply; to expand skills over 1-3 years to support growth and transformation; and to expand the net number of trainees over 3-15 years to support growth and transformation. For example:

Reducing vacancies: HEE will work with NHSI to understand how many of the vacancies are gaps in service as opposed to bank and agency, with a view to reducing vacancies down and work with the British Society of Gastroenterology, JAG, NHSI and employers to understand and tackle the root cause.

RTP campaign: An estimated 22% of Gastroenterologists registered within the UK are not working within the NHS. This proportion has steadily declined since 2013 when this proportion was an estimated at 33%. HEE will include Gastroenterology in its national RTP programme with the aim of attracting 14 back to the NHS by 2021.

Expansion of skills over 1-3 years:

Expand the number of clinical endoscopists: Working with Joint Advisory Group (JAG), HEE has developed an accelerated seven-month clinical endoscopist programme with the aim of increasing access to diagnostics, creating extra skilled capacity and helping to free up the existing medical workforce to focus on more complex cases that may require therapeutic interventions. The current scheme will produce 200 clinical endoscopists by 2018. We will produce an additional 200 by 2021 [including some backfill and supervision costs], drawing on the learning to date and the need to support Trusts and individuals in these up-skilling/Advanced Practitioner opportunities. As well as increasing the capacity to carry out investigations, (we estimate 400 clinical endoscopists could undertake 450,000 endoscopies a year by 2020), potentially freeing up more Consultant Gastroenterologists' time for complex cases if Trusts support and protect this additional time.

HEE will work with the British Society of Gastroenterology to look at further models to expand diagnostic capacity, such as freeing up the capacity of Specialist Registrars and possibly reducing medical commitments for periods of time to allow accelerated learning so that competence can be gained and deployed into the service at a faster pace.

Expansion of net number of trainees over 3-15 years:

Reduce attrition from training programmes: HEE estimate that in the order of 90 – 95% of people joining the Gastroenterology training programme ultimately complete the course and receive a CCT that allows them to join the specialist register. Should we lower attrition by 2.5% points we would hope to retain 11 more Gastroenterologists by 2021.

Improve the numbers of qualified Gastroenterologists that join the NHS, around 67% of those who completed training as Gastroenterologists will transition into working within the NHS three years after training. There are indications that this transition to employment increases in the five years after qualifying to around three quarters as people complete research and/or wait for the ideal vacancy. HEE will work with the British Society of Gastroenterology and NHSI and employers to identify actions to improve the rate of transition into employment in the NHS from training. Should we improve the transition of newly qualified gastroenterologists by around 5% points we are likely to secure 19 more into the NHS.

In the longer term, the expansion of undergraduate medical school places by 1,500 which will be rolled out from September 2018 until September 2020 will also help to increase the supply of doctors to the NHS.

Paediatrics

The expansion of undergraduate medical school places by 1,500 which will be rolled out from September 2018 until September 2020 will also help to increase the supply of doctors to the NHS in the longer term.

Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points - based visa system?

Yes

If known, how many workers from outside of the UK have been recruited using the Tier 2 points - based visa system in the past 12 months, stating the job titles.

Home Office data for Restricted Certificates of Sponsorship (RCoS) for the 12 months to April 2018 showed 4,500 applications at the senior/middle doctor grade. The applications contained over 2,000 different job titles. DHSC have mapped the job titles to specialties where possible. Almost 1,650 (36%) of the applications had insufficient information to assign them to a specialty therefore the numbers in the table are likely an underestimate.

Some specialties have been able to recruit significant number of doctors through the Tier 2 route. The specialties proposed for inclusion on the SOL have a source of non-UK doctors available, as proved by the number of RCoS granted in the recent 12 months: General and acute medicine (112+69), emergency medicine (341), Clinical Radiology (85), gastroenterology (31), geriatric medicine (25) and histopathology (16), Psychiatry group (37), GPs (54), Paediatrics (280).

Figure 50: RCoS for middle/senior grade doctors/dentists (Apr 17 - Mar 18)

Specialty group	Specialty	Granted	Applications
Acute Medicine	Acute Medicine	69	101
Anaesthetics	Anaesthetics	128	156
	Intensive care medicine	74	111
Anaesthetics Total		**202**	**267**
Clinical oncology and radiology	Clinical Oncology	18	29
	Clinical Radiology	85	100
Clinical oncology and radiology Total		**103**	**129**
Dental group	Oral and maxillo-facial surgery	7	12
	Additional dental specialties	0	2
Dental group Total		**7**	**14**
Emergency Medicine	Emergency Medicine	341	350
General medicine group	Cardiology	54	73
	Dermatology	16	24
	Endocrinology and diabetes mellitus	21	26
	Gastroenterology	31	40
	General Medicine	112	162
	Geriatric Medicine	25	30
	Neurology	16	18
	Palliative Medicine	2	2
	Rehabilitation Medicine	1	5
	Renal Medicine	16	23
	Respiratory Medicine	29	34
	Rheumatology	8	17
General medicine group Total		**331**	**454**
General practice	General Practice	54	63
Infectious diseases	Infectious diseases	1	2
Obstetrics & gynaecology	Obstetrics and Gynaecology	58	83
Ophthalmology	Ophthalmology	83	99
Paediatric group	Paediatrics	280	295
Pathology group	Haematology	35	41
	Histopathology	16	19
	Medical microbiology	3	3
	Chemical pathology	1	1
	General pathology	6	10
Pathology group Total		**61**	**74**
Psychiatry group	Child and adolescent psychiatry	4	6
	Old Age Psychiatry	8	8
	General psychiatry	25	27
Psychiatry group Total		**37**	**41**
Surgical group	Cardio-thoracic surgery	46	61
	ENT	21	29
	General Surgery	1	1
	Neurosurgery	38	44
	Paediatric Surgery	26	30
	Plastic Surgery	8	24
	Surgery	249	393
	Trauma and orthopaedic surgery	161	237
	Urology	68	84
	Vascular Surgery	24	27
Surgical group Total		**642**	**930**
unspecified		1134	1641
Grand Total		**3403**	**4543**

Source: DHSC analysis of Home Office data

Non-UK doctors in the NHS

In the NHS, 37% of Consultants and 64% of SAS and other (SASO) doctors have medical degrees from outside of the UK.

HEE analysis has split SASO doctors into two group: permanent and other-than-permanent to reflect the variety of employment history of this group of doctors. Data for March 2017 shows 8,040 other-than-permanent SASO, non-UK doctors, of which most (70%, 5,600) have a non-EEA medical degree. This implies non-UK doctors are being recruited from outside the EEA in large numbers to various posts within the NHS.

If you have any other information that might be useful for our call for evidence please use the space below to explain.

GPs

In September 2014 the Government committed to an additional 5,000 doctors working in general practice by 2020. The General Practice Forward View published in April 2016, set out plans to deliver the commitment, such as training additional GPs, improving retention and recruiting 500 GPs from abroad. In August 2017, NHSE announced plans to accelerate its international recruitment programme and recruit 2,000 doctors into English general practice over the following three years.

Despite these targets and the measures put in places to deliver them, annual workforce losses have exceeded annual workforce gains for GPs over the period September 2015 to September 2018.

Social Care

The adult social care workforce in England comprises around 1.6 million jobs across more than 20,000 organisations. Vacancy rates (8% overall increased from 5.5% in 2012/13) across the care workforce are high. Care providers have difficulty recruiting and retaining workers, particularly to the roles of Care Worker, Social Worker, Registered Manager and Nurse.

The MAC has previously acknowledged that social care needs will continue to grow and that work in the sector needs to be made more attractive.[48] The Department's Social Care Green Paper will outline measures to improve the attractiveness of working in social care, alongside existing work carried out by Skills for Care to build sector capability and the skills of the workforce, a national recruitment campaign to improve the perception of care work and the funding of the Social Work bursary and for Social Work practice placements.

As the relative levels of vacancy are high for RQF6 roles in social care it is our view that they should be included in the SOL to make it easier for health and care organisations to recruit international workers to these high skilled roles. In addition to Nurses (adult social care vacancy rate 12.3%) and Occupational Therapists (9.0%) described above we recommend adding adult Social Workers (vacancy rate 10.2%) to the SOL.

[48] Migration Advisory Committee (2018) EEA Migration in the UK: Final report

This covers the current minimum skill level of RQF6. As the MAC has also requested information on skill levels below RQF6 these roles are included in the social care section below.

Adult Social Care

Tier 2 visas have typically been used to recruit high skilled workers (RQF6 and above) earning more than £30,000. There are certain essential professions within social care, such as social workers, nurses and occupational therapists, which do require skill levels of RQF6 and above and earn, on average, more than £30,000 which have persistent and significant vacancy rates in adult social care. In these cases we recommend inclusion of these roles on the SOL.

Figure 51: Individual job titles

	Job title	Closest ONS job title	Closest ONS occupation code	Sector(s) most affected
1	Registered Nurse	Nurses	2231	Health and social care
2	Registered Manager	Residential, day and domiciliary care managers and proprietors	1242	Residential and Social Care
3	Social Worker	Social Workers	2442	Residential and Social Care
4	Care Worker	Care workers and home carers	6145	Residential and Social Care
5	Occupational Therapist	Occupational therapists	2222	Health and social care
6	Support and Outreach	A broad range of job titles e.g. Welfare and housing associate professionals n.e.c.	(e.g) 3329	Residential and Social Care
7	Senior Care Worker	Senior Care Workers	6146	Residential and Social Care

What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)?

This response highlights the growth in vacancies as an indicator of shortage across roles in adult social care by job type. Workforce pressures are a significant challenge for adult social care. The sector has relatively low pay and status, leading to competition with other sectors, and high turnover and vacancy rates.[49]Vacancy rates have increased from 5.5% in 2012/13 to 8.0%% in 2017/18 and are highest for the grouping of regulated professional roles such as Nurses and Social Workers.

The MAC has previously described the domestic recruitment issues in the sector and related those to the relative competitiveness of wage rates, whilst the high levels of turnover have led the MAC to be sceptical of a sector-based scheme for social care. However, high levels of persistent relative vacancy are also present in RQF6 roles, and so we recommend that these either continue to be on the SOL, or are added to it to make international recruitment into these vacancies straightforward where health and care organisations need to fill high skilled roles. These include Nurses (currently on the SOL and described above), Occupational Therapists (described above) and Social Workers.

As the MAC has requested information at all skill levels the table below shows Skills for Care's estimates of the job roles in the independent and local authority sectors of adult social care in England where the 2017/18 vacancy rate is much higher than the July 2018 national average of 2.7 per cent. The range of vacancy rates in adult social care for these seven job titles is 6.2% for Senior Care Workers to 12.3% for Registered Nurses. The only job role which doesn't meet this employer-based indicator of shortage is Senior Managers (a vacancy rate in 2017/18 of 2.5%) and is therefore not included.

The increase in relative (vacancy rate) and absolute (vacancies) indicators of shortage between 2012 and 2017 demonstrate an increasingly unmet demand for workers in adult social care, demand which has not been met from within the domestic labour market.

Figure 52: Social Care Vacancies across professions 2012/13-2017/18

		2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
Registered nurse RQF6	Employees	44,000	45,000	43,000	41,000	38,000	36,000
	Vacancy rate (%)	4.1%	7.9%	9.5%	9.4%	9.0%	12.3%
	Vacancies	2,000	4,000	5,000	4,000	4,000	5,000
Registered	Employees	21,000	21,000	21,500	22,000	22,000	22,500

[49] Moriarty et al (2018) Recruitment and retention in adult social care services. Available at: https://www.kcl.ac.uk/sspp/policy-institute/scwru/pubs/2018/reports/recruitment-and-retention-report.pdf

		2012/13	2013/14	2014/15	2015/16	2016/17	2017/18
manager RQF4	Vacancy rate (%)	Not available	12.5%	12.0%	11.2%	11.1%	11.8%
	Vacancies	Not available	3,000	3,000	3,000	3,000	3,000
Social worker RQF6	Employees	17,000	17,000	15,500	16,000	15,500	15,500
	Vacancy rate (%)	7.6%	9.6%	8.5%	13.0%	10.8%	10.2%
	Vacancies	1,000	2,000	1,000	2,000	2,000	2,000
Care worker (Low skilled)	Employees	670,000	705,000	740,000	730,000	750,000	765,000
	Vacancy rate (%)	7.1%	7.1%	7.6%	8.4%	7.9%	9.1%
	Vacancies	51,000	54,000	61,000	67,000	64,000	76,000
Occupational therapist RQF6	Employees	3,800	4,200	3,700	3,300	2,900	2,900
	Vacancy rate (%)	6.1%	7.8%	6.6%	10.5%	9.8%	9.0%
	Vacancies	200	400	300	400	300	300
Support and outreach RQF3	Employees	57,000	55,000	53,000	59,000	54,000	49,000
	Vacancy rate (%)	5.3%	6.4%	5.2%	6.0%	5.9%	6.7%
	Vacancies	3,000	4,000	3,000	4,000	3,000	4,000
Senior care worker RQF3	Employees	80,000	80,000	81,000	84,000	83,000	86,000
	Vacancy rate (%)	2.6%	3.2%	3.5%	3.8%	4.2%	6.2%
	Vacancies	2,000	3,000	3,000	3,000	4,000	6,000

Source: Skills for Care workforce estimates (vacancies rounded)

The table below shows the mean annual full-time equivalent pay by job role in the local authority and independent sectors[50], highlighting the potential importance of the SOL exemption of the five-year salary threshold for settlement for jobs at RQF3+. The MAC has stated its concern that 'special immigration schemes for social care will struggle to retain enough migrants in the sector if work in it is not made more attractive'[51]. The section below highlights the Department's activities in this area.

Figure 53: Number of roles in social care and average pay

Job role		**Local authority sector (Sep 17)**	**Independent sector (Apr 17 – Mar 18)**
Registered manager (RQF4)	Jobs	700	22,000
	FTE annual Pay	£38,000	£30,700
	Hourly Rate	£19.73	£15.42
Social worker (RQF6)	Jobs	16,200	950
	FTE annual Pay	£34,900	£18,800
	Hourly Rate	£18.15	£9.73
Occupational therapist (RQF6)	Jobs	2,500	650
	FTE annual Pay	£34,700	£30,000
	Hourly Rate	£18.04	£15.57
Registered nurse (RQF6)	Jobs	175	42,000
	FTE annual Pay	£30,800	£29,400
	Hourly Rate	£15.83	£15.23
Senior care worker (RQF3)	Jobs	2,400	86,000
	FTE annual Pay	£23,700	£17,100
	Hourly Rate	£12.33	£8.87
Care worker (Low skilled)	Jobs	33,600	795,000
	FTE annual Pay	£18,900	£15,700
	Hourly Rate	£9.80	£8.12
Support and outreach (RQF3)	Jobs	13,300	41,000
	FTE annual Pay	£22,700	£16,600
	Hourly Rate	£11.79	£8.58

[50] Pay time series available at: https://www.skillsforcare.org.uk/NMDS-SC-intelligence/Workforce-intelligence/documents/Adult-social-care-workforce-estimates.xlsx

[51] Migration Advisory Committee (2018) EEA Migration in the UK: Final Report

Source: SfC: NMDS-SC workforce estimates 2017/18

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research

To improve recruitment and retention in the adult social care sector the Department continues to fund Skills for Care to deliver initiatives to build sector capability and the skills of the workforce and attract, train and retrain staff including:

Values and behaviours based recruitment;

New approaches for targeting and attracting talent in social care;

Return initiatives such as the return to practice for nurses in social care;

Disseminating good practice for example, through the publication "Secrets of Success" which highlights good practice for providers to help retain their workforce.

The Department has listened to feedback from the sector and the National Audit Office on the need for a national adult social care recruitment campaign. The campaign objectives are to improve the public's perceptions of care work, raise awareness of the breadth of rewarding roles and careers, signpost interested people to local jobs, and upskill employers to attract, recruit and retain people with the right values to provide excellent care. The Department is working closely with key stakeholders, including Local Authorities, The Association of Directors of Adult Social Services, and representative bodies, to ensure the campaign highlights, signposts to and complements existing guidance on effective recruitment practices and improved retention of the care workforce.

The Department has worked closely with key stakeholders to run two test-and-learn pilots in November 2018 in England. These were designed to test which messages, channels and sector engagement methods were effective as an overall campaign approach, to then inform how an optimal and scaled up campaign model can be rolled out nationally across England (with regional and local activation where possible). We expect the national campaign to make a positive impact on recruitment and retention and will be carrying out an evaluation of the national campaign in summer 2019.

With regard to Social Workers, Social Work England is being established as a single-profession regulator to focus solely on social work. Responsibility for the Social Work profession is shared between the Department of Health and Social Care (DHSC) and Department for Education (DfE) with a common policy of increasing the quality of social work education (and thereby social workers) and maintaining a sufficiency of supply of social workers.

DHSC, on behalf of both Departments, provides funding for the social work bursary and for social work practice placements. DHSC sets the number of new bursaries available each academic year on an annual basis. There is no restriction on the number of students that Higher Education Institutes can recruit.

In addition, DHSC set up and fund Think Ahead, a graduate training programme for mental health social work. DfE also operate the Step–Up to Social Work and Frontline programmes.

Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

The RQF6 roles – Registered Nurse, Social Worker and Occupational Therapists – are currently open to eligible workers from the Tier 2 points-based visa system

Glossary

Agency staff - Temporary staff supplied by external agencies. These staff cost on average 20% more than the NHS's own "staff bank".[52]

AHPs - Allied Health Professions are health care professions distinct from nursing, medicine and pharmacy. They apply their expertise to treat, support and rehabilitate patients.

ALB - Arm's Length Body

Bank staff - An internal pool of temporary workers that provide cover when there are staffing shortfalls. These staff are already employees of the NHS trust and have agreed to work flexible shifts.

BAPO - British Association of Prosthetists and Orthotists

Certificate of Sponsorship – an electronic record which is required for migrant workers who are applying for Tier 2 or Tier 5 visas.

Consultant shortfall - Shortfall is the unfilled posts expressed as a percentage of the funded posts

EEA - European Economic Area

[52] https://improvement.nhs.uk/news-alerts/nhs-could-free-480m-limiting-use-temporary-staffing-agencies/

Fill rate - the number of filled training posts expressed as a percentage of the total funded posts

FTE - Full Time Equivalent

GOC - General Osteopathic Council, regulator of the practice of osteopathy in the United Kingdom

HCHS - Hospital and Community Health Service (NHS Trusts and CCGs)

HCPC - Health and Care Professions Council, a regulator of 16 health and care professions

HEE - Health Education England

HEFCE - Higher Education Funding Council for England

HEI - Higher Education Institutions

NHSI - NHS Improvement

NMC - Nursing and Midwifery Council

ODP - Operating Department Practitioners

OT - Occupational Therapist

P&O - Prosthetists and Orthotists

Participation rate - the hours worked as a percentage of 'full time' hours.

PMQ - Primary Medical Qualification from a University Medical School is the first Medical qualification awarded following completion of a course of study in medicine.

RCP- Royal College of Physicians

RCPsych - Royal College of Psychiatrists

RoW - Rest of the World includes any countries outside the EEA and UK. This includes the Crown Dependencies (Isle of Man, Bailiwick of Jersey and Bailiwick of Guernsey) and all British Overseas Territories.

SASO - Specialist and Associate Specialist and Other doctors

Sickness absence rate – Total sickness absence days divided by the sum of total days available per month for each member of staff.

SLTs - Speech and Language Therapists

Turnover - Shows people leaving or returning to active service, this includes those going on or returning from maternity leave or career break, for example.

UCAS - Universities and Colleges Admissions Service

VER - Voluntary Early Retirement

Data Annex

Data	Description	Data source	Links
Demand growth	Percentage growth in demand, based on population growth in England.	ONS	https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/timeseries/enpop/pop
NHS medical and non-medical workforce supply	Number of full time medical and non-medical staff in the hospital and community healthcare services.	NHS Digital	https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/september-2018
Vacancy rates of non-med NHS workforce	Number of full time equivalent posts vacant as a percentage of funded posts.	Nurses in HCHS – NHS Improvement Nurses in Social Care – Skills for Care Midwives and AHPs – Health Education England, unpublished	https://improvement.nhs.uk/resources/quarterly-performance-nhs-provider-sector-quarter-2-201819/
Applications and acceptances to nursing and midwifery courses in England	Number of people applying and accepting courses to become a nurse or midwife.	UCAS	https://www.ucas.com/corporate/data-and-analysis/ucas-undergraduate-releases/ucas-undergraduate-analysis-reports/ucas-undergraduate

			-end-cycle-reports
EEA nursing and midwifery joiners and leavers	Number of nurses and midwives joining the Nursing and Midwifery register for the first time, and those leaving the register.	Nursing and Midwifery Council Register	https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics-tables/
Tier 2 Certificate of Sponsorship, applications and grants	Grants of Tier 2 Certificate of Sponsorship are required if a skilled international worker wants to apply for a tier 2 visa and enter the UK.	Home Office	Unpublished data
EEA reliance for NHS AHPs	Proportion of EEA AHPs working in hospital and community healthcare services.	Health Education England	Unpublished data
Recruitment to doctor Core / Specialist training	England has a large but limited number of training posts available for doctors to become specialists. Doctors complete for the available training posts. There are over 60 different specialties. Specialist training takes many years and can include additional stages of competition to further specialise. Recruitment data shows the number of doctors recruited to each part of the training system. The 'fill' rate is the number of doctors recruited to training, as a percentage of the training posts available in the year.	Health Education England (Oriel recruitment system)	Unpublished data

Consultant shortfall	Trusts reported Consultant shortfall data by speciality for September 2017, the data shows where funded Consultant posts are unfilled. Shortfall is the full time equivalent number of unfilled posts expressed as a percentage of the funded posts.	Health Education England and NHS Improvement	Unpublished data
GP participation rates	General Practitioners (excluding Registrars, Retainers & Locums) participation rates by age and gender. Participation rate is the hours worked as a percentage of 'full time' hours.	NHS Digital	[add link]
Adult Social Care workforce estimates	Skills for Care estimate the total size of the adult social care workforce at 1.6m jobs in 2017/18 and make detailed estimates on the local authority and independent sector workforce (1.35m jobs) on characteristics such as vacancies, pay and nationality.	Skills for Care	https://www.skillsforcare.org.uk/NMDS-SC-intelligence/Workforce-intelligence/documents/Adult-social-care-workforce-estimates.xlsx
Adult Social Care vacancy rates	Calculated in relation to the 1.26m employees in the local authority and independent sectors. 'Establishments are asked to record the number of permanent and temporary staff employed and also the number of vacancies at the time of completing the NMDS-SC. From these numbers the vacancy rates are calculated by dividing vacancies by the sum of	Skills for Care	https://www.skillsforcare.org.uk/NMDS-SC-intelligence/Workforce-intelligence/documents/Adult-social-care-workforce-estimates.xlsx

	directly employed staff and vacancies'.		
Adult Social Care pay rates	Mean annual full time equivalent and hourly pay rates relate to the 1.35 million jobs in the local authority sector and the independent sectors only. Local authority pay data was as at September 2017 and independent sector data covers the period from April 2017 to March 2018.	Skills for Care	https://www.skillsforcare.org.uk/NMDS-SC-intelligence/Workforce-intelligence/documents/Adult-social-care-workforce-estimates.xlsx
GP vacancy data	Number of full time equivalent vacancies reported open for Greater than three months.	NHS Digital	https://files.digital.nhs.uk/excel/r/p/general_practice_vacancy_tables__2015-16_to_2017-18.xlsx
Job advertisements data	The number of job advertisements on the NHS jobs website. This is a proxy for vacancies because a single advert may be used to advertise multiple roles and not all trusts use NHS jobs in the same way.	NHS Digital data from NHS Jobs website	https://digital.nhs.uk/data-and-information/publications/statistical/nhs-vacancies-survey/nhs-vacancy-statistics-england---february-2015---march-2018-provisional-experimental-statistics

Workforce Directorate

www.gov.uk/dhsc

ECITB

January 2019

ECITB Submission to MAC call for evidence on Shortage Occupation List 2018

The ECITB is submitting this response to the consultation considering the broader context of Brexit and potential impacts of restriction of free movement on existing skills shortages.

Introduction

Engineering construction is a specialised industry that underpins the delivery and maintenance of the UK's critical infrastructure. It covers the oil and gas, nuclear and renewable energy sectors, as well as major process industries, such as chemicals, pharmaceuticals, food processing, water and waste treatment. The Engineering Construction Industry (ECI) employs nearly 190,000 people and has an aggregate employment impact of around 750,000 people.

Investment in infrastructure is increasing and with it, the demand for new recruits. This includes an annual demand for 124,000 engineers and technicians as well as 79,000 related roles up to 2024 across all engineering sectors. According to ECITB research, some 91,000 engineers and 29,000 engineering technicians currently in the workforce will have retired or be close to retiring by 2026. This encompasses just under a fifth of the entire engineering workforce and nearly 18% of engineering technicians[1].

1 ECITB (2018) Engineering Today – The *supply and demand for engineers in the UK*
2 ECITB (2018) Engineering Today – The *supply and demand for engineers in the UK*
3 ECITB (2019) ECI labour market and business outlook, commissioned from Pye Tait

This means that, on average, more than 9,000 engineers and almost 3,000 engineering technicians will be retiring every year. In addition, there will be more than 233,000 retirements among the skilled trades and over 176,000 retirements among the managerial and other related professions[2].

In addition to potential manpower shortages in the future, the engineering construction industry faces skills gaps and shortages today. A forthcoming ECITB report[3] finds that almost a third (32%) of employers have experienced vacancies that are hard to fill due to insufficient applicants.

According to the same research, EU citizens (non-UK) make up just over 5% of the ECI workforce, featuring most prominently in large companies:

Table 1: Origin of workforce (by company size)

	Overall	**Micro (1-9)**	**Small (10-49)**	**Medium (50-249)**	**Large (250+)**
UK citizens	93.70%	78.00%	80.90%	67.00%	51.00%
EU citizens (non-UK)	5.30%	20.00%	14.50%	24.50%	32.20%
Non-EU citizens	1.00%	2.00%	4.60%	8.50%	16.80%

Although EU workers make up a small proportion of the industry workforce, restrictions on freedom of movement as a result of leaving the EU could have negative knock-on effects on the ability of employers to recruit and retain talent.

Impact of Brexit

Larger companies have greater concerns regarding Brexit, with nearly 37% believing that Brexit will make it harder for them to recruit workers and nearly 31% believing it will be harder to retain skills:

Table 2: Detailed impacts of Brexit (by size)

	Micro (1-9)	**Small (10-49)**	**Medium (50-249)**	**Large (250+)**
Make it easier to recruit workers	2.60%	5.40%	1.40%	8.80%
Make it harder to recruit workers	20.50%	22.10%	26.30%	36.80%
Make it easier to retain skills	-	5.10%	4.00%	12.30%
Make it harder to retain skills	12.80%	17.50%	20.50%	30.70%

Base: 816. (Multiple responses) ECITB/Pye Tait Survey, 2018.

With EU (non-UK) citizens making up almost a third of workforce in large companies, a rising Euro to the Pound and not insignificant trends of EU (non-UK) citizens returning to the continent from other shortage industries, the concerns or larger companies are comprehensible.

Any restriction on free movement of people will see a tightening of the general recruitment pool and industries competing with each other for a smaller number of new recruits. With an ageing workforce and difficulties in recruiting new workers, the ECI is likely to experience greater recruitment problems if the number of potential workers is further reduced by a new minimum earnings threshold for non-UK EU workers, as has been proposed by the Government.

Recruitment Problems

Our forthcoming report reveals that the majority of employers surveyed are concerned about the lack of suitably experienced, skilled and/or specialist workers to meet the increasing demand for engineers and related roles.

Whilst 32% of employers have experienced problems filling vacancies, a further 36% of companies have been unable to fill vacancies easily because applicants have lacked the appropriate skills.

The retirement of older staff is cited as the main reason for the skills gap, with approximately 44 percent of employers expecting their skills gaps to increase over the next three years. Along with the increasing demand for engineers, the fast-paced nature of technological advances and impact on the industry, adds additional pressure for highly skilled labour, especially in the area of STEM[4]. Net requirement projections from Working Futures 2014-2024 indicate that by 2024, 54% of the workforce will require Level 4+ qualifications. This compares with 41% in 2014[5].

Whilst the UK produces enough engineering graduates to fill demand if all engineering graduates went into engineering roles, this is not the case. The number of engineering graduates, therefore, needs to increase if demand is to be met without the help of EU (non-UK) engineers.

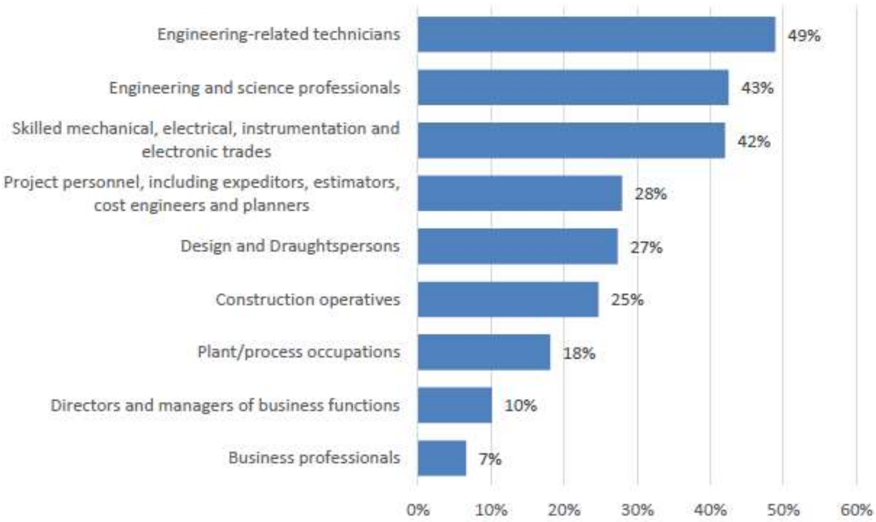
4 Engineering UK (2018) *The state of engineering* January 2019

Table 3: ECI job vacancies **Engineering construction vacancies** (past 12 months)	**Average number per company**	**No. of companies reporting vacancies**	**Total number of vacancies**
Total job vacancies	13.9	529	7378
Hard-to-fill vacancies due to insufficient applicants	9.8	264	2599
Hard-to-fill vacancies due to applicants lacking appropriate skills	10.2	295	3021

Base: 829. ECITB/Pye Tait Survey, 2018.

Engineering related technicians and engineering and science professionals feature as the top two areas where companies have difficulty recruiting:

Figure 1: Jobs difficult to recruit due to shortages of skills in the marketplace



Base: 349. ECITB/Pye Tait Survey, 2018.

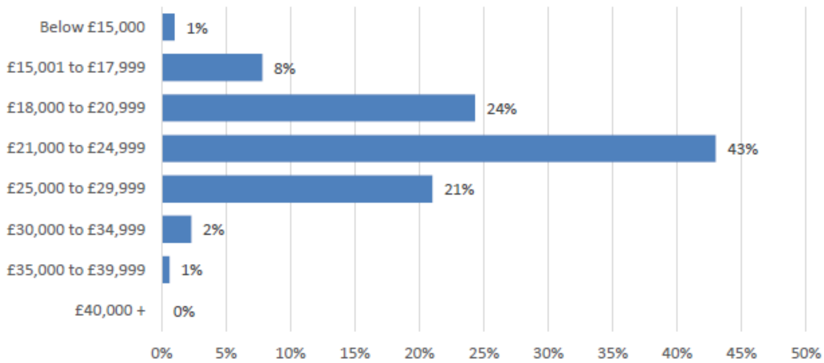
5 UKCES (2016) *Working Futures 2014-2024*

Qualitative evidence from our end of year employer forums suggests that vacancies for Welders, Planners, Instrument Control Technicians, Estimators and Mechanical Engineering trades are particularly hard to fill and constitute a skills shortage.

Graduate recruitment difficulties and salaries

The vast majority of graduates working in the ECI would not meet the Government's proposed minimum earnings threshold, with the average gross graduate salary standing at £23,253 and only 3% earning the required £30,000 or more:

Figure 2: Graduate starting salaries



Base: 309. ECITB/Pye Tait Survey, 2018.

Even larger companies who are more likely to employ EU workers at any level, will see graduate earnings overwhelmingly below £30,000, with under 6% of employed graduates earning £30,000 or more:

Table 4: Starting salaries: graduates (by size)

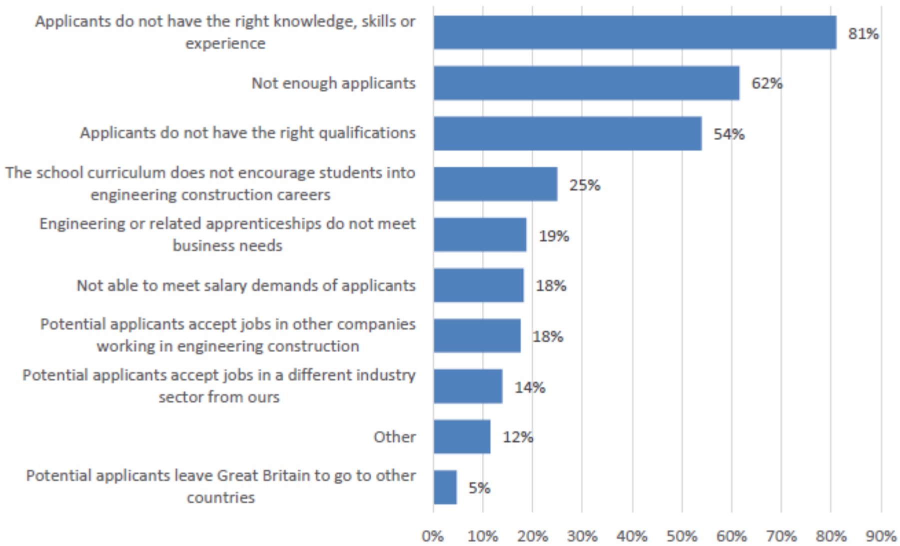
	Micro (1-9)	Small (10-49)	Medium (50-249)	Large (250+)
Below £15,000	-	-	1.70%	-
£15,001 to £17,999	6.70%	10.10%	9.20%	-
£18,000 to £20,999	20.00%	29.20%	23.50%	17.60%
£21,000 to £24,999	46.70%	40.40%	42.00%	52.90%
£25,000 to £29,999	26.70%	19.10%	19.30%	23.50%
£30,000 to £34,999	-	1.10%	2.50%	5.90%
£35,000 to £39,999	-	-	1.70%	-
£40,000 +	-	-	-	-

Base: 309.ECITB/Pye Tait Survey, 2018.

The second most cited barrier to graduate recruitment in the ECITB labour market report was insufficient availability of candidates (17%), trailing only slightly behind entrants lacking sufficient knowledge or practical skills[6].

This is reflected in reasons given for general recruitment difficulties, where a lack of applicants is given as a recruitment barrier by 62% of surveyed employers:

Figure 3: Reasons for recruitment difficulties



Base: 353. ECITB/Pye Tait Survey, 2018.

These data are particularly problematic in the light of a minimum earnings threshold. The ECI struggles to attract sufficient applicants to fill its recruitment needs and a minimum earnings threshold could deter EU (non-UK) graduates from UK universities from entering the industry in favour of higher paying industries. This is already a problem in general ECI recruitment as employers voice concerns over not being able to meet applicants' salary demands and companies losing applicants to other industries (see figure 3).

Almost two thirds of employers surveyed fear that competitors will outbid them in terms of salary. Four in ten believe there will not be enough graduates and apprentices coming through the system with right qualifications and just under a third think that restrictions on freedom of movement after Brexit will make it harder to recruit.

Table 5: Thinking ahead – factors making it harder to recruit (by size of firm)

	Overall	**Micro (1-9)**	**Small (10-49)**	**Medium (50-249)**	**Large (250+)**
Any restrictions on freedom of movement resulting from Brexit	29%	11.60%	12.70%	12.40%	14.80%
Competing infrastructure projects	29%	11.60%	10.80%	14.00%	15.40%
Competitors paying higher salaries	62%	21.70%	25.50%	31.80%	25.80%
Lack of confidence in the market	33%	21.70%	15.30%	12.20%	14.80%
Not enough graduates/apprenticeship completers with the right qualifications	40%	17.40%	19.30%	16.90%	15.10%
Staff not being prepared to travel/move for work	21%	1.40%	9.60%	9.60%	10.40%
Other	12%	14.50%	6.80%	3.00%	3.70%

Conclusions

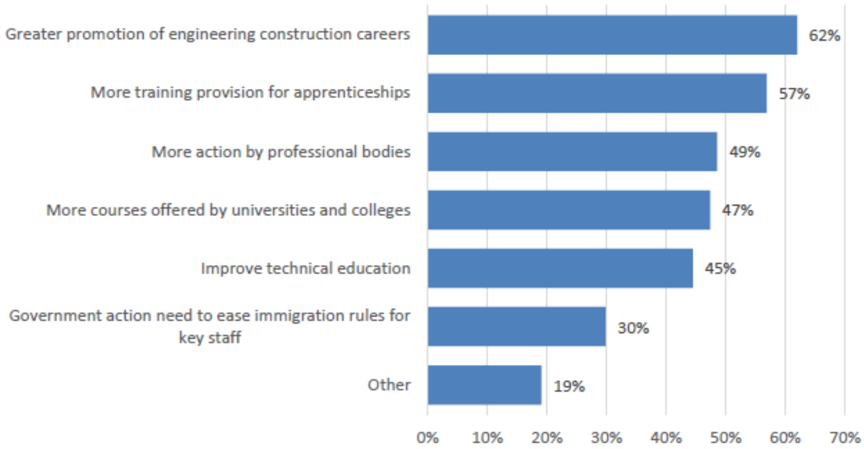
There is a consensus that more needs to be done to promote the ECI and ECI jobs to young people in the UK, improve apprenticeship and technical education provision and encourage engineering graduates to stay in the field. The results of these efforts will, however, take considerable time. Given the current shortage in workers and skills, any restrictions on employment are likely to exacerbate the problem.

When asked about how best to tackle recruitment problems, 30% of employers said that Government action was needed to ease immigration rules for key staff (see figure 4).

A minimum earnings threshold of £30,000 would restrict recruitment of EU (non-UK) graduates from UK universities as well as potential EU (non-UK) applicants from abroad at graduate level.

Currently, not enough engineering graduates enter their professional fields with evidence suggesting that higher salaries in other industries is a key factor. Creating barriers for the recruitment of EU (non-UK) graduates would not be conducive to filling the skills shortage in the short term whilst long term strategies to increase the number of applicants are being implemented.

Figure 4: Actions to tackle recruitment problems



Base: 767. ECITB/Pye Tait Survey, 2018.

About the ECITB

The Engineering Construction Industry Training Board (ECITB) is that statutory skills organisation for the Engineering Construction Industry in Great Britain. A non-departmental public body (NDPB) sponsored by the Department for Education, the ECITB works with employers and government to attract, develop and qualify the engineering construction workforce in a wide range of craft, technical and professional disciplines. Employer-led, we fund training to enhance skills across the engineering construction industry: in 2017 we invested over £30 million to the benefit of the industry.

The ECITB is accountable to Parliament and funded by a levy that it is required to collect from the industry. The levy is used to support employers to train and upskill their workforce to industry standards. We also develop qualifications and courses that meet employer needs and regulate a network of approved training providers to deliver training. The ECITB is a registered charity in England and is accredited as an Awarding Organisation by the Qualifications and Examinations Regulation (Ofqual), Qualifications Wales and the Scottish Qualifications Authority (SQA).

Education Workforce Council

1. This information complements previous evidence submitted by the Education Workforce Council (EWC) to the Migration Advisory Committee in September 2016 and October 2017.

2. Wales has not experienced the teacher shortages that persist in other parts of the United Kingdom, apart from specific challenges in recruiting to STEM subjects and the Welsh language. However, Wales is now experiencing difficulties in recruiting to teacher training programmes, with institutions failing to recruit to target for the past 4 years. This is particularly evident in the secondary phase.

3. EWC data also show that there are also challenges relating to headteacher recruitment[53] (SOC 2317), with the requirement for all headteachers in Wales to hold the National Qualification for Headship (NPQH) meaning that shortages are unlikely to be filled via the recruitment of practitioners from outside Wales or England. There are specific challenges in filling headship posts, e.g. the small salary differential between deputy and headship posts, rurality of some schools, small schools, Welsh-essential posts, and posts that carry a significant teaching commitment. This evidence also suggests there are very low numbers of applicants for headship positions, although the same challenges do not appear to apply to deputy and assistant head positions.

4. Numbers awarded recognition of Qualified Teacher Status (QTS) under the European Directive have generally been in decline over recent years with 98 awards made from 150 applications in the three years 1 April 2014 – 31 March 2017. Further interrogation of the data held on the Register of Education Practitioners highlight that of these awards, only 40 are currently registered with the EWC, but not all of these are in employment, and those that are, are not necessarily employed as teachers.

Registration data as at 18/12/2018	
Teacher	3 (Primary phase)
Learning support role	7
Pastoral role	1
Further education teacher	2
Supply (as learning support worker and / or teacher)	14
Registered with the EWC, but records show not currently employed as a teacher or other profession regulated by the EWC.	13
TOTAL	**40**

5. The EWC does not currently have the regulatory powers to recognise teaching qualifications from outside the European Union. As part of the implications of Brexit, the Welsh Government and the EWC are exploring the potential to recognise qualifications from outside the EU in future.

[53] EWC policy briefing 14 December 2017. Further information and PowerPoint presentation available from: https://www.ewc.wales/site/index.php/en/policy-hub/policy-briefing.html

6. Unlike other professional regulators, the Education Workforce Council does not currently impose any additional English language requirements for overseas applicants for recognition of their teaching qualifications under the European Directive, however, demonstrable proficiency in English language is likely to be a factor considered within recruitment processes. Furthermore, Welsh Government policy (particularly the ramifications of 1 million Welsh Speakers by 2050 strategy, and the levers to stimulate Welsh language ability embedded within the new professional standards for teachers) continues to drive demand for education practitioners with Welsh language ability which may act as a barrier to those who qualified outside of Wales in securing employment even in shortage subject areas.

Annex

Applications for recognition under the European Directive by year

Year	QTS Awarded	Not Awarded	Total Applications	Percentage successful applications for QTS (%)	Total registrant population as at 1 March each year
2003-04	5	4	9	**55.6**	37,816
2004-05	0	0	0	**N/A**	38,220
2005-06	31	15	46	**67.4**	38,479
2006-07	14	17	31	**45.2**	38,685
2007-08	20	11	31	**64.5**	38,942
2008-09	19	17	36	**52.8**	38,879
2009-10	34	16	50	**68.0**	38,896
2010-11	27	8	35	**77.1**	38,770
2011-12	50	14	64	**78.1**	38,290
2012-13	57	21	78	**73.1**	37,862
2013-14	65	31	96	**67.7**	37,673
2014-15	55	21	76	**72.4**	37,355
2015-16	24	18	42	**57.1**	36,951
2016-17	19	13	32	**59.4**	36,182
2017-18 (YTD 1 Apr - 29 Oct)	9	3	12	**75.0**	35,576
TOTAL	**429**	**209**	**638**	**67.2**	

Applications for recognition under the European Directive by country between 1 April 2018 and 29 October 2018

Country	Award	Decline	Number of Applications
Netherlands	1	0	1
Romania	1	0	1
Spain	2	0	2
Germany	2	0	2
Poland	1	1	2
Greece	1	0	1
Portugal	1	0	1
Cyprus	0	1	1
Republic of Ireland	0	1	1
Total	**9**	**3**	**12**

Farming and Rural Issues Group South-East of England (FRIGSE)

Website: *www.frigse.org.uk* [54]

Migration Advisory Committee
2nd Floor
Peel Building
2 Marsham Street
London
SW1P 4DF
1st December 2018
Dear Chairman and Committee Members,

The Farming & Rural Issues Group South East (FRIGSE) represents rural businesses and organisations across the South East of England. We are financed by subscription and our Members include: NFU, CLA, AHDB, Landex Colleges, RICS, National Trust, Countryside Alliance, Confor and independent businesses.

Many of the businesses that we represent, employ workers from countries within the European Union. These workers are an essential part of the workforce, engaged at many different levels, from basic operational and manual jobs to supervisory and management positions.

These rural businesses have a present and future need for large numbers of workers. It is no exaggeration to say that without this additional workforce; it will not be possible to fully staff many of these business operations. It will not be possible to recruit sufficient staff from amongst our local communities, as unemployment in the area is so low and there is a desperate shortage of; not only workers, but skills and basic work ethic.

If the free movement of people across the EU cannot be retained; then alternative schemes need to be put in place without delay to satisfy the needs of businesses for additional workers. As most businesses have a need for additional workers all year-round; there is a need for work permits to reflect this. Businesses urgently need to be able to give assurances to the existing and future workforce and to customers that jobs are secure and that they can deliver the goods.

In order for the businesses to have confidence in investing for the future, it is imperative that far more clarity is given to the likely shape of future trade and labour agreements with the EU and the rest of the world post Brexit. There is already evidence that investment into rural businesses is being curtailed because of so much uncertainty as to the availability of staff with the required skills (at all levels) to fill the available vacancies.

[54] REPRESENTING: Country Land & Business Association (CLA), Countryside Alliance, Agriculture & Horticulture Development Board (AHDB), National Farmers' Union (NFU), National Federation of Young Farmers' Clubs (NFYC), National Trust, Royal Institution of Chartered Surveyors (RICS), Confederation of Forestry Industries UK Ltd (Confor), British Institute of Agricultural Consultants (BIAC), Horticultural Trades Association (HTA), South East Agricultural Colleges (Landex).

Food and Drink Federation (FDF)

Consultation Questions:

Q8 - If you wish, you can provide details of individual jobs titles you/your members have found hard to fill in the boxes below (maximum of 10).

Own staff

Packaging engineers (2129)

Electrical Engineers (5241)

Mechanical Engineers (5223)

Food Technologists (2129)

Food Scientists (2129)

Shift Managers (1121)

Process/Machine Operatives (8111 – Operative, processing, food)

Packing Operatives (9134)

Butchers (5431)

Forklift Truck Drivers (8222)

The job titles above were all identified by our members as areas of shortage in our focus group and consultation with members. Other job titles with shortages identified by our members that didn't have a clear ONS occupation code were:

Automation Engineers

Crystallisation Specialists

Extrusion Specialists

Sugar Specialists

In addition, members identified the following shortages in their supply and delivery chains. Some members employed these roles in-house whereas others had noticed shortages in these roles affecting their suppliers and/or contractors (which in turn had affected their businesses):

Agronomist; Agronomist; 2112

Carpenter; Carpenter; 5315

Herdsman; Herdsman; 5119

LGV Driver; LGV Driver; 8211

Milker; Milker; 9119

Plumber; Plumber; 5314

Veterinarian; Veterinarian; 2216

Q9 - What do you think are the main reasons for job shortages, and or wider shortages in the sector(s)?

This food and drink manufacturing response, but FDF continues to work with our colleagues from across the food and drink supply chain under the Food and Drink Sector Council (a formal industry-led partnership with Government) and through the Immigration Policy Group and the Food and Drink EU-Exit Trade Association Roundtable.

Food and drink manufacturers require employees from across the whole skills spectrum in order to operate. Members identified a wide range of factors that were leading to job shortages in the sector. Some of the these were more applicable to low-skill roles, others to mid- and high-skill roles, and some were applicable across the skill spectrum.

For lower-skill, members suggested an ageing workforce combined with a shift in aspirations among the younger British workforce. People who used to do manual, repetitive roles are retiring and younger British workers have different aspirations to their older counterparts.

These shortages are being exacerbated by the decline in net EU migration. EU citizens have been more willing to take on manual roles but fewer are available for work since the recent decline in net migration levels. Food and drink manufacturers are already aware of this change exacerbating shortages significantly in their supply chain, both in farming roles and in logistics. The decline in net migration is also already impacting seasonal agency labour.

At the mid- and high- skill end, members identified the quality of STEM education in the UK exacerbating skills shortages among engineers and amongst food scientists in particular. With very little provision for food science specialisms in the UK, members often turn to Europe to recruit where there is greater provision for these subjects.

Members also highlighted a shortage of vets as a significant problem for their suppliers in the food chain. As well as there being a shortage of UK trained vets, UK vets were seen to prefer working with pets as opposed to livestock. Indeed, 90% of Official Veterinarians working in the UK are EU citizens.

Looking across the skills spectrum, members felt the industry suffered from an undeservedly poor image. This was seen as partly due to careers advice in schools promoting office jobs over jobs in manufacturing, driven by a poor understanding of what 21st century high-tech food and drink manufacturing looks like. Members also noted that British engineers were more likely to aspire to work in automotive or aerospace than the food and drink sector, despite the fact that in some instances food and drink manufacturers were using the very same robots in their sites as automotive manufacturers. Crucially, members noted that non-British engineers were less likely to see food and drink manufacturing as a poor relation, particularly amongst Eastern European engineers where the food and drink industry was held in higher esteem.

A final issue raised was the lack of public transport available to transport workers to Food and Drink Manufacturing sites that are often located away from major urban centres. This could be particularly challenging when combined with a need to work shift patterns.

Q10 - Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

Members highlighted increasing the number of apprenticeships as one way in which they have attempted to reduce shortages. Whilst there has been some success from this approach, it has also been beset by a range of problems and has by no means resolved skill shortages (see next section).

Members have also made efforts to engage with schools and universities to increase understanding of the jobs available in 21st century food and drink manufacturing, as well as the wider food chain. Members acknowledged that much of this work was siloed and company specific, though the LEAF Open Farm Sunday initiative was identified as one example that had been successful across the sector.

Members have also increased salaries to attract staff, especially in the areas of food science, logistics, digital and engineering (especially in areas where food and drink manufacturers were competing with automotive and aerospace businesses for engineers). However, this has mostly led to companies and sectors recruiting staff from each other, with limited success in increasing the overall number of workers in these areas (see Question 11 for potential reasons for a lack of interest).

FDF, in partnership with Sheffield Hallam, also sought to partially address the lack of advanced food engineering training in the UK by launching the first MEng Food Engineering degree in 2014. However, the degree programme has coincided with the changing landscape of the education sector. The increasing of tuition fees in 2012 and introduction of the apprenticeship levy have created a number of push and pull factors away from university courses. This has made it more difficult to attract students into a degree programme that was purpose built by industry to address the food and drink manufacturing shortages. Despite the large-scale support from over 40 companies and investment from industry, including paid placements, a focused recruitment campaign and a creation of pathways into the course, take up has remained low with only 4 students starting the course in September 2018. Recruitment for this course was indefinitely suspended in 2018 due to a lack of applicants (see Question 11 for potential reasons for this and Question 14 for more detail on the MEng Food Engineering programme).

Attempts to tackle the food and drink manufacturing image problem by dispelling misconceptions of the industry through a number of coordinated careers activity. These are outlined in Q14.

Automation of processes has already taken place for many food and drink manufacturers with many others currently automating. However, this is not suitable for all processes and all companies. For SMEs especially, the initial outlay to automate is often prohibitively expensive. Moreover, supply contracts in the food and drink Industry are typically short-term in nature. Therefore, the non-renewal of a contract could leave a manufacturer with an expensive piece of equipment and no order to fulfil.

Q10 -Have these measures worked, if not why?

Members highlighted apprenticeships as one route that had some success in recruiting new staff. The introduction of the Apprenticeship Levy has brought on a change in company behaviour. Companies increasingly use apprenticeships as a recruitment tool to ensure they can access new talent and fully utilise their levy money. Furthermore, as outlined above, change to the education landscape has seen a growing demand for ‘learning and earning’. Members have reported a number of positive outcomes, for example, apprentices tend to show more loyalty with higher retention rates than with graduates.

The apprenticeship landscape in 2013 was subject to a wholesale reform of apprenticeship frameworks and move to employer-led standards (further details can found under Q14). What employers need now is stability and time to embed these new standards and to work with their local providers to build high quality, food and drink specific apprenticeship training provision and build ‘critical mass’ of apprentices to make these standards viable for both the provider and employer.

The geographic spread of the food and drink industry has been challenging for high quality apprenticeship provision. Whereas apprenticeship providers for the automotive industry could locate in the Midlands where most of the automotive industry is located, it was harder for specialist food and drink manufacturing apprenticeship providers to benefit from the same economies of scale.

Members felt that the government’s move away from supporting Level 2 apprenticeships was damaging to efforts to bring new recruits into the sector, many aspiring apprentices do not have the capabilities to jump straight to a Level 3 apprenticeship.

Social norms were also seen as damaging to the food and drinks industries ability to attract STEM candidates. Aerospace or automotive engineering were often prized over food and drink manufacturing for those who go into STEM. Members believe this is driven by a lack of understanding on the part of careers advisers, schools, universities, and society more widely about the opportunities available in modern food and drink manufacturing. Members noted it was often difficult for engineers to transfer from other industries to food and drink manufacturing where there were more rigorous controls on hygiene and cleanliness around the machinery used.

Where salaries have been increased, this has had a limited impact on solving staff shortages, resulting in firms taking staff from each other rather than increasing the overall supply.

For food scientists and engineers, shortages are being driven by a lack of STEM and food science education and training in the UK. For logistics drivers, there are a range of issues including the unsociable hours and working conditions inherent in being an LGV driver. Members also noted the limited capacity for training LGV drivers in the UK and the 25-year-old age limit for an LGV license as a barrier.

Members noted that whilst some companies had been able to automate more than others, a mass move to automation was only likely to exacerbate skills shortages in different areas in the future if the UK didn’t improve its STEM education and training capacity.

Q12 - Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

No

Q13 - If know, how many workers from outside the UK have been recruited using the Tier 2 points based visa system in the past 12 months, stating the job titles.

Whilst some of our members have experience of using the Tier 2 points-based visa system, we were unable to put an exact figure on this.

Feedback from members was that the current Tier 2 points-based visa system was slow, bureaucratic, and expensive. Members were broadly welcoming of the MAC's suggestion to streamline this system in the future.

For our members whose overseas recruitment to date had largely or solely involved recruiting from the EU, there were particular concerns around engaging with the Tier 2 points-based visa system for the first time once the new system is introduced. Ensuring the new Tier 2 points-based visa system is as streamlined and inexpensive as possible will greatly help these members.

Q14 - If you have supporting evidence such as survey results from members please attach here.

In the first half of this year, the FDF will be publishing new research giving an overview of the food and drink supply chain's workforce, using both our own and official data.

Please also find attached our August 2017 report on workforce: 'Breaking the Chain: Key workforce considerations for the UK food and drink supply chain as we leave the EU'.

We also received the following case study from a member during the consultation on their use of 'temp-to-perm' recruitment and promotion:

'We have difficulties recruiting Machine Operators. These would be at RQF Level 2 or 3. These roles require the individual to set up and operate complex packing machines (including multi-arm pick and place robots) and fix minor faults. The individuals do not require any formal qualification but must have a natural intelligence and aptitude for machines and problem solving. The traditional source for these roles was our pool of Packing Operators. We would usually have been able to identify Packing Operators with potential and then train them in-house to become Machine Operators. As the difficulties recruiting Packing Operators has increased, the calibre of new colleagues has reduced, so it has become difficult to maintain our internal 'supply chain'. We have tried to recruit externally with limited success. We have tried to find a suitable apprenticeship scheme - also without success. Every provider has pushed us down the Engineering apprenticeship route but these are not engineering roles. A level 2 scheme would be more appropriate. In conversation with other local manufacturers, they are experiencing similar issues.'

Please also find below further information on the FDF/Sheffield Hallam MEng Food Engineering degree mentioned in Question 10:

Engineering is one of the most vital specialisms required to increase automation and plant reliability in our industry. However, in 2012 there was no university provision in the UK for food and drink engineering. This meant that new graduates had the qualifications but not the skills and required extensive training on the specific requirements of working in the food industry.

To remedy this, FDF and the National Skills Academy for Food and Drink came together with industry to identify a delivery body for the MEng Food Engineering. After a competitive tender process, Sheffield Hallam University was identified as the delivery partner due to its current links with the food industry, engineering expertise, student experience and ability to deliver a centre of excellence. This degree gave food and drink manufacturers an opportunity to take collective action to secure sufficient flow of highly talented engineering graduates into the food and drink manufacturing industry. Industry supported the development of the MEng Food Engineering by:

- Providing a bursary of £2.5k to new students on the course.

- Nominating specialist colleagues to participate in the working groups setting up the project, including informing the course curriculum.

- Working with Sheffield Hallam University to recruit high calibre people

- Offering a scholarship to a current employee

- Providing guest lectures

- Offering paid work placements

- Agreeing to employ Graduate Excellence graduates (subject to final references and grades)

- Working with suppliers to donate new or nearly new equipment for the Centre of Excellence in Food Engineering.

- Hosting factory visits for prospective students and current students, to give them a taster of what it is like to work as an engineer.

- Providing engineers to support events throughout the year to promote the degree.

Challenges experienced: The Food Engineering degree and subsequent pathways were developed for the industry, by the industry, and aim to create a pool of specialist engineers equipped to meet the specific needs of the sector. First entrants on the course began in September 2014. However, despite the large-scale support and investment from industry, including bursaries and a focused recruitment campaign, take up has remained low.

Industry has worked with Sheffield Hallam to find solutions. This has included a move towards a generalist first year of learning alongside mechanical engineering and the creation of more food and drink engineering modules that can be incorporated into other engineering degrees. Ultimately, despite the huge investment from companies and their continued support for the students of these course, external barriers still exist which slow the progress of the development of a future pipeline of engineers for the industry.

Food and Drink Careers Campaigns (from Q10):

Including but not limited too; presence at the Big Bang, the IFST led Food Start initiative, NCUB's Food 4.0, FDF's Taste Success campaign and NSAFD's Tasty Careers campaign. The image problem is felt right across the food and drink supply chain, initiatives that have been led by other Trade Associations can be found in Breaking the Chain.

Apprenticeship Trailblazers (from Q11):

Food and drink manufacturers were one of the first eight sectors to come together under the 'Trailblazers' group to create new apprenticeship standards (we have created 9 new food and drink specific apprenticeship standards ranging from levels 2 to 6). A major aspect of the reforms at this point were about making apprenticeships more consistent in output so that one company could take on an apprentice trained at another company and be confident that all apprentices would have the right knowledge and skills and demonstrate the right behaviours required for the occupation.

Goldstar Chefs

Call to end inappropriate government policy against UK's hospitality industry

This is an urgent plea calling on the government to amend the 'Shortage Occupation' skills criteria for non EU Specialist Chefs which is blocking the recruitment of desperately needed Chefs. Highly inappropriate and thereby unrealistic clauses within the criteria are causing severe hardship and economic damage to huge swathes of the restaurant and catering industry throughout UK.

The government claims non EU Chefs are welcome and includes them in the official Shortage Occupations list. However this is grossly disingenuous as the qualifying criteria is wholly unworkable.

The criteria defines a high skill based restaurant as a low skill 'fast food outlet' if it provides a take away facility. Practically every restaurant facilitates collection and delivery for home dining, this has been an industry norm. The trend for ordering restaurant food 'to go' has exploded in the advent of ordering apps and platforms such as Deliveroo that enable bring restaurant food to consume at home. 'Eating in' is even by offered by high end fine dining establishments, eating in is becoming the new eating out. The government has affirmed the skills criteria is only met if a restaurant serves an individually cooked to order complex dish for regular table dining. However if this restaurant serves the same expertly prepared dish for collection or delivery it falls below the skills threshold and therefore ineligible to recruit a professional non EU Chef.

The government also disqualifies other catering activities involving high culinary skills such as banqueting and bespoke events catering, as well as all forms of volume output. These are classed as 'bulk food' and 'standard fare' in spite of requiring a higher degree of skill and dexterity than a single made to order serving.

The minimum salary threshold for non EU Chefs is also a massive inhibiting factor. Other than in high end Central London restaurants, £29,570 is wholly unworkable for almost every other region in UK. The average salary* for the most in demand position of Chef De Partie / Specialist Chef is between £23,000 and £25,000 (the figure for Central London is £25,000). A Head Chef post ranges between £25,000 and £28,000 outside Central London. (*salary figures obtained from Caterer.com as at October 2017)

The restrictions to accessing non EU Chefs are wholly fallacious and unrealistic, and are thwarting the sustainability let alone potential growth of UK's hospitality industry. These restrictions were immigration policy devised by Home Office following consultation with Migration Advisory Committee (MAC) and duly sanctioned by the government.

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The MAC is a government sponsored economic and social migration policy advisor to the Home Office. They are made up of labour market experts and economists.

At its inception the 'shortage occupation' criterion was an alternative to the resident labour market test which enabled recruitment without this process. Most non EU recruitment continued under pre rule changes as many Chefs were unaffected by evolving restrictions. However by 2016 Chefs entering before April 2011 gained settlement and many exited the market. In spite of labour market transitions and commercial expansion, skill shortages intensified, but Home Office maintained these restrictions seemingly to force greater engagement with what was wrongly perceived as vast pool of skilled workers within UK and EU. The current skills equation has been retained as a blunt immigration control instrument and is causing abject misery and disruption.

There is now an urgent need for Home Office to address this highly contentious and wholly unrealistic ruling which is needlessly damaging a colossal multi billion pound SME section of the economy in the name of outmoded migration politics. It is causing chaos and crisis to specialist skill based establishments whose plight is now compounded by pre Brexit drain of EU workers.

The government repeatedly cites 'undercutting of wages' as justification for non EU skills control. The reality is employers are being forced to reign back on growth and development due to the lack of interest in spite of high salary offers. Circumstances out with employers control undermine efforts to recruit UK workers. The gig economy has lured thousands of hospitality workers, including many Chefs into lucrative income opportunities with the likes of Uber and Amazon. Parts of the catering industry has been a long standing gig economy luring many from salaried employment to working 'off the books' unregulated employment, or below the tax threshold and enabling access to state income into the bargain.

Highly prohibitive policies against non EU skilled workers are inadvertently sustaining the black economy, and placing an ever increasing illicit burden on the welfare state, whilst depriving the treasury of additional PAYE and VAT revenue. The government is inadvertently aiding the 'undercutting' of lawful employment by subsidising and cushioning unregulated employment.

The main component in every hospitality establishment is the experienced Chef whose craft has taken years to develop and hone and whose skills can be imparted to junior ranks. There is a serious misunderstanding and misconception of skill deployment. Please see following extract of immigration rules governing the recruitment of non EU Chefs.

Extract from Appendix K of immigration rules (as at 7th April 2016)

SOC Code 5434 –

Skilled chef where the pay is at least £29,570 per year after deductions for accommodation, meals etc; and the job requires five or more years relevant experience in a role of at least equivalent status to the one they are entering; and the job is not in either a fast food outlet, a standard fare outlet, or an establishment which provides a take-away service; A fast food outlet is one where food is prepared in bulk for speed of service, rather than to individual order. A standard fare outlet is one where the menu is designed centrally for outlets in a chain / franchise, rather than by a chef or chefs in the individual restaurant. Standard fare outlets also include those where dishes and / or cooking sauces are bought in ready-made, rather than prepared from fresh / raw ingredients.

Muddled and contradictory wording has enabled government an opportunity to target virtually the entire catering industry by defining it as ' fast food outlets'. The Home Office interpretation of Chef rules are causing confusion, chaos and hardship to those affected. Chef's work visa applications are being refused and many sponsors have felt 'criminalised' by sponsor licence revocations. There are thought to be approximately **500** (possibly double this number) Chefs currently facing deportation as a result.

Access to non EU Chefs only requires a few modifications to present rules, specifically removal of the following restrictions;

Rule 1. – No take away or delivery - This is wholly unrealistic and impractical as virtually EVERY quality / high end establishment facilitates home dining

Rule 2. - No 'Bulk food' production – This is seriously impacting the event catering industry, buffet restaurants, central kitchen and producers of specialist cultural food products

Rule 3. - Unrealistic minimum salary threshold - £29,570 is fine for London weighting but is not viable for the vast majority of businesses for rest of UK. A realistic min figure for Chefs of primary need i.e. Chef De Partie / Specialist Chef should be between £20,000 to £23,000. Sous Chef / Head Chef - £23,000 to £25,000 to £28,000 depending on location and employer

There is an undeniable shortage of skilled specialist Chefs within the UK and EU labour market, and thereby unavoidable need for non EU Chefs to fill immediate vacancies, and to enable training and cultivation of home grown Chefs.

Whilst dedicated culinary or 'curry colleges' have a supporting role they are not capable of producing adequately skilled Chefs to address immediate skill needs. A lack of experienced craft Chefs means there's no trainers in these 'colleges' to train anyone, not to mention the lack of interested trainees. In any case culinary training is prolonged needing long term retention of students which itself can be a challenge. A skilled Chef only becomes a skilled Chef through years of practical work experience, which requires expert Chefs trainers.

Goldstar Chefs are working on creation of 'national curry apprenticeship' programme and will provide training frameworks for generating home grown Chefs through on site skill development and experience. We aim is to attract and train as many people as possible from the resident market to fill majority of nationwide vacancies but this will require the aid of experienced imported Chefs to cultivate a new generation of home grown Chefs.

Global cuisine makes up one the largest sections of UK's booming £multi-billion hospitality industry. However the sustainability and growth of an estimated 20,000 speciality restaurants and catering organisations is being stifled by obstinate and misplaced government policy. This policy purposely distorts the skills equation to meet net migration targets. The criteria for non EU employment is flawed, injurious and outmoded in today's UK booming leisure economy. Practically every town and city in UK is affected. The profession is not viewed with reverence by the indigenous labour culture in spite of attractive rewards and prospects.

Hospitality and foodservice is a major part of UK's economy but the indigenous labour market is by and large irreverent, this is evident by huge amount of Europeans who make up the majority of the workforce. However the current pre Brexit mood and the low pound is now driving away Europeans which further rationalises the need for skill based migration from outside EU.

From our work in addressing these issues I suggest the following six areas for focus and redress;

#Area 1 – The rules and the effects

- Under the official shortage occupation criteria a specialist Chef is deemed to have the necessary skill level <u>only</u> if he or she produces a single portion complex dish
- Home Office has defined collection and delivery of skilfully prepared restaurant food, event catering and centralised preparation of complex cuisine as 'fast food' standard fare and bulk food thereby not having high level culinary expertise or complex skills input.
- Collection and delivery is an integral part of a restaurant's business, and a sub industry in itself. However Home Office claim take away services are NOT historically associated with high quality restaurants, even though this vital function has always been a mainstay in just about every quality restaurant in the land since the beginning of time
- There are but a handful of restaurants in UK, mainly in Mayfair and Knightsbridge that currently meet criteria. Till now these have remained dine in only, however even they have succumbed to demand for dining at home driven by ordering apps and gig economy delivery systems. The government's 'take away clause' is outmoded for today's restaurant industry

- Restaurants that provide buffet dining, banqueting or other catering services are deemed to have insufficient skill needs as this is crudely referred to as 'bulk food'
- High end event caterers and / or restaurants that provide large scale dining are also ranked as low skilled (bulk food), in spite of processes deploying higher skill and dexterity than in a single made to order dish Specialist business such as 'Asian sweet centres' in high concentration Asian populous parts of UK that mass produce highly complex intricate cultural fare in are in crisis due to being denigrated as low skill 'bulk food'. A Brexit led hospitality industry is simply unsustainable, let alone grow, without immediate skill ready professional chefs from the rest of the world
- Appendix K of immigration rules (as on 7th April 2016) governing SOC code 5434 is unfit for purpose, it is inherently ambiguous, confusing and misapplied in many instances (see extract below)
- The Shortage Occupation rules are in fact being **UNLAWFULLY** applied because it states "*.......made to order complex dish prepared from scratch using fresh raw ingredients....*" It also cites that a menu should be designed by the Chef or Chefs in the individual restaurant. Every restaurant offering a collection or home delivery meets the above criteria
- For more on this see www.goldstarchefs.co.uk www.goldstarchefs.co.uk/campaigns/

Area 2 - The damage

- There has been misapplication and inconsistencies in Home Office decision making.
- Restaurants are being stripped of their sponsor licences and robbed of their Chefs
- There are estimated to be between 500 and 1000 (non EU) skilled Chefs facing deportation due to decision inconsistency and retrospective penalisation
- Adverse shortage occupation criteria is 'criminalising' essential Chef recruitment
- Employers are forced pay to excessive tax free wages to mostly resident Chefs who are exploiting skill shortages
- The shortage of Chefs has spawned a transient casual employee culture unwilling to engage in formal gross salaried employment due to ease of access to state income.

- From our experience both as a recruiter and immigration practitioner the majority of newly settled workers pursue unregulated employment immediately upon gaining settlement. They resign without notice from the employer who has pledged continuity of employment at the salary level that enabled settlement approval in the first place.
- Settlement granted to former Tier 2 migrants associated with the catering sector has caused dramatic displacement of skilled labour from lawful employers
- It is entirely wrong and unjust for lawfully operating businesses to be unfairly disadvantaged by (tax payer subsidised) unregulated employment inadvertently cushioned by government policy against non EU recruitment
- The industry is also suffering a serious authenticity and skills erosion, and thereby plummeting food quality due to a lack of ability and professionalism
- Many establishments are fearful of decline in health & safety and food safety standards. Poor literacy, non-adherence to quality practices among resident Chefs is a risk factor
- The blockade and retrospective removal of fully salaried non EU Chefs denies treasury of taxes. It also inhibits business sustainability growth and development which denies the treasury of millions in additional VAT income
- Confusion, vagueness and ambiguity over right to work is inadvertently placing lawful businesses at risk as desperate employers are forced to make uninformed choices and compromises
- Vicious circle of chronically overstretched and under resourced businesses wandering into risk based employment due to punitive migration policies.
- Most business owners and operators are at breaking point due to;
    - Stress and overwork
    - Potential danger to mental and as well as physical health
    - Unable to deliver customer satisfaction and function effectively
    - Family and work life balance in turmoil
    - Unable to grow and develop
    - Unable to partake in training & skills development programmes having no proper skilled Chefs on board to facilitate this
    - Worry and uncertainty about future sustainability of livelihood

- The Asian restaurant sector is viewed as 'high risk' and subjected to the infamous 'hostile environment' policy. Counterproductive ill-judged decision making is wreaking havoc!

Areas - 3 Changes needed on both sides

- The Home Office should HALT its onslaught on legitimate use of Tier 2 sponsorship within the hospitality industry. The Home Office must apply realistic, fair and sensible parameters in both the skills measure and salary thresholds

- The current entry salary level for the elevated Tier 2 skills threshold (NQF level 6 is £25,100), (this applies to many highly skilled professions), the minimum salary level for incumbent Tier 2 at this level is now £30,000, the shortage occupation salary threshold of £29,570 is both unrealistically high and unworkable. The minimum threshold ought to be in the range of £20,000 to £25,000, a higher salary would be paid anyway for London and high cost residential areas. Accommodation allowances should be allowed in package

- Instead of pursuing licence revocations, the Home Office ought to help employers gain a better understanding and harnessing of rules, rules also need to be realistic and fair

- There needs to be proactive engagement and closer co-operation with the business community instead of the deeply aloof and contempt laced culture, and the two way demonisation that results

- The sponsorship route should not be viewed as a primary means of fulfilling staff needs, this should be a temporary route for sourcing for specialist culinary craft, and should be conditional to deployment of a training and skills development programme, which Goldstar Chefs can facilitate

- Importing highly skilled Chefs should be a short term measure to aid long term skill development within resident labour market

- Only proven skilled professionals should be eligible for entry into UK for specialist deployment, and not to be filling posts that can realistically be filled within resident market

- Calibre and quality of international Chefs must be paramount. Goldstar Chefs would provide robust skill vetting and credibility.

- The Asian restaurant community must distance itself from the notion of importing low skilled workers under high skilled based routes

- Ethnic culinary skilling and employment must be open to the wider community and not be kept ethnically exclusive.
- Micro businesses may not meet requirements for sponsor licensing nor find it economically viable to import Chefs. However they should position themselves by adopting required standards of employment & HR practices. This will enable them gain partial access to Chefs through 'supplementary employment' in cooperation with a main sponsor without needing to be a sponsor licence holder.
- See http://www.goldstarchefs.co.uk/sponsor-licensing/ and read all about sponsor licensing for your industry sector.

Area 4 - The importance of proper representation

- It is vital for mainstream national business support organisations, chambers of commerce, MP's celebrity Chefs and foodservice media to press the government for urgent removal of punitive restrictions

Area 5 - The importance of getting it right!

- The industry must get the message right,
- Imported skilled labour should not be viewed as primary means of fulfilling staff needs
- In house training to create home grown Chefs must be evident
- Goldstar Chefs are engaged in aligning with apprenticeship programmes, and devising wider skills development frameworks, both in UK and overseas
- There is an URGENT need for removal of unrealistic and outmoded restrictions to take off the pressure
- Goldstar Chefs seeks to be recognised as a reputable gateway, as well as gatekeeper for access to non EU skilled Chefs

Area 6 - Proposals for getting it right!

- Acceptable ratio/ quota of established full time domestic employees to non EU
- Non EU labour to fulfil specialist skills needs based on realistic skill parameters and a robust inclusive employment hierarchy
- Importing skills to be linked to evidence of in house training systems in place eg. apprenticeships
- Acceptable standards of trading and employability ie. VAT registration, accounts, min trading period or sufficiently capitalised if new
- Realistic median salary levels
- Removal of immigration skills charge (ISC)
- Funding to access to wider skills development frameworks, both in UK and overseas
- IMMEDIATE removal of unrealistic and outmoded restrictions to take off the pressure
- Automatic right to apply for settlement should be excluded, the Tier 2 skilled worker system should be a temporary route only, at least in the first 6 years duration
- Future indefinite leave to remain should not enable immediate entitlement to state income, ILR status should be subject to immigration control albeit lesser
- Consultation with relevant experts in Tier 2 (General) pertaining to the hospitality industry, on design, parameters and implementation of Tier 2 system.

I invite your comments and ask for your help to gain resolve to what is a crisis of common sense and realism!

Imperial College London

Migration Advisory Committee: Shortage occupation list 2018

Response from Imperial College London

This submission responds to the Committee's call for evidence on occupations at Regulated Qualification Framework (RQF) level 1 and above to ascertain what potential national shortages there may be within the UK if specific recommended policy changes are implemented. It focuses on specific staff groups at Imperial College London.

Summary
1. Imperial College London's mission is to achieve enduring excellence in research and education in science, engineering, medicine and business for the benefit of society. Our immigration system needs to allow us to continue attracting the best academic, technical and operational staff.

2. We would be greatly concerned by the potential impact of a reduction in the number of international staff able to take up academic and non-academic positions at Imperial.

3. The Migration Advisory Committee (MAC) recommendation[55] for the post-Brexit immigration system to open the Tier 2 work route to roles skilled to RQF 3 and above would not be sufficient to meet the College's skills needs, in particular if the salary threshold and cap on visa numbers continued to apply.

Occupations at RQF Level 1 and above at Imperial

4. Imperial is a world leading university[56] with the greatest concentration of high-impact research of any major UK university.[57] Maintaining world-class research and teaching across STEMB disciplines depends on our being able to attract and retain academic, technical and support staff.

5. The staff groups most dependent on recruiting international staff are Academic & Research and Operational Services roles (60% and 48% respectively), followed by Learning and Teaching (31%) and Technical Services (27%). Operational Services are particularly reliant on EEA migration (37%).

[55] 1 Migration Advisory Committee, EEA migration in the UK: Final report, September 2018
[56] 2 World University Rankings by Subject, Times Higher Education (2015-16)
[57] 3 See Imperial has UK's greatest research impact, finds REF 2014 (December 2014)

Table 1: Staff by Nationality within Staff Groups				
	EEA	Non-EEA	UK	Total
Academic & Research	34%	26%	40%	100%
Clinical Academic	13%	3%	84%	100%
Clinical Research	16%	13%	71%	100%
Learning & Teaching	21%	10%	69%	100%
NHS Nurses	16%	9%	76%	100%
Operational Services	37%	11%	52%	100%
Professional Services	12%	8%	80%	100%
Technical Services	18%	9%	73%	100%
TOTAL	**23%**	**16%**	**61%**	**100%**

6. We have undertaken a high-level analysis of our staff groups to match them to RQF-levels:

- The vast majority of Academic & Research staff are skilled to PhD level and meet RQF level 6. Teaching Fellows in the Learning & Teaching staff group and sessional language teachers in the Professional Services staff group may also meet these requirements.
- Technical Services roles such as Research Technicians and Laboratory Technicians are generally skilled to RQF Level 3.
- Operational Services roles such as catering, cleaning, estates, residential services, security, and sports would all fall within the lower skilled RQF Levels 1 or 2 except for certain managerial roles which may be skilled to RQF Level 3.
- Within Professional Services there are large numbers of administrative and professionally qualified staff who either support academic faculties and departments or the College as a whole. Except for specialist and senior roles in areas such as Finance, HR, IT, Registry and Student Recruitment which may meet RQF Level 6 requirements, a substantial proportion of these roles may only meet RQF Level 4 or 3.

7. Between 2012 and 2018, the overall number of College staff increased by 14%. The percentage growth in numbers was the same for EEA and non-EEA nationals, followed by UK.

Table 2: Staff Numbers by Nationality 2012 -2018				
Academic Year	**EEA**	**Non EEA**	**UK**	**Total**
1st August 2012	1684	1033	4481	7198
1st August 2013	1800	1043	4623	7466
1st August 2014	1930	1161	4805	7896
1st August 2015	2000	1169	4984	8153
1st August 2016	2080	1175	5016	8271
1st August 2017	2084	1204	5033	8321
1st August 2018	2021	1242	4952	8215
Difference 2012 - 2018	337	209	471	1017
% change 2012 - 2018	20%	20%	11%	14%

8. For Operational and Technical Services roles, where the College is particularly reliant on EEA nationals to fill vacancies, the Committee's current recommendations to extend Tier 2 (General) to be open to all jobs at RQF3 and above would likely not be sufficient for the College to meet its skills needs, in particular if the current cap and salary threshold as well as the complexities of the current system are maintained.

9. At the same time, the College's ability to recruit sufficient UK nationals to Operational and Technical Services roles based on the skills and labour available in the domestic labour market is limited. Whilst we cannot easily provide evidence on availability of UK candidates from our current recruitment processes, we are confident that if we only had a UK resident labour market to draw from, there would be both strong competition for candidates and most likely a shortage of sufficient quality candidates.

Independent Age

Migration Advisory Committee Call for evidence: Shortage occupation list review 2018 December 2018

About Independent Age

We offer regular contact, a strong campaigning voice and free, impartial advice on the issues that matter to older people: care and support, money and benefits, health and mobility. A charity founded over 150 years ago, we are independent so older people can be too. For more information, visit our website www.independentage.org
Registered charity number 210729.3

Introduction
Independent Age welcomes the opportunity to submit evidence to the Migration Advisory Committee's call for evidence on the shortage occupation list. We have answered questions outlined in Annex B of the consultation document, as these best reflect our role as a representative in the charity sector. We have answered only the questions relevant to our research and expertise, in this case relating to the adult social care sector.

In summary, our recommendations for the shortage occupation list are as follows:

- We believe that skilled care worker roles, including senior care worker, should be included in the current Migration Advisory Committee's Tier 2 shortage occupation list.
- We further believe that non-EU migrants who have entered the care sector through Tier 2 should be exempt from the £30,000 minimum income threshold.
- We recommend that Tier 3, for low-skilled workers filling temporary labour shortages, be opened up for care workers in order to help the sector meet immediate staffing needs.

Q3. What do you think are the main reasons for job shortages and/or wider shortages in the sector(s)?

The adult social care workforce is under considerable strain. In 2017, the number of adult social care jobs in England was estimated at 1.6 million, an increase of 1.2% between 2016 and 2017[58]. Despite this increase, the vacancy rate in adult social care was 8% - equivalent to around 110,000 vacancies at any given time. The majority of these vacancies were care workers. This vacancy rate of 8% compares to 2.8% for the UK labour force as a whole[59], and represents a 2.5% rise since 2012/2013. In 2017/18, staff turnover rate in adult social care was 30.7%, equivalent to around 390,000 leavers in the previous 12 months.

Challenges to staff recruitment and retention are one of the key reasons for job shortages in adult social care. The majority of care staff are female, with an average

[58] Skills for Care, 2018. The state of the adult social care sector and workforce in England.
[59] ONS, 2018: UK labour market: November 2018.

age of 43 years old, and a quarter of workers aged over 55[60]. Growth in the so called "working age population" is going to slow, which will likely make it harder to recruit from traditional sources.

Furthermore, care work is generally perceived as low paid 'feminine' work, which makes recruitment from other sections of society difficult.

Restrictive immigration policy has a negative impact on social care recruitment. The adult social care sector has greater reliance on non-EU workers than on workers from the EU. In 2017, there were around 233,000 jobs in adult social care held by people with a non-British nationality, with 8% of jobs held by EU nationals and 10% by non-EU nationals[61].

Social care wages remain relatively low, which can make it an unattractive industry for UK-born workers to join. In 2018, over 500,000 jobs[62] in social care were paid below the real living wage[63]. Low pay inevitably results in the sector struggling to recruit and retain workers. It also leads to a dependence on migrants who may have fewer work opportunities.

London and the South East of England have particularly high concentrations of migrant care workers. Independent Age have previously identified that 3 in 5 of London's care workforce are born abroad, and approximately 9 in 10 of its migrant care workers come from outside of Europe[64].

Despite this reliance on migration for staffing, care workers do not currently appear on the Tier 2 shortage occupation list. In 2016, Independent Age carried out projections of future migration scenarios, finding that continued staffing issues and low net migration could result in over one million fewer care workers by 2037[65].

The issues outlined above are further constrained by long-term underfunding of social care, with adult social care services facing a potential a funding gap of £1.5 billion in 2020/21 and £6 billion by 2030/31[66] at current prices, despite almost 5,000 new requests for adult social care daily in England[67].

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[60] Skills for Care, 2018.
[61] Ibid
[62] Institute for Public Policy Research, 2018. Fair Care: A Workforce Strategy For Social Care
[63] The real living wage is a voluntary rate set by the Living Wage Foundation based on the amount needed to meet the real cost of living. In 2018/19, the real living wage was £10.55 in London and £9.00 across the rest of the UK.
[64] Independent Age and International Longevity Centre (ILC), 2015. Moved to care; the impact of migration on the adult social care workforce.
[65] Ibid
[66] The King's Fund, 2018. A fork in the road: next steps for social care funding reform.
[67] NHS Digital, 2018. Adult Social Care Activity and Finance Report, England - 2017-18.

4. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

As outlined above, non-EU migrants account for the greatest proportion of migrants working in care, yet face highly restrictive immigration policies. While some care providers may be able to recruit from the EU in the short term to fill any workforce gaps, there remains uncertainty about how immigration will operate after the UK leaves the EU.

According to the Government's "*EU Settlement Scheme: statement of intent*", the rights of EU citizens living in the UK will not change until after 31st December 2020[68]. Figures from Skills for Care show that 21% of workers with an EU nationality already have British Citizenship[69]. They also show that 50% of EU workers arrived in the UK either in or prior to 2015, and therefore may have gained the five years continuous residency required for 'settled status' by 2020. The remaining 29% of EU workers will be eligible for 'pre-settled status.' We note that a forthcoming pilot of the EU settlement scheme[70] will allow workers in the health and social care sector early access to secure their settled or pre-settled status, which we welcome.

Under this scheme, EU workers currently working in adult social care should be able to choose to continue to work in the UK provided that they remain living in the UK and do not have any criminal convictions. However, it is still unclear how immigration will operate after the UK exits the Union. While it has previously been assumed that any need for lower-skilled labour can be fulfilled by workers from within the UK and EU, significant risks to the care workforce could remain depending on potential restrictions to EU migration.

We note that the temporary exemption of all doctors and all nurses from the Tier 2 cap was made permanent in 2018[71]. Given the staff shortages in the social care sector, we believe there is a good case for skilled care worker roles to be included in the Tier 2 shortage occupation list.

5. Have these measures worked, if not why?

Ongoing uncertainty around post-Brexit immigration rules means it is unclear whether the EU Settlement Scheme will avoid further stretching of the care workforce.

6. Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system? (Yes/No answer).
No.

7. If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.
Currently the only route into the UK for non-EU migrant workers is via Tiers 1 and 2 – for "high value" or skilled migrants. However, the vast majority of migrant care workers would not come under either of these headings. As such, it is likely that no social care

[68] Home Office, 2018. EU Settlement Scheme: Statement of intent.
[69] Skills for Care, 2018
[70] HM Government, 2018. EU Settlement Scheme. Pilot: Important information for EU citizens in the UK.
[71] Home Office, 2018. Doctors and nurses to be taken out of Tier 2 visa cap.

workers have been recruited using the Tier 2 system in the last 12 months, with the exception of registered nurses.

We believe that skilled care worker roles, including senior care worker, should be included in the current Migration Advisory Committee's Tier 2 shortage occupation list.

Under this option, an exemption for non-EU migrant care workers working in specialist roles could be built into the current framework for Tier 2.

Furthermore, **we believe that non-EU migrants who have entered the care sector through Tier 2 should be exempt from the £30,000 income threshold.** The alternative approach is to lower the income threshold for the sector, but this is still likely to result in some workers falling below the threshold despite being high skilled and providing socially useful roles.

9. If you have any other information that might be useful for our call for evidence please use the space below to explain:

Previous reviews of the shortage occupation list have considered a wide range of healthcare practitioner roles with an older persons remit, including geriatric and old age psychiatry posts, but not social care workers. In recent history, the Shortage List has included a series of roles related to the health sector, such as "social worker working in children's and family services", or "specialist nurse working in neonatal intensive care units", but no specific attention was devoted to care services for older people. Indeed, since 2011 senior care workers or social workers have been removed from the Tier 2 shortage list.

Our main interest is ensuring we have the social care workforce our ageing population needs. We are concerned that there is a significant risk that restricting Tier 2, and raising salary thresholds, could act as a further obstacle to providers as they look to secure the professionals and managers they need in the future. With non-EU migrant workers making up such a significant proportion of the overall adult care workforce, it is clearly important that the Government gives regard to their vital role in the labour force.

We note that Tier 3, through which non-EU low-skilled workers are able to enter the UK labour force, is currently closed – indeed it has never been opened. This limits the extent to which non-EU migrants can enter the social care sector. Because the shortage occupation list currently only includes skilled migrant labour, there is no equivalent path for low-skilled non-EU migrant labour despite the reliance of the social care sector on it.

We therefore recommend that Tier 3, for low-skilled workers filling temporary labour shortages, be opened up for care workers in order to help the sector meet immediate staffing needs. Depending on final decisions around EU-migration post-Brexit, this could also potentially provide an additional pathway for EU-migrants working in social care in future.

Independent Care Group

Sent by email to MAC@homeoffice.gov.uk January 2019.

Dear Migration Advisory Committee,

The Independent Care Group [ICG] is a Membership organisation representing independent care providers across North Yorkshire and York as well a contributing to National debates.

Workforce recruitment and retention is a key issue for our Members and one with the potential ‘No Deal’ Brexit is increasing concerns and uncertainty for the future.

We have been made aware of your ‘call for evidence’. Had we been aware of this sooner, our preference would have been to have engaged our Members in the discussions so we could provide detailed evidence and research findings under Annex B ‘residential & social care’.

We have brought this to the attention of our Members and encouraged them to respond direct but this is the busiest time of year and with winter pressures and a whole raft of other consultations on-going plus now preparing for a no deal Brexit, we do not believe this has been a priority for them.

However, workforce is one of the sectors biggest priorities and risks along with fees and investment. We would therefore appreciate it if you could take into consideration our comments below and let us have details of the stakeholder events that are planned so we can ensure that the independent care sector have a voice.

Qualified nurses continue to remain difficult to recruit and retain in the sector and often are pulled into the NHS where pay rates can be greater. With the significant loss of EU nationals from the NHS we are increasingly seeing more demand for nurses and increased difficulties recruiting into our sector.

Care workers are the biggest risk. The ICG and others have campaigned for these essential workers to be classified as such and deemed as skilled workforce. Without care workers, the much needed home and domiciliary care in the UK could not be provided. Eligibility is threefold:

a) Evidence that national shortages cannot be filled from within the domestic labour market
b) Skilled to the required level set by the Home Office

c) Demonstrate that it is sensible seek to fill vacancies with migrant labour.
a) Evidence of shortages.

As set out in the Key findings for adult social care report published by Skills for Care in September 2018:

• The vacancy rate averages around 8.0% or approximately to around 110,000 vacancies at any given time.
 o The majority, 70% of these vacancies (76,000) are care workers.

• Staff turnover rates were 30.7% this is equivalent to 390,000 leavers in one year o 67% these leavers move to other roles within the sector so are not new appointments.
 o 33% leave the sector

• A quarter of the workforce (25%) was on a zero hours contract (335,000 jobs). These are not roles, which are attractive to domestic recruitment.

• A fifth of all workers (320,000 jobs) were aged over 55 years old. Added to the existing staff turnover rates this is potentially a big concern for the future.
 o The average age of the adult social care workforce is 45 – recruiting young British into the sector is proving a challenge

• The majority (83%) of the adult social care workforce is British. It is slightly higher at 92% in Yorkshire & Humberside. However there is shared concern of the secondary effects of Brexit across the region, with a predicted increase in hospitality and retail vacancies which pay higher than the national living wage and can therefore attract workers out of the adult social care sector.
 o Almost one in 5 workers have an EU or non-EU nationality with the split broadly even, 9% and 10% respectively. We are encouraging our Members to support their colleagues with the EU Settlement Scheme however given 82% of the workforce is woman, we are aware from anecdotal evidence that many of the EU and non EU workers are here with their family therefore their right to Settled Status may be influenced by a family member.

There has been a 1.6million increase in the number of people working in adult social care since 2009. By 2035, it is forecast that a further 59% growth or 950,000 roles will be needed to respond to demand. Given the sector has 8% vacancies at any one time and annual staff turnover of 30.7% it is clear from employment and education trends that this demand cannot be met solely from the domestic workforce.

b) Skilled

The Home Office continue to align skill to salary level. The ICG have campaigned and raised concerns about this. Our workforce needs to be trained and able to work at a specific highly regulated level yet the salaries are restricted by the social carefunding regime, which for care workers predominantly limits this to the national living age at most.

Sensible to fill vacancies with migrant labour

We believe we have summarily evidenced that there is a strong economic need to include care workers, registered managers as well as nurses on to the SOL occupations. Even if current EY & non EU migrants stay, the aging workforce, the continuing turnover and vacancies added to expected rising demand for servi9ces over the next 10 years, means that the sector is potentially heading to a workforce crisis should certain roles not start to be considered as in shortage.

We hope you find this summary useful. We would welcome the opportunity to meet you to discuss this further, to attend the Stakeholder events and if beneficial, we would work with or members to conduct research to better understand and evidence the workforce issues and possible solutions.

Thank you for taking the time to read our response to your Call for Evidence

Monaghan Mushrooms (Post-consultation follow up)

The Mushroom Industry's Access to Labour Challenge

A Briefing Paper

January 2019

KEY MESSAGES

Access to EU and Non EU labour critical: Although not finalised the government's post-Brexit immigration policy looks set to deny mushroom growers access to a dependable, flexible and productive workforce.

Threat to the survival of the UK mushroom industry: Facing severe labour shortages the UK mushroom industry will become less competitive with the result that businesses will downsize or relocate abroad.

Deteriorating trade balance: Despite growing domestic demand and a widely expressed desire by retailers and consumers for home grown mushrooms, if these labour shortages are not addressed the UK will be more dependent on imports to satisfy domestic demand**.**

A Sectors Based Scheme (or similar) is vital: In order to meet the particularly demanding needs of mushroom growers a scheme similar to that in force up until 2013 is needed. The basis must be a sector's distinct needs, rather than inappropriate attempts to distinguish between skilled and unskilled labour. The Shortage Occupation List should be widened to include jobs that are proving difficult to fill from local sources.

Reduce the £30K threshold: This arbitrary remuneration level destroys the UK mushroom sector's competitiveness. Access to labour identified through the SOL should be possible in a controlled manner outside the UK at more realistic remuneration thresholds.

SUMMARY

Growing demand: The UK mushroom market – retail, food service and ingredients – is currently valued at more than **£670mn**. The market is growing at around **3** per cent per year driven by increasing consumer interest in healthier, plant based diets.

Imports: the UK imports more than **50** per cent of the mushrooms consumed, despite a widely expressed desire by UK retailers and consumers for home grown mushrooms.

Earnings: Mushroom pickers are paid on a piece rate system whereby earnings rise in line with a progressive performance bonus linked to productivity. Entry level harvesters earn at least the National Living Wage (NLW) during 12 weeks of training and after 26 weeks, on average, hourly earnings generate gross earnings of **£424** a week (£22,000 per year). As skill and experience increase so does the bonus allowing top pickers to earn in excess of **£13/hour** - some two-thirds higher than the adult minimum NLW generating gross earnings of more than **£520** per week (£27,000 per year).

Labour shortages: The mushroom sector is reliant on foreign nationals managing and operating individual farm businesses that also employ several hundred harvesters. The former are well educated, computer literate individuals responsible for many aspects of running a business including organisation, communication, motivation, succession planning, recruitment and training. Since the referendum net migration from citizens of the EU fell by **60** per cent and the mushroom sector located in rural areas, where unemployment at **2.7** per cent amounts to full employment, has been unable to recruit sufficient workers to meet its needs.

Labour skills: In rural areas only **14** per cent of the population is the same age profile as the majority of mushroom pickers, given the physical nature of the work, and not only are their numbers declining but also, in contrast to migrants and despite above average earnings and development opportunities few are attracted to farm based employment. Available local labour generally – despite extensive on the job training – often lacks the specific capabilities possessed by migrants, including the aptitude, dexterity and mental agility needed to efficiently pick mushrooms. Intensive, local recruitment campaigns generate little response reflecting in part low rural unemployment rates and a reluctance of people in urban areas to travel.

Training: The training investment (cost and time) required in Mushroom Harvesting is significant and pro-longed. Typically initial training takes 12 plus weeks, however the more a Harvester can practice and hone their skillset, the more they can earn (£22000 after 6 months and £27000 after 12 months as above). The length of time it takes for a Harvester to develop their skillset and the dedication required, demonstrates this type of work is not likely to motivate a worker who can only work for 6 or 12 months as part of a Work Permit Scheme and indeed the mindset required is more suited to a worker who wishes to stay with the Industry for more than a year. The previous Sector Based Scheme was a significant success for these reasons.

Career development: All employees have the opportunity to benefit from supervisory, leadership and management programmes (including the apprenticeship levy where appropriate). This advanced training forms part of succession planning whereby employees advance to supervisory and management roles where earnings typically range from **£25,000 to £35,000** per year.

Technology not a solution: Reducing labour requirements by investing in technology eg, robotics, is not an option as such systems are not yet sufficiently advanced to enable mechanised picking and sorting of fresh produce that will meet the quality standards expected by consumers

Institute of Physics and Engineering in Medicine

IPEM's Data informing the Response to the Migratory Advisory Committee's Consultation on the National Shortage Occupation List

Vacancy data contained in the table below originates from IPEM's 2017 Radiotherapy Physics Workforce Census (response rate over >90%), IPEM's 2017 Clinical Engineering Workforce Survey (response rate 80%), IPEM's 2015 Rehabilitation Engineering Workforce Survey (response rate 60%) and IPEM's 2018 Diagnostic Radiology and Radiation Protection Physics Workforce Survey (73% response rate).

Data on the percentage of the workforce comprising non-UK Nationals originates from IPEM's Medical Physics and Clinical Engineering workforce survey 2017 which achieved a 55% response rate, capturing approximately 70% of the workforce.

Clinical Science Modality	**Vacancy Rate**	**Projected number of years to redress shortfall at current training rate**	% of workforce comprising Non-UK nationals
Radiotherapy Physics	8.0%	>5 years	14%
Diagnostic Radiology & Radiation Protection Physics	11.6%	>5 years	14%
Clinical Engineering	13%	Insufficient data to project	18%
Rehabilitation Engineering	12.8%	>5 years	7.2%
Nuclear Medicine	No figures available directly, but anecdotal evidence suggests that the situation is just as acute as in Diagnostic Radiology, as demonstrated by the proportion of the workforce recruited from overseas,.	No data available	16%
Clinical Technology Modality	**Vacancy Rate**	**Projected number of years to redress shortfall at current training rate**	% % of workforce comprising Non-UK nationals
Radiotherapy Physics	6.0%	>5 years	14%
Diagnostic Radiology & Radiation Protection Physics	12.8%	3-5 years	14%
Clinical Engineering	5%	Insufficient data to project	18%
Rehabilitation Engineering	9.8%	>5 years	7.2%
Nuclear Medicine	No figures available directly, but anecdotal evidence suggests that the situation is just as acute as in Diagnostic Radiology, as demonstrated by the proportion of the workforce recruited from overseas,.	No data available	16%
Radiation Engineering	6.5%	>5 years	14%

Shortage Occupation List Response

The results from our latest All-Island Business Monitor (Q3 2018) tell us the following in terms of skills shortages:

Q. To what extent are each of the following an issue for your business?

	NI	Exporters	Manufacturing & Production	Construction	Professional Services	Leisure, Hotel & Catering	Retail, Distribution and Other Services	Up to 10 Employees	11 to 49 Employees	50 or more Employees
Difficulty recruiting appropriate skills	21%	30%	27%	18%	26%	13%	19%	20%	23%	42%
A lack of appropriate skills in your workforce	17%	24%	33%	10%	21%	7%	21%	16%	25%	40%

% saying it's an issue (giving a rating of 3, 4 or 5 on a scale of 1 to 5)

Q. Do you think there are any skill shortages within your sector?

	NI	Exporters	Manufacturing & Production	Construction	Professional Services	Leisure, Hotel & Catering	Retail, Distribution and Other Services	Up to 10 Employees	11 to 49 Employees	50 or more Employees
Do you	13%	26%	17%	19%	12%	3%	16%	13%	17%	32%

think there are skill shortages within your sector?										

% saying ‘yes’

Q. If ‘yes’ to the above, are they in any of the following areas?

* low base of 64 (unweighted)	NI	Exporters	Manufacturing & Production	Construction	Professional Services	Leisure, Hotel & Catering	Retail, Distribution and Other Services	Up to 10 Employees	11 to 49 Employees	50 or more Employees
Finance	9%	3%	4%	0%	33%	0%	0%	9%	12%	6%
HR/Personnel	2%	5%	0%	2%	4%	12%	0%	0%	16%	0%
IT	12%	19%	36%	0%	1%	0%	16%	13%	0%	19%
Production	9%	22%	22%	0%	2%	12%	15%	9%	12%	13%
Service delivery	0%	1%	1%	0%	0%	0%	0%	0%	0%	6%
Engineering	9%	12%	5%	0%	31%	0%	0%	9%	8%	13%
Regulatory legal	0%	1%	0%	2%	0%	0%	0%	0%	4%	0%
Professional	20%	20%	20%	0%	45%	0%	19%	22%	12%	6%
Hospitality, catering, retail	3%	0%	0%	0%	0%	88%	0%	0%	16%	31%
General labour	61%	52%	98%	98%	33%	28%	64%	65%	36%	44%
Transport, logistics	2%	2%	5%	0%	2%	0%	2%	0%	16%	0%
Unskilled labour	10%		26%	14%	2%	0%	0%	9%	12%	19%

London Chamber of Commerce and Industry

LCCI response to the Shortage Occupation List review 2018 by the Migration Advisory Committee

4 January 2019
INTRODUCTION
1. London Chamber of Commerce and Industry (LCCI) is the most representative business advocacy organisation representing the interests of small and medium-sized enterprises through to large, multi-national corporates. Our member companies operate within a wide range of sectors, including transport and logistics across all 33 London local authority areas – genuinely reflecting the broad spectrum of London business opinion.

2. As the voice of London business, we seek to promote and enhance the interests of the capital's business community through representations to central government, the Mayor and London Assembly, Parliament and media, as well as international audiences. Through member surveys and commissioned research, LCCI seeks to inform and shape debate on key business issues.

3. Following LCCI's response to the Migration Advisory Committee report *"EEA migration in the UK",* we concluded that the Migration Advisory Committee (MAC) had failed to recognise the full value and benefit of migration to London, especially given the capital's unique immigration footprint.

4. LCCI's *Permits, Points and Visas: Securing Practical Immigration for post-Brexit London* report made a series of recommendations including,

the MAC should maintain a separate Shortage Occupation List (LSOL) for London (as Scotland has) to attract the skills and talent necessary to ensure the long-term sustainability of the capital's economy.
5. The below provides evidence as to why LCCI is advocating a dedicated LSOL.

EVIDENCE FOR A LSOL
6. London is three times more reliant on foreign workers than the rest of the UK. The capital contains 11% of the nation's UK nationals, but 35% of the UK's EU nationals. **Over 15% of London's workers are EU nationals and over 9% are non-EU foreign nationals**

7. In Q1 2016 with 1.2m foreign nationals working in London (771,000 being EU nationals) that equated to **25% of the London workforce being "foreign-born".** The share of EU migrants in London is twice as high as in any other part of the UK.

8. Within the capital, the workforce of the economically significant sectors of financial services and construction is made up of 24% and 36% of EU workers respectively.

9. Figure 1 below, further highlights the capital's unique reliance on EU nationals across key sectors including; construction, distribution hotels and restaurants, transport and communication, banking and finance, public admin, education and health.

10. Starkly, one can see that London is more than six times more reliant on EU nationals for construction than the rest of the UK.

11. In addition to London's reliance on EU nationals within key sectors – as highlighted above – Cebr's analysis shows how the capital is also reliant on a wide variety of skilled labour across a number of occupation groups. See Fig. 2, below.

12. In 2018, LCCI and London Councils commissioned ComRes to undertake a local business survey of Greater London - the ***London Business 1000***. The survey is based on responses from over 1,000 businesses and considered a range of topics that affect the capital's business community including recruitment, retention and migration.

13. The survey, published in July, found that two in five (40%) London businesses surveyed employ EU workers and a quarter (24%) employ workers from outside the EU. Employing non-UK workers is mainly done to access their skills, education or experience.

14. Nearly a quarter (23%) of London businesses said that more than **25% of their high skilled staff were non-UK EU nationals**, and 11% reported that was the case for more than half of their workforce. This reliance was much lower for non-EU staff: only 10% reported more than a quarter was from outside the EU, and just 3% reported more than half of their staff were non-EU nationals. Looking at specific industries, the accommodation, food and recreation sector stands out, with 26% of businesses reporting more than half of their high-skilled staff were foreign nationals

15. In December 2018, LCCI published findings from commissioned research of councillors, business leaders and Londoners that found **clear support for making it easier to hire staff in occupations where there are shortages, such as Doctors, Teachers or Nurses as a high priority for a future UK immigration system –** with 85%, 75% and 70% respectively, saying this should be a high priority.

16. Furthermore, research found that a **majority (68% councillors; 65% business leaders; 67% Londoners) agreed with given London more control over the immigration of international workers to the capital.**

SUMMARY

17. LCCI commissioned research by CEBR found that London is three times more reliant on foreign workers (25%) than the rest of the UK (7%) and EU Nationals contribute £26bn in GVA to the UK annually.

18. Consequently, LCCI, along with others, advocate that due to London's unique immigration footprint, a new immigration system should adopt a degree of regionalisation, however, we are alarmed that MAC has, seemingly, advised against this.

19. LCCI would be happy to clarify or provide further comment on any matter raised within this response.

National Education Union

NATIONAL UNION OF TEACHERS HEADQUARTERS

Hamilton House   Mabledon Place London WC1H 9BD

Telephone 020 7388 6191   Fax 020 7387 8458

www.teachers.org.uk

September 2016

Call for evidence

Partial review of the Shortage Occupation List: Teachers

The National Union of Teachers is the largest teachers' union, representing almost 300,000 serving teachers in England and Wales

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INTRODUCTION

The following headlines have appeared in the press in the last few months:-

- "Nearly four in ten qualifying teachers quitting the classroom after one year" (Independent);
- "Teacher shortages leads schools to spend £733 million on supply agencies" (Times Educational Supplement);

- “Teacher shortage reaching crisis levels” (Daily Mail);
- “Warning over England’s teacher brain drain” (BBC News);
- “Ministers must heed damning report on teacher shortages” (The Telegraph);
- “Unqualified teachers drafted in as maths staffing crisis deepens” (the TES);
- “Teachers sent packing in midst of recruitment crisis – because they earn too little” (The Guardian);
- “Secondary schools spent £56m on teacher job ads last year, says Labour” (The Guardian); and
- “Teacher shortages likely to continue for a decade” (Times Educational Supplement).

These headlines should not be dismissed as mere sensationalism or overstatement. The NUT believes they reflect the truth of what is happening on the ground. Many of our school reps report that they are entering schools where members are experiencing high levels of stress because of two major factors (although there are others) which are working in parallel to create unmanageable workloads. On the one hand, there has been a significant increase in redundancies, particularly among support staff, so that teachers are increasingly under pressure to add administrative tasks to their already demanding teaching commitments. At the same time, schools are struggling to fill teaching vacancies and are, in some cases, relying on the existing complement of teachers to cover unfilled posts. This state of affairs appears to have contributed to an exodus of teachers from the profession on a scale not seen in ten years.

All of this is taking place against the background of a steady increase in demand for teachers prompted by rising pupil numbers. The primary school population has been rising since 2009 and reached 4,400,000 in 2015. By 2016, the primary school population had risen by over 100,000 and now stands at 4,504,000. DfE statistics[72] show that the number of state-funded primary pupils is expected to reach 4,690,000 in 2022 – an increase of over 4% on the current position.

While the secondary school population (2,740,000 pupils in 2015) has been falling since 2005, the increases in the birth rate since 2002 mean that the number of state-funded secondary pupils rose to 2,758,000 in 2016. The secondary school population is expected to continue rising during this projection period, reaching 3,325,000 by 2024 (an increase of 20% on the 2016 population). These figures have been revised upwards since 2015. The secondary population in 2024 is now expected to be 25,000 higher than projected in 2015.

In Wales, primary pupil numbers are expected to remain at broadly similar levels in upcoming years. However, secondary school numbers are expected to rise by around 11% by 2024, from 182,500 in 2016 to 202,000.[73]

Notwithstanding the predicted levelling off in the rate of growth of the primary school population, the percentage increase in school rolls over the next decade – especially in English secondary schools –

[72] DfE (July 2016) - National Pupil Projections – Main Tables
[73] Wales Assembly (January 2016) – Pupil Projections

will require a considerable influx of extra teaching staff. With the Institute for Fiscal Studies estimating that an additional 30,000 teachers will be needed by 2020.[74] This rise in pupil numbers will present increasing challenges year on year in terms of the recruitment and retention of teachers at a time of entrenched teacher shortages.

WHERE IS THE EVIDENCE OF A NATIONAL SHORTAGE?

Inadequate supply of new teachers

The data for 2013/14 showed that recruitment to primary ITT and many secondary subjects including maths, physics, modern languages, computer sciences and design and technology were below target. The data for 2014/15 revealed a worsening position with recruitment to ITT courses declining further to a level 14% lower than the corresponding figures for 2010/11.

Statistics from the DfE's Initial Teacher Training Census for 2015/16[75] appear to buck the trend of recent years. The decline in numbers of new entrants to initial teacher training halted and there was also a modest increase in numbers enrolling on ITT courses, with primary education, history, English and PE all meeting or exceeding their Teacher Supply Model (TSM) targets for 2015/16. There were 28,148 new entrants to postgraduate ITT courses in 2015/16 compared with 25,753 in 2014/15. Undergraduate courses continued a long term decline in new entrants, however, with numbers falling by almost 500 from 5,936 in 2014/15 to 5,440 in 2015/16.

Caveats are, however, required. The figures for 2015/16 include 1,584 Teach First trainees who were not included in previous ITT census statistics. If these are removed from the total figures the net increase in ITT entrants falls to 811. The inclusion of Teach First recruits also means that comparisons by subject with previous years' intakes are not direct comparisons. A research report commissioned by the DfE and published in July 2016 found that Teach First has high retention rates up to two years, but after this has poorer retention than the other graduate routes into teaching. The report estimated that only around 43% of the 2012 Teach First cohort remained in the profession three years after qualifying.[76]

Overall, the number of trainees recruited against the TSM target increased from 91% in 2014/15 to 94% in 2015/16, thus improving performance against target and in absolute terms. These statistics, however, only relate to a single year. Furthermore, 2015/16 is the third year running in which the initial teacher training target has not been achieved, as the table below shows. The 2015/16 recruitment figures still constitute under-recruitment which compounds the under-recruitment of the previous two years.

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[74] IFS (21 October 2015) 'English schools will feel the pinch over the next five years' [online]
[75] DfE (19 November 2015) Initial teacher training census for the academic year 2015 to 2016, England.
[76] DfE (July 2016) Linking ITT and workforce data: Research Report

2010/11	2011/12	2012/13	2013/14	2014/15	2015/16
107%	106%	100%	98%	91%	94%

Of greatest concern is the fact that whilst trainee numbers have increased overall, it is only primary education and a handful of secondary subjects which have genuine cause to celebrate.

Primary courses filled 116% of their TSM target, whilst history (113%), English (103% and PE (100%) also performed well. Secondary subjects, on the other hand, only filled 82% of their TSM target overall. While maths and chemistry achieved intake of 93% and 95%, other STEM subjects fared badly, especially physics (71%) and D&T (41%). Other subjects such as religious education (63%) and art and design (63%) also did badly.

Welcome as the 2015/16 upturn in recruitment to ITT in England is, therefore, it should not be overstated. Sustained improvements in enrolments to ITT courses over a period of years are still required, as is a plan for how to achieve this in future.[77]

The situation in Wales contrasts with that in England, in that whilst ITT enrolments have fallen by 29% since 2005/06, this fall must be viewed in the context of the Welsh Government's policy to reduce the number of new entrants to ITT courses to better meet the needs of maintained schools.[78]

In its 26th Report, the STRB expressed its concerns about recruitment to ITT, but failed to make the appropriate recommendations on teacher pay that would have laid solid foundations for improving the numbers of graduates entering the profession over the coming years, in the context of an increasingly competitive graduate employment market and rising pupil numbers.

The NUT has some concerns about the stability of the teacher training programme, given the promotion of school-led routes in preference to higher education led teacher training courses over the past few years. In 2013/14, higher education institutions accounted for two-thirds of all postgraduate ITT courses; that proportion has now fallen to less than half (49%)[79]. The NUT shares the concerns of Universities UK that an increasing focus on the School Direct training routes has built considerable instability into the teacher training system.[80] As Universities UK states, *"the speed of this change has created certain practical difficulties for institutions. It has reduced their ability both to plan strategically in the long term and to allocate resources from year to year, as the recruitment needs of specific schools can fluctuate."*

There is also the issue of School Direct's under-recruitment in its first few years, which poses questions about whether the route will in the long term be potentially more prone to under-recruitment than traditional routes. While allocations to individual routes are higher than the overall target intakes, the under-recruitment to School Direct remained much

[77] House of Commons Committee of Public Accounts (June 2016) 'Training new teachers' report

[78] Welsh Government Statistical Bulletin (1 August 2015) Initial Teacher Training in Wales, 2013/14.

[79] DfE (19 November 2015) Initial teacher training census for the academic year 2015 to 2016, England, op. cit Main Text p1

[80] Universities UK (30 October 2014): The Impact of Initial Teacher Training Reforms on English Higher Education Institution, p1.

greater than the HE led route. School Direct routes were allocated 18,000 places but fell short by 8,000. HE led courses also did not meet their target, but with a much smaller gap between the allocation of 17,000 places and the 13,500 starters.

Similarly, Teach First is experiencing recruitment problems. We understand that Teach First has a smaller number of deferred offers this year than in previous years.

The Universities UK message has been echoed by former Secretary of State for Education, Estelle Morris, who observed that "*A failure to inject strategic planning has led to whole regions of the country with too few student teachers, especially in key subjects. The knock-on effect is that many schools have no local training provider and find it much more difficult to recruit*."[81]

Of course, the fragmentation of training routes is only part of the teacher recruitment problem. Unless urgent action is taken to reverse the recent reforms on pay and take meaningful action to reduce teacher workload, teaching will continue to look unappealing; and potential recruits will be put off by the number of teachers they see leaving the profession for precisely these reasons.

The teacher workforce – more teachers leaving than entering the profession

DfE figures show that there were 43,070 FTE qualified leavers in 2015. In actuality there were 50,150 leavers[82], which compares less favourably to the number of qualified entrants (49,680). The number of teachers in England who left the state sector in the 12 months to November 2015 equates to one in ten teachers leaving the profession and is the highest number of teachers leaving in the last decade. The number of teachers leaving as a proportion of the total number of teachers in service, known as the 'wastage rate', is 10.6 per cent.

In their recent report the House of Commons Committee of Public Accounts agreed that *"in recent years, there has been increasing signs of teacher shortages growing"* and highlighted that *"between 2011 and 2014 the number of teachers leaving rose by 11% and, among leavers, the proportion leaving for reasons other than retirement rose from 64% to 75%"*. This highlights how increasing numbers of teachers are choosing to leave the profession prematurely.[83]

Retirements before the normal pension age as a proportion of total retirements also continue to rise. Although the actual number of retirements on actuarially-reduced benefits (ARBs) in 2014-15 was lower than four years earlier[84], it represented a growing proportion of total retirements (38% of all retirements compared to only 54% being normal age retirements, with the figures for 2010-11 being 34% and 57% respectively). Although changes to the TPS anticipate teachers having to work into their late 60s in order to obtain their full pension, the NUT does not expect teachers will wish to work longer, given the physical and mental demands of the job, so that cannot be relied on in any way as a solution to the problems of teacher supply.

Teacher mobility – moving from school to school

[81] Estelle Morris (27 October 2015) 'Sleepwalking into UK's worst teacher recruitment crisis' The Guardian [online]

[82] DfE (November 2015) School Workforce in England Statistics, Table 7a

[83] House of Commons Committee of Public Accounts (June 2016) 'Training new teachers' report

[84] TPS resource accounts

The NUT believes inadequate attention is paid to the impact of teacher mobility on supply and demand. It may be assumed that teacher mobility is a less significant form of turnover because it does not increase or decrease the overall supply of teachers, as do retirements and career changes, and hence there is an assumption that it does not contribute to overall shortages. From the viewpoint of school leaders, however, teacher mobility and attrition have the same effect; in either case, it results in a decrease in staff that must usually be replaced. Unfortunately, the progress of teachers in the profession; the schools they move to and whether they move to work abroad is not adequately monitored. It is therefore difficult to determine the extent to which teacher mobility/migration impacts teacher supply, particularly in areas like London and the South East, where the demand for good teachers regularly outstrips supply[85]. In its report 'Training new teachers' (February 2016), the National Audit Office observed that

"The Department does not use its teacher supply model to estimate how many teachers are required locally or regionally and largely relies on the school system to resolve problems. It has initiatives to address particular issues, such as its plan to create a National Teaching Service to work in underperforming schools. However, the Department has a weak understanding of the extent of local teacher supply shortages and whether they are being resolved locally".

In response to the criticisms levelled at it, the DfE published *'Schools workforce in England 2010 to 2015: trends and geographical comparisons'*[86] in September 2016. The report provides information on regional teacher migration. It is contended that teachers moving between schools account for an increasing proportion of recruitment activity. In 2015, it was the biggest source of new entrants to schools (rather than NQTs or teachers returning to the profession). For instance, in 2011 10,500 primary teachers moved to other schools and 11,900 left the sector. In 2015, the figure was 19,000 for each group (plus 4,900 who retired). For secondary, 8,700 moved to other schools in 2011 and 14,500 went out of service. By 2015, it was 17,100 to other schools and 18,500 out of service.

What is required, in the NUT's view, is a greater understanding of the reasons for the growth in school-to-school mobility. What is motivating teachers to move between schools in the state sector and where are teachers moving to? Anecdotal evidence suggests school-to-school mobility is on the rise precisely because there is a national shortage of teachers. The shortage means teachers are able to find employment in "better" schools with ease and are increasingly choosing to do so to the detriment of schools with greater challenges and fewer resources.

The teacher workforce – vacant posts

DfE statistics[87] on vacancies indicate a growing number of teaching posts that schools are not able to fill but an overall low number of vacancies. The NUT suggests, however, that the MAC disregard this data as being a largely useless measure. While DfE ministers remain keen to use these statistics in their pronouncements on teacher supply, the DfE itself will tacitly acknowledge that the measure adds little to the sum of our knowledge. As the NUT and others have pointed out, the vacancy rate identified in November each year does not take account of schools' actions to reorganise courses or classes to avoid a

[85] Allen, Burgess and Mayo (2012) 'The teacher labour market, teacher turnover and disadvantaged schools: new evidence for England'
[86] Schools workforce in England 2010 to 2015: trends and geographical comparisons (September 2016)
[87] DfE (November 2015) School Workforce in England Statistics, Table 14

vacancy, nor does it yield any information on whether posts have been filled by teachers with the required experience.

What is interesting about the vacancy rates is the number of temporarily filled posts as at census day and the increasingly large sums of school funding diverted each year into the pockets of teacher supply agencies as a consequence. DfE[88] and EFA[89] data on schools' and academies' financial returns show that spending by schools and academies on agency teachers rose to £733 million in 2013-14. Meanwhile, agency teachers are paid well below the rates payable to teachers directly employed and do not have access to teachers' pension arrangements. The NUT continues to call for alternative solutions which would benefit schools and supply teachers alike.

The teacher workforce – subject shortage and subject mismatch

The problems of recruitment mean that whilst schools are struggling to fill vacancies, more and more pupils are being taught by teachers who do not have a "relevant qualification" in the subject – a point which has been acknowledged by the STRB. DfE school workforce statistics published in June 2016 and showing the position in November 2015, revealed that more than 26% of maths teachers, just over 22% of English teachers and 37.5% of physics teachers did not have a relevant post A-level qualification in the subject. All of these figures were higher than those from the previous year.

Furthermore, the DfE's definition of "relevant qualification" is problematic in that on the one hand, teachers without a "relevant qualification" may have significant experience or have received CPD in teaching the subject, but on the other hand a "relevant qualification" may not be an actual A level in that subject. The NUT believes that further work should be undertaken on subject mismatch and the extent to which teachers are being required to teach completely outside their subject expertise as a result of inability to appoint a teacher with the necessary subject specialism. Any such study should also consider the impact of subject mismatch on staff turnover.

Recruitment into teaching – starting pay and pay in early career

There are many reasons why people consider a career in teaching. Whilst it is a challenging job, it is also a very rewarding one. It would be naïve, however, to imagine that the question of pay - both in terms of starting pay and expectation of future pay – plays no part in shaping a potential applicant's decision. At a time of teacher shortage, and in an increasingly competitive graduate employment market, it remains the case that the best way to ensure teacher supply is to ensure that teachers' pay levels hold their own against pay in other graduate professions.

The High Fliers report '*The Graduate Market in 2016*'[90] suggests there were 7.5% more entry-level vacancies for graduates than the previous year - the fourth consecutive year that graduate vacancies have increased. This substantial increase in graduate vacancies has taken graduate recruitment beyond the pre-recession peak in the graduate job market in 2007 and means that there were more opportunities for 2016 graduates than at any time in the last decade.

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[88] Schools education and children's services spending 2013 to 2014

[89] Income and expenditure in academies in England 2013 to 2014

[90] High Fliers Research Limited (2016) The Graduate Market in 2016 p5.

As well as recruiting more graduates, the *High Fliers* survey also suggested that employers were increasing starting salaries. Whilst the Main Pay Range for teachers from 1 September 2016 starts at £22,467 outside London, starting salaries at the UK's leading graduate employers attained a median salary of £30,000 for the second year running.

Median graduate starting pay in the public sector at £21,000 lagged behind all other sectors according to the High Fliers report. Median predicted starting pay was higher for example for investment banking (£47,000), in law firms (£41,000), banking and finance (£36,000), IT and telecommunications (£30,000), oil and energy (£32,500), consulting (£31,500), accountancy and professional services (£30,300) and retail (£26,000).

The 26th report of the STRB looked at median teacher earnings over the last decade compared to changes in CPI inflation and economy-wide earning growth and found that teachers' earnings had grown at a slower rate than earnings across the economy as a whole and within the public sector. This slow rate of growth no doubt reflects the two year pay freeze introduced by the coalition Government, and the pay cap of 1% which has been in place since 2013.

In their 2016 recommendations, the STRB stated that 'if current recruitment and retention trends continue, we expect an uplift to the pay framework significantly higher than 1% will be required in the course of this Parliament to ensure an adequate supply for good teachers for schools in England and Wales'.

With regard to graduate pay progression generally, the STRB 25th Report cited a 2014 report from Incomes Data Services (IDS)[91] which found that average salaries of graduates with three-year tenure was 38.5% higher than the corresponding average starting rate, whilst graduates with five-year tenure had an average salary some 69% higher than the starting rate. The STRB then compared these figures with salary expectations for teachers (using DfE School Workforce statistics), finding that teachers who have received annual pay progression increases have typically seen their salaries increase through annual pay progression by 26% after three years and by 46% after five years (not including any responsibility payments). These expectations for teacher pay progression will have been at least largely based on the old system of pay increments being awarded for experience. The NUT is concerned that with performance-related pay progression now determined according to criteria set at school level, coupled with the ending of pay portability, expectations for teachers' earnings at three or five years will be even less attractive.

It is important that prospective teachers feel assured that a career in teaching is a rewarding one both professionally and in terms of remuneration compared to other professions. The replacement of fixed-pay scales and experienced based pay progression with unpredictable, locally determined pay policies is likely to cause confusion and concern amongst potential graduate applicants to teaching, especially when compounded by below inflation pay increases. Graduates considering teaching will find it more attractive if they have a certain expectation of what they might earn three, five or ten years down the line, as well as starting pay that compares favourably with that available in other professions. Better pay prospects for early career teachers might also help address wastage rates in early career which are of course far higher than we would want.

The teacher workforce – pupil to teacher ratios

[91] IDS (Thomson Reuters) (April 2014) Pay and progression for graduates 2014

The latest DfE school workforce statistics show pupil to teacher ratios (PTR ratios) increasing by 0.3 percentage points in 2015/16 (17.4 pupils per FTE teacher) from the 2014/15 position (17.1 pupils per FTE teacher). This is higher than the previous three years where it was static at 17.2 (in 2011, 2012 and 2013). Whether or not these statistics accurately reflect what is happening on the ground is difficult to say. As the National Audit Office observed in its February 2016 report, schools have a lot of freedom over how they use staff. For example, primary schools with approximately 210 children in areas of low deprivation can have as many as twelve FTE teachers or as few as seven. Members in London and the South East regularly report class sizes in excess of thirty pupils. This may be the result, in some cases, of amalgamating subjects (e.g. triple science instead of separate classes for biology, chemistry and physics), although this may be evidence of the measures taken by school leaders to deal with the problem of teacher shortage.

The teacher workforce – issues of composition

DfE initial teacher training statistics[92] reveal that in 2015/16 some 22% of recruits to primary ITT and 40% of recruits to secondary ITT were men. These percentages are similar to those for 2014/15 (21% and 40% respectively). Male recruits in Wales in 2013/14 (the most recent academic year for which statistics are available) made up some 26% of students on primary and 37% of secondary ITT courses.[93] The gender imbalance in the teaching profession clearly requires continuing attention.

DfE statistics also show that, overall, 45% of recruits to ITT were aged 25 or over in 2015/16, compared with 39% in 2014/15. The picture in Wales in 2013/14 was similar, in that almost half (46%) of ITT students were aged 25 and over. An increasing average age for recruits will have implications for long term projections on intakes to teacher training.

Recruits of Black teachers (i.e. teachers of African, Afro-Caribbean, Asian and mixed heritage) edged up to 14% in 2015/16, compared with 12% in 2014/15. However, this is significantly lower than the school age population, within which Black groups make up nearly a quarter of the population, according to OME analysis of ONS population estimates.[94] In Wales, all but 6% of first year ITT students recorded their ethnicity as white in 2013/14.[95]

Last year the youth employment charity, Elevation Networks, reported the findings of its research on employment in UK state-funded primary and secondary schools.[96] It found that just 6% of state primary school teachers and 9.9% of qualified and unqualified teachers in maintained secondary schools were Black. Based on current figures, the report estimates that 51,132 Black primary school teachers and 14,429 Black secondary school teachers would be needed to achieve proportional representation. In July 2016, a report commissioned by the DfE, found that ethnic minority teacher trainees have very low retention rates.[97] Achieving proportional representation is therefore unlikely without effective policy development in this area.

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[92] DfE (19 November 2015) Initial teacher training census for the academic year 2015 to 2016, England op.cit. Table 3

[93] Welsh Government (13 August 2015) Initial Teacher Training in Wales, 2013/14 op. cit. (Table A.5)

[94] OME analysis of ONS population estimates (age 0-19), cited in STRB 25th Report (March 2015)

[95] Welsh Government (13 August 2015) Initial Teacher Training in Wales, 2013/14

[96] Race to the Top 2: Diversity in Education (November 2015)

[97] DfE (July 2016) Linking ITT and workforce data: Research Report

Meanwhile, the overall proportion of new entrants who identified themselves as disabled was 8% in the academic year 2015 to 2016. Trainees with a declared disability were most prevalent on courses run by higher education institutions (10%), whereas students with disabilities made up just 6% of trainees on the School Direct (salaried) and SCITT programmes.[98]

These points indicate that tackling the lack of diversity in the teaching profession may be one of the ways in which the problem of teacher supply could be addressed. It is particularly important for schools with a high percentage of SEN and BME pupils, and located in areas of deprivation, that this is tackled as a matter of urgency. As the National Audit Office report (Feb 2016) demonstrates, schools in areas with high levels of poverty and with greater numbers of Black and SEN pupils are less able than other schools to attract and retain good teachers. While there is no guarantee that teachers from under-represented groups would be more likely than other teachers to work in these schools, there is evidence that schools with a diverse roll tend to attract and promote teachers from under-represented groups at a higher rate. Teachers from under-represented groups may therefore be incentivised to apply for and remain in jobs at these schools.

Teacher retention – teacher morale at an all-time low

Given some of the challenges outlined above, it is not surprising, perhaps, that teacher morale remains low. An NUT and YouGov survey last year found the following among the triggers driving teachers to leave, or to think of leaving the profession:-

- Workload;
- Pay;
- Lack of professional autonomy; and
- Lack of leadership.

Two-thirds (67%) of respondents were not in favour of performance related pay, and of those, 84% believed it was "not practicable" to match an individual teacher's contribution to student outcomes. More than half (53%) of those surveyed were thinking of leaving the teaching profession in the next two years, citing a range of factors including workload, work/life balance, health concerns and pay as factors influencing their wish to leave. Two-thirds (67%) of respondents who had been teaching for 5 years or more said that their morale had declined since May 2010.

As far as workload is concerned, the most recent DfE teachers' workload diary survey[99] found that the average primary teacher worked nearly 60 hours and the average secondary teacher nearly 56 hours per week. Although differences in survey methodology make exact comparisons impossible, these hourly totals are significantly higher than those reported in the previous teacher workload diary in 2010. Below are some typical quotes from the 2014 NUT workload survey of over 16,000 members:

[98] DFE(19 November 2015) Initial teacher training census for the academic year 2015 to 2016, England
[99] Teachers' workload diary survey 2013: Research report (February 2014) - TNS

"Even if I stopped sleeping and eating I wouldn't be able to get everything done. I love teaching but sadly working with the children seems to be the least important thing."

"I have no 'me' anymore and for the children I love to teach this is devastating. I will not do this for life, I simply cannot."

"I have no family life. I take Saturday off but otherwise work 7.30am till 6pm in school and another one to two hours in the evening. I work all day Sunday."

"I love teaching but it is breaking me."

Urgent action is needed to reduce unnecessary workload, in particular the demands of excessive accountability measures, so teachers can be free to focus on their core responsibilities in the classroom. Much more needs to be done to engage with teachers in seeking solutions to the problem of excessive workload and bureaucracy so that teachers can enjoy a healthy work/life balance and arrive each day at school feeling refreshed and enthused rather than exhausted.

The recruitment crisis – how schools are being forced to respond

An NUT survey of leadership group members completed by 861 respondents between 17 and 20 March 2016 showed the following:

- Almost three quarters (73%) of school leaders said that they are experiencing difficulties in recruiting teachers while 61% said that the situation had got worse (42%) or much worse (19%) over the last year.
- The greatest problem areas were in Maths (36% of school leaders indicated they were struggling to recruit in this area), followed by science (34%). A significant proportion of school leaders are also struggling to recruit English teachers (23%) and language teachers (15%).
- Primary recruitment was confirmed as a challenge with a third of primary school leaders (33%) struggling to recruit Key Stage 2 teachers and over a fifth of primary school leaders (23%) struggling to recruit Key Stage 1 teachers.
- The most commonly cited action to meet recruitment difficulties was the use of supply staff (selected by 63% of respondents).
- In addition to the use of supply staff, just over half (51%) of respondents said that subjects had been taught by non-specialist teachers as a response to recruitment problems. A quarter (25%) said that more lessons were taught by the head teacher or deputy head teacher; 13%

said that classes had been merged; and 11% said they had worked with a group of schools to recruit or share teachers.

<u>Comments on recruitment difficulties:</u>

"Five years ago we advertised for a post and had 20 applicants. We did the same two years ago and had six. We've done the same again this year and only one person applied."

"It's worse than it was a year ago and in another year or two I see the situation becoming a huge crisis."

"As a recently RI school [it is] impossible to attract staff to a deprived, low attaining area particularly since [the] changes to [the] appraisal system and Ofsted."

"We have had a lot of staff leave - particularly teaching assistants - and have been unable to replace most of them!"

ARE OVERSEAS TRAINED TEACHERS PART OF THE SOLUTION?

The profile of NUT overseas trained members

The NUT has approximately 1,300 overseas trained teachers currently in membership. They comprise teachers who originate from both EEA and non-EEA countries. They are typically

- Between the ages 22 and 34;
- Located in London (some in the surrounding counties);
- Directly employed and on permanent contracts;
- Teaching in academies or maintained schools;
- Teaching in secondary schools;
- Classroom teachers (although a significant proportion are subject co-ordinators, key stage leads and heads of department as well);
- On the main pay scale (4-6); and
- Experienced (many have been working in the UK as teachers for between 5 and 10 years).

Below are the experiences of two overseas trained teachers. Representing teachers in England and Wales, as we do, we are not in a position to comment on the experiences of teachers in other parts of the UK. However, we hope the qualitative evidence that our members have been able to provide will form a useful addition to the MAC's report.

CASE STUDY 1 (KS)

KS is a teacher in her twenties. She qualified in Canada five years ago. She is a secondary school teacher and her subject specialism is philosophy and religious studies. She had only a little teaching experience before migrating to the UK, so most of her teaching experience (with the exception of six months teaching in Kenya) has been gained during her four years in the UK.

KS explained that there is currently a surplus of teachers in Canada. Newly qualified teachers are not engaged on permanent contracts until they have completed at least three years of temporary/cover teaching. For every two hundred permanent posts, there are at least two thousand applicants.

KS was engaged while in Canada by a UK based consultancy firm/agency. She entered the UK on a Tier 5 visa, but moved to Tier 2 when it became apparent that there were many jobs on offer. She has been sponsored by her current school (an academy) for two years, but has worked in many other schools and school settings, including early years settings.

As a qualified teacher from Canada she was able to apply for UK QTS without undergoing statutory induction, but says she would have appreciated some form of induction during her first year of teaching because she had no prior knowledge of the national curriculum, or of current standards. She was effectively "thrown into the deep end".

KS says she has found teaching in South East London both challenging and rewarding. There are 1700 pupils at her school, a disproportionate number of who are SEN pupils. She teaches at least twenty-two hours per week, which is in addition to her responsibility as subject leader for Key Stage 5. She also regularly provides cover for Key Stage 3 classes, which contain as many as thirty pupils per class. In addition, she has provided cover for GCSE science, in respect of which there have been two unfilled vacancies for the past year. She explained that because half the staff have resigned, it is not unusual for pupils to have as many as six different teachers in any one week. She is extremely proud that she has not only survived, but thrived in this very challenging environment.

In relation to the cost of living, KS believes she does relatively well financially, although she attributes this to the fact that she is single and has no children. She says she can afford to travel far less than she used to, however, because a significant proportion of her disposable income goes towards her visa fees and the health care charge.

KS has established a strong support system of friends and colleagues since arriving in the UK. She is in a committed relationship with a British citizen and would very much like to remain in the UK on a more settled basis if possible.

CASE STUDY 2 (AD)

AD teaches English literature at secondary school level. She was a fully qualified teacher before coming to London to seek employment. She was encouraged to come to London by friends and family already living and working in London. Her decision to teach in London was fuelled by her frustration at the lack of permanent employment in Ireland. She describes her bleak job prospects in Ireland as *"disheartening…when you're not even getting interviewed."*

AD had little difficulty in finding a job once she arrived in London. After working via an agency for a year, she was offered a permanent full-time contract at one of the schools she had been assigned to. She says that although she had been offered permanent employment at other schools, the school in which she currently works had a nice working environment with good colleagues and enthusiastic children and that that is why she decided to "put down roots". She said she had worked in many other schools where pupil discipline had been a challenge and that this had discouraged her for a time in seeking more permanent employment.

She commented on the many differences between teaching in Ireland and in Britain - the curriculum, the school hierarchy and structure, the diversity of pupils, the pressures associated with Ofsted inspections, the longer school day and shorter holidays, etc. She felt, however, that the diversity of pupils was one of the things she most enjoyed about teaching in London.

In relation to the cost of living, she said the expense of living in London had come as a surprise. She said that although she felt the wage she was getting was a good wage for a single person in her twenties, it did not really stretch, so that by the time she had paid her bills and paid for transport and food, she had very little left over for entertainment and out-of-work activities. Nevertheless, she enjoyed the city and what it had to offer.

Asked whether she intended to remain in Britain indefinitely, she said it was her wish to one day return to Ireland, but the current economic situation in Ireland acted as a deterrent to returning home.

National Farmers Union

Migration Advisory Committee Shortage Occupation List Call For Evidence

The NFU represents more than 55,000 farming and growing members and in addition some 40,000 countryside members with an interest in the countryside and rural affairs. The NFU welcomes the opportunity to respond to the Migration Advisory Committee (MAC) call for evidence as part of its full review of the Shortage Occupation List (SOL). The SOL comprises of occupations and job titles held to be in shortage either across the UK, or in Scotland only, where it would be sensible to fill through non-EEA migration. Job titles on the SOL are not required to undertake the Resident Labour Market Test or meet the five-year salary threshold for settlement.

The NFU also welcomes the new approach by the MAC to support its call for evidence by proposing a programme of engagement with stakeholders following this call and the plans to host a series of regional events around the UK, including Northern Ireland, Scotland and Wales. The NFU commits to attend these events and will await further details as to when these events will take place.

Before we look at the call for evidence questions we would like to provide a general overview of the workforce and skill requirements within agriculture and horticulture.

A competent and reliable workforce is business critical to the production of food and drink in the UK. Both on farm and throughout the supply chain, people are needed to ensure products worth £113bn annually to the economy are delivered safely and affordably to consumers. Almost 4 million people work in this chain, equivalent to 13.6% of total UK employment and farmers, as the bedrock of the sector, manage more than 70% of the UK's land area. The prosperity of food and farming is closely intertwined with the fate of the UK's economy, society and environment.

The NFU is clear that at the centre of a dynamic UK food chain lay competitive, sustainable and profitable farms. While Brexit presents many opportunities, it also poses a number of threats. Among the most substantial is the availability of labour across the entire food and drink supply chain.

Farming itself is a highly diverse sector, with different production systems having various sources of income and levels of market return. This is reflected in the variation seen in the requirement of both permanent and seasonal labour for different enterprises across an entire spectrum of skill levels. While the needs of each sector differ, one prevalent observation is that non-UK nationals are vital to filling this great diversity of roles and in some cases make up the vast majority of a particular workforce.

The NFU has consulted with members to help inform our response and provide details to the relevant questions on a sector-by-sector basis. The short timescale for this call for evidence has not allowed sufficient time for any detailed evidence gathering however, the evidence that has been collected has been in partnership with many food and farming businesses. NFU members have also been invited to respond to the call for evidence directly by completing the MAC's own online response.

The NFU calls for swift Government action to provide certainty that in the event of a No Deal, there will be a commitment to provide access to a sufficient supply of non-UK workers at all skill levels.

Agriculture Workforce Overview

Of the two million EU nationals working in the UK economy 20% currently work in the food and drink supply chain, as outlined in the 'Breaking the Chain' report. A substantial proportion of the agricultural workforce, whether seasonal, temporary or permanent, is made up of non-UK nationals at all skill levels. Continued access to this supply of labour from overseas is critical to the sector's ability to continue to produce a traceable, safe and affordable domestic supply of food, which the public trusts.

Agriculture and horticulture are diverse sectors that have significant, distinct requirements for permanent, temporary and seasonal labour across the full skills spectrum. Seasonal labour is predominately required for periods in the horticulture sector for harvesting and packing crops and in the poultry meat sector primarily in the processing of turkeys in the Christmas period. The majority of this labour need is currently met from EU nationals. The fall in numbers of seasonal workers, that has been well evidenced and recognised by the MAC, is having a knock on effect on the ability to recruit permanent workers on farm. Future requirements could be fulfilled through the Seasonal Workers pilot being developed into a fully functioning scheme but, nevertheless, all industry sectors, in particular poultry, dairy, pigs and horticulture employ EU labour on farm on a permanent and temporary basis.

There is justified concern that much of the debate to date on the end of free movement and a future immigration system has focussed on the need to provide UK industry with access to 'highly skilled workers', without a clear definition of the term. The range of agricultural jobs that are often filled by non-UK workers at present is varied – from skilled herd managers and semi-skilled assistants in the dairy sector, through to specialised and labour intensive work in horticulture and poultry, and permanent lower skilled workers in the pig and poultry sectors. A future immigration system must ensure an adequate supply of both higher and lower skilled workers, in permanent, temporary and seasonal positions, based on business need. In developing this system, the industry also wishes for there to be a review of skill level definitions, as it is felt that terming a job low-skilled does not reflect fully its value and importance.

All these different levels of workers are essential to the functioning and future sustainability of businesses. There is an assumption from some areas that those doing lower skilled work can be easily replaced by domestic workers. Experience in the sector in trying to recruit domestic workers, coupled with current record low levels of unemployment, show this is not the case and lower-skilled roles currently filled by EU nationals cannot simply be filled by domestic workers.

Whilst there is an abundance of anecdotal evidence on labour shortages in the sector, more detailed evidence looking at the permanent and temporary labour needs of farms, how they have changed, staff turnover rate, average salary, essential skills and accurate labour trends has not been captured. The NFU plans to launch a survey of its members in 2019 to help provide this evidence. The results of the survey will feed into our response to the future immigration system to demonstrate the vital need of farms to access labour from non-UK sources.

The future immigration system must recognise the crucial importance of migration for certain sectors of the UK economy, across all skill levels, and be based on a realistic expectation of the ability and availability of UK workers to fill the jobs currently carried out by EU migrant workers. Access to a flexible, skilled workforce is imperative if farming is to succeed post-Brexit. A lack of labour will lead to a number of consequences for UK agriculture, the movement of investment and operations out of the UK, and the likelihood of price inflation for consumers. The impact on farm of restricting access to a wider pool of labour would be a contraction of the industry as farmers will not have growth options or the ability to replace staff when they leave. As a result, it is essential that Government commits to discussion and consultation on controlled access to labour in the long term for the industry.

The focus of our response is on-farm labour. However it is worth highlighting that any potential reduction in labour supply is an issue that extends well beyond the farm gate, with EU nationals

employed widely throughout the supply chain. For example there is a significant reliance upon EU workers in processing plants, packaging, haulage, veterinary services and food distribution and service.

Creating an immigration system that recognises and meets the specific requirements of the agriculture and wider food industries will be critical if farming is to continue to deliver the food it provides. If we undermine our food security by reducing our capacity to produce food at home, we instead rely on imports produced to different environmental and welfare standards and under food safety systems over which we have little or no control.

The NFU response will now focus on the sector responses to the MAC call for evidence.

Call for Evidence Questions

Dairy Sector

The NFU represents close to 7,000 of dairy farming businesses - out of a total of 9,203 registered dairy farms in England and Wales.1 A skilled and professional workforce is vital for a thriving, competitive and confident dairy sector. UK farmers need access to a competent and reliable workforce in order to run profitable businesses. Labour requirements on dairy farms remain relatively constant all year round, irrespective of system used. Therefore, continued access to sufficiently skilled, permanent labour is crucial.

We have previously responded to the Dairy APPG Inquiry on Skills and Labour, the MAC's 2017 call for evidence as part of its commission to advise on the economic and social impacts from the UK's exit from the European Union, and the EFRA inquiry in January 2018 on labour constraints. These responses highlighted that the availability of permanent labour is tightening apace and continued access to a supply of labour is critical to the successful operation of our industry, and indeed the whole UK food supply chain.

The response below has been informed through consultation with members and other industry stakeholders and sector representative bodies.

Evidence of shortages within the Dairy sector

It is widely accepted that many farms are dependent on family labour, but out of an estimated 19,000 people working on farm around 5-7,000 are employed, non-familial workers.

The 2017 RADBF labour report indicated that 56% of respondents had employed staff from outside the UK in the last five years, up from 32% in 2014. The majority of these originated from Poland, with Romania, Slovakia, Latvia and Hungary also common sources of overseas dairy labour2. Respondents stated that they expected their European staff to remain with them for three or more years with very few regarding the labour as seasonal, transient or temporary.

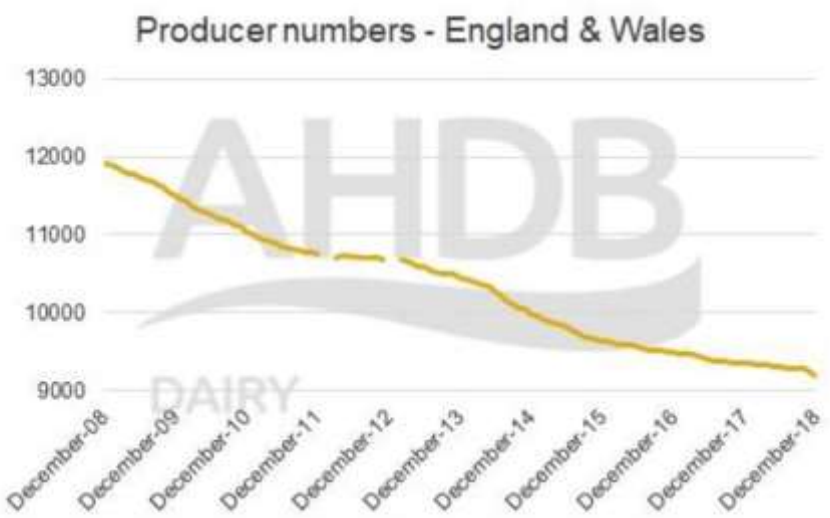
Job roles, such as calf rearing, relief milker, feed wagon operator, herd manager and general stockperson have been encapsulated in the titles below. The roles progress from trainee development to managerial level, crossing a number of qualification and salary thresholds with some of the managerial or lead herdsman positions exceeding £30,000. However, feedback from members and from agricultural labour providers indicates that there are shortages at all levels. Continued access to the range of skillsets required to fill all these positions is vitally important for a successful and productive dairy sector.

Question 3: What do you think are the main reasons for job shortages, and/or wider shortages in the Dairy sector?

There has been a continual decrease in dairy farm numbers and a corresponding increase in herd and farm size. This has led to a move away from solely family farm units to the employment of more staff. According to AHDB Dairy, in 2008 there were just under 12,000 dairy farms in the UK. As of December 2018, there were 9,203 dairy farms registered in England and Wales, with an average UK herd size of 146 (up from 115 in 2008). At the same time milk production has remained relatively stable at 14 billion litres.

1 AHDB, December 2018

2 RABDF, The importance of European labour to the UK dairy sector, October 2017



The outcome of the Brexit referendum, volatile exchange rates and the impact of a long, deep market downturn in 2016 have led to several immediate challenges when it comes to recruiting the right number of workers with the required skills in the UK. Foreign workers are being put off by a lack of future job security and a better exchange rate from countries in central Europe, such as Germany. Uncertainty around agricultural profitability due to market volatility means that many may be seeking employment in industries with more stability or which can offer a more competitive wage.

There are a number of reasons why the recruitment of domestic labour on dairy farms is difficult including location, unsociable working hours and the perception of farming as a harder working environment. The geographic and rural location of farm businesses often makes them inaccessible or undesirable to many, add to this the cost of rural housing and the planning restrictions faced by farmers wishing to provide accommodation for workers, and location is a key issue in labour recruitment.

Some of the challenges around recruitment relate to the perception of farming as low skilled with a lack of career progression. The reality is that as the sector increasingly implements new technologies and new techniques there will be a need for a greater proportion of the workforce to be "skilled." While Government may class agricultural workers as lower skilled, the position of herdsman is a highly experienced one and involves a broad skill set and knowledge base. Those who fill the positions need to be qualified for the role although may not hold high educational qualifications. For these positions highly skilled does not mean educated to degree level – more important is experience, knowledge base, work ethic and aptitude. Whilst automation has increased in the sector, most work remains relatively manual with human skills and experience required to manage the technology. The ability to work responsibly with animals, monitor animal health and welfare requirements and a good working knowledge of animal husbandry are important qualities in prospective workers and are vital for maintaining farm standards

Members have also cited a lack of young UK workers wanting to enter the sector and a disconnect between schools, colleges and agriculture which needs to be overcome to encourage more people to seek careers in the sector. Very often it is the interplay of all these factors that determines whether individuals choose to work in agriculture.

Question 4: What measures have been taken to reduce shortages in the Dairy sector?

Many dairy businesses will advertise on social media, through their own websites and other industry recruitment websites such as jobsinagriculture.com Others will use more traditional methods, NFU Consultation Response advertising in local or national newspapers, through word of mouth or through agencies such as LKL: Services to Agriculture. European staff are often recruited via existing networks and introductions made through existing staff who will recommend friends and family members. There are a number of agricultural labour providers who advertise job opportunities on a national and international scale. Some of these employ regional managers to recruit directly from European countries and look after their pool of workers. For example, a Romanian regional manager will look after the Romanian staff working on farms in the UK. They will also advertise in the foreign press.

Feedback from members highlighted a focus on skills and training, flexible working hours, higher wages and the provision of accommodation as important in securing and retaining labour. However, it was stressed that the sector needs a fair, fit for purpose supply chain which offers stability and transparency to ensure productive businesses and provide producers with the confidence to invest in sufficiently trained labour resource.

The NFU is involved in the development of apprenticeship standards through the Apprenticeship Trailblazer process. Led by AHDB, and in collaboration with other organisations and employers in the agricultural sector, the process has developed new pathways into the livestock, crops and poultry sectors. These standards aim to offer a route into the sector to people looking to make a career in farming and aim to help ensure the future of the industry.

In order to help address skills and training issues across the farming sector and promote the importance of continued learning the NFU was a founding member of the industry wide Agri-Skills Forum which aimed to address skills challenges within the sector and ensure that skills development and training uptake is seen as a high priority and important investment. This Forum has now moved on and a skills and labour industry coalition has been created. Three workstreams have been identified by the coalition: Professional Framework (incl. Education Strategy), Careers & Recruitment and CPD & Business Support.

The NFU continues to participate in a number of activities to promote dairy sector careers. This includes participation in IGD's Feeding Britain's Future which encourages businesses to open their doors to local unemployed young people to showcase the industry and provide an insight into careers within the food industry. The NFU is also a key sponsor of Open Farm Sunday which is a successful initiative increasing public awareness of farming.

Question 5: Have these measures worked, if not why?

It is clear that ongoing difficulties in recruiting the staff needed are worsening; results from the RABDF surveys suggest that between 2014 and 2016 a quarter more dairy farms experienced difficulties with recruiting the right staff, and 75% more farms were recruiting staff from overseas or more specifically central and eastern Europe.

The number of job vacancies across the industry indicates that the availability of workers from the EU is also reducing. Many dairy businesses are competing for migrant labour with other countries such as Germany and are experiencing higher churn rates since the referendum decision. Feedback provided to the NFU suggests that this situation has been exacerbated by Brexit but may have occurred in any case over a longer time period.

Should there be a reduction or even no access to EU migrants post Brexit, the indications are that dairy businesses may not be able to fall back on the UK workforce to fill the gap. A RABDF survey of UK adults carried out in 2017 show that very few people (4%) were willing to consider job roles that include all the main elements of working on a dairy farm: working outside; flexible hours; working with animals; working with machinery; working in small workforces; and rural locations.

The current lack of available workers can be evidenced by the number of adverts for dairy herdsmen. As of January 2018, there were around 45 on farm, dairy vacancies advertised via the Farmers Weekly. NFU Consultation Response

Recruitment agencies are also reporting waiting lists of up to 40 to 50 clients seeking labour on dairy farms.

The Livestock Trailblazer Apprenticeship Scheme is still in its infancy with many producers as yet unaware of its existence. However, alongside a general promotion of apprenticeships an attitudinal change needs to take place to ensure these schemes are valued by both students and employers and suitable candidates apply who have the aptitude, work ethic and skills needed to make a successful career in agriculture. Anecdotal information indicates that a lower calibre of worker is being attracted to the roles in the dairy sector, with no ambition to be there for the long term. This is leading to concern about the experience and skills of workers and increased churn rates for businesses.

Question 6: Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

No

Question 7: How many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.

None

Question 8: Supportive Evidence:

A look at some of the main labour provider websites in the dairy sector, in January 2018, shows that the majority of businesses seeking labour are small family farm units, often dependent upon low staff numbers who are crucial to the operation of the business. These units include farms with extremely automated systems.

It is clear from the information the NFU has previously collected through surveys from both labour providers and member businesses that the labour availability across the industry is becoming tighter and predicted to worsen.

In October 2017 the Royal Association of British Dairy Farmers (RABDF) issued a report titled '*The importance of European Union labour to the UK dairy sect*or.' This provided details of surveys RABDF undertook with UK dairy farmers in 2014 when the prospect of an EU referendum was first raised, and a repeat of the survey in 2016 after the referendum had taken place. The surveys found an increasing reliance on semi-skilled and skilled labour from central and eastern Europe between 2014 and 2016, and rising concern among producers over the future potential loss of access to that labour.

A comparison of the 2014 and 2016 surveys identified fears about filling job vacancies and future sourcing of skilled EU labour. In summary:

56% of respondents in 2016 had employed staff from outside of the UK in the last five years; in 2014 this was 32%
50% of these workers in 2016 were highly skilled or mainly highly skilled in dairy, that is, they were able to do most of the jobs on a dairy farm
85% of dairy farmers had employed staff from Poland, and 23% from Romania. Slovakia, Latvia and Hungary were common sources of overseas dairy labour
60% of respondents in 2016 indicated they expected their EU staff to remain for three or more years; in 2014 56% said they expected them to remain for two years or more. Very few regarded them as seasonal, transient or temporary.

Even amongst the EU labour force there is evidence of a growing difficulty in sourcing the labour farm businesses require. It is crucial that post-Brexit, UK immigration policy also recognises the need to provide employers with the ability to source labour from beyond Europe.

The NFU is not aware of any further sources of evidence in the dairy sector.

Dairy Sector Job Role Shortages: Job Title	Closest ONS job title	Closest ONS Occupation Code (4 digit)	Sector Most Affected
Dairy Herdmanager	Farm Worker	1211	Dairy
Assistant Herdmanger	Farmer	5111	Dairy
Dairy Herdsperson	Farmer	5111	Dairy
Assistant Dairy Herdsperson	Farm Worker	9111	Dairy
Calf rearer	Farmer	5111	Dairy
Relief milker	Farmer	5111	Dairy
Feed wagon operator	Farmer	5111	Dairy
Tractor driver	Farm Worker	9111	Dairy
General farm worker	Farm Worker	9111	Dairy

Poultry Sector

The UK poultry sector accounts for just 0.94% of the farmed land but delivers around 13.37% of the farmed output. It is a highly productive unsupported (from a CAP perspective) sector that is responsive to the market. It is a dynamic fast moving sector that embraces technology and automation however access to labour is business critical.

The UK poultry sector is an important sector for UK agriculture. In 2016, 1.79 million tonnes of poultry meat were produced in the UK with a value of £2.25bn making the UK the fourth largest overall producer in the EU28 and second largest producer of broilers. Overall egg production in the UK increased again in 2016 and amounts to 633,929 tonnes (as at 2015). The value of eggs for human consumption is £603m (this value does not take into account eggs for hatching or other purposes). **Production is forecast to grow to 702,900 tonnes in 2019 making the UK the 5th largest producer in the EU.**

Evidence of shortages within the Poultry sector

The poultry meat sector currently employs approximately 37,000 people directly, with 28,000 in processing facilities and 9,000 on farm. Across the entire sector approximately 60% of this labour is non-UK. Seasonal poultry meat production, including turkeys and geese for the Christmas market, requires an estimated 13,000 workers in addition to permanent labour. Approximately 58% of this seasonal labour is made up of non-UK citizens. In the egg sector, industry estimates are that 10,000 workers are directly employed, of which 35-40% are from EU countries. The sector also estimates that 13,000 workers are employed indirectly.

In the sector it is recognised that 'work ethic' is a skill and that is nearly always a feature of non-UK labour as they are attracted to the UK to do just that i.e work.

Question 3: What do you think are the main reasons for job shortages, and/or wider shortages in the Poultry sector?

Competition from other sectors in the UK economy is particularly acute given the low unemployment rate. For example many employers in other sectors can offer higher pay, shorter hours, more sociable hours and a 'cleaner' working environment. Throughout its conversations with the industry, the NFU found that EU nationals were more likely to occupy roles that were physical or manual in nature. Anecdotal evidence shows that non-UK labour has not felt welcome in the UK resulting in the retention and recruitment of non-UK labour being more challenging.

It is noted that non-UK labour is increasingly taking work in EU countries closer to their own respective countries such as Germany and France. The devaluation of the pound has, it is believed, had a significant impact on migration as, in effect, non-UK nationals have suffered a pay cut making the UK financially less attractive to work in. One poultry member commented, "the last 12 months has seen a definite reduction in the ability to get labour. It doesn't matter at what price, the staff are not there. Retention is harder - the labour pool shrinks, staff can move to other industries that pay more and less hard work (JLR Telford)".

Operators in the poultry industry also reported that some skills, in particular the sexing of day-old chicks, are scarce in the UK workforce and only largely found in employees from other countries.

Question 4: What measures have been taken to reduce shortages in the Poultry sector?

• Apprenticeships. In part in response to labour shortages and to encourage young people into the sector and to demonstrate the sector commitment to training and development the poultry sector developed and launched a bespoke poultry apprenticeship in May 2018 at the British Pig and Poultry Fair.

• The poultry apprenticeship is aimed at stockpersons / hatchery operatives (Poultry Worker Standard) and site managers / assistant managers (Poultry Technician Standard);

• Increased automation and mechanisation of processes but there are limitations to this. The high capital investment required is a major barrier, with the investment required typically measured in tens of thousands of pounds to reduce the need for labour. One specific example given in the NFU's response to the MAC consultation in October 2017 was a poultry enterprise that is in the process of investing £2.8m in order to replace 28 manual positions. This equates to approximately 40% of the workforce. While over time such investment may pay-off, the high upfront cost makes the decision difficult. In addition it will be some considerable time before automation impacts on the demand for labour.

• Automation does not fully limit the need for human workers, both to operate and maintain machinery, but also be part of processes where mechanisation is not possible. In some parts of production, particularly on-farm for the rearing of birds, machines are simply incapable of carrying out roles. The welfare of animals is a key consideration, where human intervention is required to maintain bird health and welfare.

• Poultry farmers are increasing the reach of their advertising and increasingly engaging with recruitment agencies in an attempt to recruit staff;

• Prospective employers are engaging with schools, colleges and universities to encourage students into a career not just a job. This includes work placements, mock interviews and careers events. Another example is working with LEAFed on Face Time a Farmer;

• This is in addition to Open Farm Sunday which is a national network of farms that open annually in June;

• Reducing livestock numbers and in some cases closing satellite farms in short scaling back their operation. This is detrimental to productivity and UK supply;

• Increasing wages/salaries;

• In some cases employers are paying for non-UK workers fares for travelling to the UK;

• Not necessarily new but the poultry sector is providing extensive training courses both in-house and externally eg British Poultry Training passport in an attempt to upskill workers. This clearly aids recruitment eg from schools and colleges as well as driving retention. It also demonstrates that the sector encourages new entrants and actively provides an extensive training package.

• The British Poultry Training Scheme is in place for the poultry meat sector, with scheme membership a requirement for all Red Tractor assured businesses. A similar scheme is in place for the layer sector. Under the EU Broiler Directive the L2 Diploma in work-based Agriculture is the recognised qualification needed unless grandfather rights are in place.

Question 5: Have these measures worked, if not why?

• Many of the measures will take a number of years to have an impact (eg engaging with schools) consequently it is not possible to say at this stage if some of these measures will have worked. Indeed efforts to do this in the past had yielded little success and operators on the whole were of the view that even limited success would not be enough to cover any major shortfall in labour availability;

• One employer commented ‘We cannot really comment how what we are doing is helping as we are still in very early stages of the project’;

• In some respects the strong UK economy with low unemployment has negated the potential beneficial impact of the measures outlined above;

• Some companies reported that UK workers are harder to recruit to fill roles, particularly in rural areas;

• Robotics can be used in manufacturing process but not farms - animal welfare responsibilities will always require human supervision

• As one poultry member commented: Working with livestock is hard work, hot, dirty, etc therefore not that attractive;

• Some of our poultry members, based on experience, question the commitment, passion, attendance and work ethic of UK nationals all of which are a requirement to work in the sector;

• Regarding EU nationals employed, members reported that the advantages of employing these workers include flexibility in working hours and willingness to work unsociable hours when compared to UK workers. EU workers are further characterised by their good reliability, a positive work ethic and a less negative perception of and attitude toward physical and monotonous roles;

• At the time of writing (early January) the sector is experiencing a surplus of live chicken on the poultry meat market (broilers) and a shortage of labour in the processing plants (slaughterhouses) is said to be one of the main causes i.e availability of labour.

Question 6: Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

No

Question 7: How many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.

None

Question 8: Supportive Evidence:

Given the diversity of businesses within the poultry sector, it is very difficult to provide a comprehensive list of all the job roles that businesses struggle to recruit from UK nationals. The NFU has therefore encouraged its members to respond to the consultation directly in order to provide evidence from their individual businesses and sectors.

The NFU has also consulted directly with our members and has collated a list of job roles which are common across many businesses. For both poultry meat and egg production, there are a range of permanent roles required. These roles rely on a relatively high proportion of non-UK nationals to fill vacancies. NFU Consultation Response

Poultry Sector Job Role Shortages: Job Title	Closest ONS job title	Closest ONS Occupation Code (4 digit)	Sector Most Affected
Farm Managers	Farm Manager	1211	Poultry
Assistant Farm Managers	Farm Manager	1211	Poultry
Live Bird Handlers (catchers)	Farmer	5111	Poultry
Cleaners (for cleaning poultry sheds)	Farm Worker	9111	Poultry
Hatchery Operative	Farmer	5111	Poultry
Day-old Chick Sexer	Farm Worker	9119	Poultry
Packhouse Operative	Packers	9134	Poultry
Packhouse Supervisor	Factory Manager	1121	Poultry
Packhouse Manager	Factory Manager	1121	Poultry
Slaughterhouse Processor	Meat Processor	8111	Poultry
Lorry Driver	LGV Driver	8211	Poultry
Official Veterinary Surgeon in slaughterhouse	Veterinarians	2216	Poultry

Horticulture Sector

The UK horticulture sector accounts for just 3% of the farmed land but delivers around 25% of the farmed output. It is a highly productive sector that is responsive to the market. It is not an industry that is standing still, but neither is it an industry that can rely on UK workers alone.

Evidence of shortages within the Horticulture sector

As stated in the September 2018 MAC report on EEA migration in the UK, the UK agriculture and horticulture sector is unique in its dependence on overseas workers to fill seasonal job roles. The report states “According to the ONS, 99 per cent of seasonal agricultural workers are from EU countries and it is difficult to imagine a scenario in which this workforce can come from the resident labour market.” What is not captured in the report, but is equally critical, is the fact that many of the permanent roles within horticultural businesses have been filled by returning seasonal workers who have built up skills and expertise that are incredibly valuable to the industry.

It has been widely evidenced that availability of workers in the horticulture sector has been in decline for a number of years. The annual Defra June Survey estimates there are around 40,000 horticultural roles in England (no sector breakdown available for Wales or Scotland), plus an additional 65,000+ seasonal workers. The NFU Labour Providers Survey, which captures around half of all seasonal worker vacancies, has shown a marked decline in availability since the EU referendum, with shortages of 10% in 2017 and over 13% in 2018. This has had a knock on impact in recruiting for permanent roles.

Question 3: What do you think are the main reasons for job shortages, and/or wider shortages in the Horticulture sector?

There are various reasons for this fall in numbers of workers, including the fall in the value of the pound, the uncertainty over the ability to return to the UK post-Brexit, the growing economies in other EU countries. The fall in numbers of seasonal workers has been well evidenced and recognised by the MAC and as previously stated, this is having a knock on effect to the ability to recruit permanent workers on farm. For UK resident workers (whether UK or non-UK national), the geographic and rural location of farm businesses often makes them inaccessible or undesirable to many, add to this the cost of rural housing and the planning restrictions faced by farmers wishing to provide accommodation for workers, and location is a key issue in labour recruitment.

Question 4: What measures have been taken to reduce shortages in the Horticulture sector?

Horticultural businesses have responded to labour shortages by increasing wages by 9% in 2017, investing in accommodation, offering bonuses and other financial incentives, paying for travel etc. Worryingly, many businesses have also reacted by postponing investments or reducing production, which could result in a contraction of the industry and an increase in imports that may be produced to lower standards. Many horticultural businesses have built relationships with local schools and colleges in order to promote the job opportunities within horticulture. Others have worked closely with job centres to promote vacancies.

Question 5: Have these measures worked, if not why?

There are no official statistics for the proportion of permanent workers in horticultural businesses that are non-UK nationals. But it is undoubtable that without access to non-UK workers, horticultural businesses would not be able to recruit sufficient numbers of skilled workers, and would result in contraction of the industry. And with a future seasonal worker scheme expected to require all seasonal NFU Consultation Response workers to return home at the end of their contract, this much needed source of skilled labour will be cut off from horticultural businesses.

With food prices continually being driven down by retailers, there are limits on how far businesses can go to provide additional benefits in order to attract more workers. Even so, wage rates are not seen as a barrier to recruitment because pay rates can be very attractive compared to other comparable occupations. Success with job centres has been minimal, and relationships with colleges and schools may attract a small handful of new applicants, but not enough to fill the high number of vacancies.

Roles that are difficult to fill from the domestic workforces require a wide range of skill levels. But as the horticulture sector is very specialised, much of the training is done in-house, rather than through a recognised qualification. Important skills include, food hygiene and health and safety, operating specialist machinery, safe handling of hazardous products, quality control, IT literacy, accuracy and an eye for detail etc.

Question 6: Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

No

Question 7: How many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.

None

Question 8: Supportive Evidence:

Contrary to popular belief, automation and robotics will not have a significant impact on labour requirements so as to negate the need for overseas workers. Leading experts on the Agri-Robotics Task and Finish Group (as part of the Food and Drink Sector Council) agree that major developments in robotics are still 10 or more years away. Even then, the focus for manufacturers will initially be on harvesting equipment which may help reduce the number of workers in some seasonal roles, but would have little impact on other permanent roles.

Given the diversity of businesses within the horticulture sector, it is very difficult to provide a comprehensive list of all the job roles that businesses struggle to recruit from UK nationals. The NFU has therefore encouraged its members to respond to the consultation directly in order to provide evidence from their individual businesses and sectors.

The NFU has also consulted directly with members to collate a list of job roles which are common across many businesses. These roles rely on a relatively high proportion of non-UK nationals to fill vacancies. NFU Consultation Response

Horticulture Sector Job Role Shortages: Job Title	Closest ONS job title	Closest ONS Occupation Code (4 digit)	Sector Most Affected
Farm managers	Farm Manager	1211	Horticulture
Packhouse operators and supervisors/ managers	Factory Manager	1121	Horticulture
Field workers and supervisors/ managers	Farmer	5111	Horticulture
Irrigation operators and supervisors/ managers	Farmer	5111	Horticulture
Crop production operators and managers	Farmer	5111	Horticulture
Technical manager	Farm Manager	1211	Horticulture
Graders – e.g. potato graders	Weighers, Graders & Sorters	8134	Horticulture
Quality control operators	Weighers, Graders & Sorters	8134	Horticulture

Administration/ secretarial roles	Farm Secretary	4215	Horticulture
Accommodation managers	Housing Manager	1251	Horticulture
Orchard/ hop husbandry operative and supervisor	Farmer	5111	Horticulture
Tractor drivers	Farm Worker	9111	Horticulture
Forklift drivers	Farm Worker	9111	Horticulture
Lorry drivers	LGV Driver	8211	Horticulture

Livestock Sector

Question 3: What do you think are the main reasons for job shortages, and/or wider shortages in the Livestock sector?

One of the key supporting services for livestock production is veterinary services. The British Veterinary Association estimates that 52% of vets in the UK are UK nationals, with 23% being of EU citizenship. These vets are key to ensuring animal health and welfare on farm, which is essential to farm productivity and profitability.

However, the BVA has reported that there has been difficulty in recruiting suitable candidates, with 40% of practices in 2016 having taken either longer than three months to recruit for vacancies, or withdrawn the opening altogether due to a lack of suitable candidates. This highlights the need to keep the available pool of labour for this profession as wide as possible.

In addition, the British Meat Processors Association (BMPA) has provided information on EU labour for processors. We have referenced some of this information here as there is concern that a reduction in EU labour for processing plants will affect the ability to process meat products in the UK and impact on the provision of retail ready cuts of meat and exports. This adds significant value to the product produced on farm and helps increase farmgate prices. Without this access to labour further up the supply chain this could result in the UK producing less meat and importing more, impacting negatively on both the processing industry and the UK farming industry.

Producing boneless cuts takes more skilled labour. According to the BMPA it has not been possible to recruit these additional people from the UK. The ability to attract EU workers has driven the growth of the sector, allowing the industry to become more efficient, more flexible and more export focussed. **Migrant workers have not replaced UK workers but added to them.**

Question 4: What measures have been taken to reduce shortages in the Livestock sector?

Many of the migrant workers come for a substantial period of time. **Over 75% of workers stay in post for over a year, and turnover is about 20% generally**. Increasingly migrant workers are being promoted into supervisory and key worker positions in meat plants and as a result they stay longer than operative level staff. Most processing sites use some agency staff, though the proportion varies from site to site, as a means of keeping flexibility in their staffing patterns to allow them to respond to retailer demand, promotion, production etc.

About 40% of the workers need some level of knife skills. It takes six weeks to train someone up from no knife skills to a level of skill in one cut of meat, but to train someone to full skills where they can work anywhere on the line, which is essential to avoid RSI injuries, and to accommodate shift patterns, takes a couple of years.

Question 5: Have these measures worked, if not why?

The difference in attitude between UK nationals and workers from central and eastern Europe towards the industry is marked. In the UK work in a meat plant has a low social cachet, but workers from less developed, less affluent economies do not regard it in the same way. Recruiting from there does not have the same problems as trying to find staff in the UK.

Question 6: Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

No NFU Consultation Response

Question 7: How many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.

None

Question 8: Supportive Evidence:

The **red and white meat processing industry is worth over £7billion a year to the British economy**. It ranges from small owner run abattoirs and cutting plants to large multi-site organisations that have abattoirs, cutting plants and packaging plants and also the secondary processing companies who make meat products such as ham, sausage and bacon. **The total workforce is around 75,000**.

Of that workforce the BMPA estimate that currently around **63% are from the EU 27 countrie**s (mainly, but not exclusively central and eastern Europe), though this masks the many plants with as many as 70% or even 80% of the workforce coming from the EU. These staff are in the workforce all year round, in directly employed or agency roles. Veterinarians play a key role overseeing the operations of abattoirs to ensure high food safety and animal welfare standards. The Food Standards Agency estimates that 85% of vets undertaking such work in approved facilities are of non-UK origin.

The proportion of **non-UK nationals working in the meat industry has risen significantly in the past fifteen years** as the number of people in the industry has also risen. This reflects the increase in demand for much more boneless fresh meat rather than just carcases.

Livestock Sector Job Role Shortages: Job Title	**Closest ONS job title**	**Closest ONS Occupation Code (4 digit)**	**Sector Most Affected**
Official Veterinarian Surgeons in abattoirs	Veterinarians	2216	Livestock
Abattoir Manager	Abattoir Manager	1121	Livestock
Abattoir Operative	Butcher	5431	Livestock
Meat Processor	Meat processor	8111	Livestock

Meat Packer	Packers	9134	Livestock

Combinable Crops sector

Evidence of shortages within the Combinable Crops sector

The combinable crops sector is facing a broad reaching permanent staffing problem. Price pressures have significantly impacted on profitability as UK growers have to compete with imports from countries with lower wages and, often, lower production standards. The pressure this puts on wages, combined with a drop in the number of EU workers coming to work on UK farms, has resulted in significant challenges in employing sufficient skilled workers into the industry.

Question 3: What do you think are the main reasons for job shortages, and/or wider shortages in the Combinable Crops sector?

Often, UK growers are not competing on a level playing field with global producers, thereby driving down prices and limiting the opportunity for wage growth. In some cases, similar job roles in other industries may offer higher wages – e.g. those experienced with machinery could get a higher rate operating a digger on a building site. This goes hand in hand with the fact that the hours expected of a farm worker can vary seasonally, with unsociable hours during busy periods such as harvest and drilling. Although this is counteracted by sufficiently quiet periods through the winter, most workers are looking for regular income throughout the year rather than peaks and troughs.

A particular challenge is finding employees with the skill set required. Much of the machinery and equipment present on the modern arable farm is highly technical with computer systems that require training or experience. As with horticulture, this training is only really received in house and does not require or entail an official qualification.

Question 4: What measures have been taken to reduce shortages in the Combinable Crops sector?

Many of our members have turned towards the apprenticeship programme and have had some success attracting new-starters. However, upon completion it is common for individuals to seek progression opportunities elsewhere, for example in bigger companies, and move on from the initial business after a short time. Arable businesses can be small in structure and therefore provide limited opportunities for promotion into more senior positions and at higher salaries.

Some members provide other incentives and benefits, including accommodation and cars which can help retain existing employees.

Question 5: Have these measures worked, if not why?

The sector is particularly concerned about the lack of new entrants coming to work in the industry. As well as the reasons set out above, another factor which acts as a disincentive for working on farm is that roles can often be physically demanding, and require working outdoor during all weathers. It can be dusty and dirty and therefore less appealing.

Question 6: Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

No

Question 7: How many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.

None

Combinable Crops Sector Job Role Shortages: Job Title	Closest ONS job title	Closest ONS Occupation Code (4 digit)	Sector Most Affected
Farm Manager	Farm Manager	1211	Combinable Crops
Field workers	Farmer	5111	Combinable Crops
Sprayer operator Forklift operator Combine driver Harvest operatives Digger drivers.			
Irrigation operators and supervisors/ managers	Farmer	5111	Combinable Crops
Agricultural mechanics	Farmer	5111	Combinable Crops
Crop production operators and managers	Farmer	5111	Combinable Crops
Roguers and hand weeders	Farm Worker	9111	Combinable Crops

Economic, Fiscal and Social Impacts

State of the Farming Economy

Farming and its wider supply chain are currently heavily dependent on EU migrant labour. As such, immigration has played a central role in the economic contribution of the sector. UK agriculture has come a long way in the recent years and its contribution to the wider economy continues to remain vital:

- The UK food and farming sector is worth £113 billion or 6.6% of national GVA. This is larger than car and aerospace manufacturing combined.

- The agri-food sector employs some 3.9 million people or 13.6% of the total UK workforce;

- British farming provides 60% of the food eaten in the UK;

- The food supply chain in the UK as a whole generates £220 billion, which comes from spending by consumers;

 Farming also provides the raw materials for exports of British food and drink with food and drink exports breaking above the £22billion mark in 2016.

Farming's contribution to the economy has grown by £3.3 billion (48%) in the last decade, at the same time farm output has grown by £10.2 billion (64%) to £26.1 billion. Similarly, profitability of the sector has increased by over 95% to £5.7 billion during the same period3. The NFU believes that with the right conditions and favourable future immigration policies, farmers can continue this impressive performance and contribute even more to the economy.

3 Defra, Agriculture in the UK

4 Defra, Agricultural Price Index

Despite this, the last three years have certainly been volatile for the farming industry. Through the ebb and flow of agricultural commodity markets to the result of the EU referendum vote and the subsequent uncertainty, the sector has seen many farming businesses challenged.

The political and economic uncertainty has been the main driver of the currency changes. In the short-term, the shifts in exchange rates are driving some upward movements in commodity prices and providing much needed support to agriculture's exports. However, a weaker pound is a double edged sword for farming. The fall in the value of the pound has led to increases in key farming costs across the board since the EU referendum vote.

Total input costs have seen an overall increase of 15% since the EU referendum, according to the latest Defra's Agricultural Price Index4. Some key farming costs have seen much greater increases – for example feed wheat prices have risen by over 52%, fertiliser prices are 46% higher than in June 2016 and energy prices have increased in price by 30% since the EU vote.

National Farmers Union Scotland

CALL FOR EVIDENCE: SHORTAGE OCCUPATION LIST REVIEW 2018

Summary

1. Thank you for the opportunity to comment on the Migration Advisory Committee (MAC) Call for Evidence document dated 9 November 2018. In summary, the views of NFU Scotland are that:

1.1. the 2017 conclusion by the MAC that there was not a general need for immigration to fill vacancies at salary levels below the Tier 2 £30,000 p.a. is inconsistent with its own previous reports on the Seasonal Agricultural Workers Scheme and with international experience with low paid employment.

1.2. if the Tiered immigration scheme is not amended to provide access to lower paid workers then the Shortage Occupation List needs to be expanded. Without non-UK workers the supply chain – farms, processors and hauliers - will be unable to maintain the current provision of food to UK consumers.

1.3. in numerical terms the main shortages are for harvest workers but many skilled, permanent farm jobs are now reported to be hard to fill or have been filled by EU workers, trained in their home countries, who may not be available in the future.

Background

2. Although the numbers of workers in full time employment on farms has fallen due to factors such as mechanisation there remains a real need for motivated workers for permanent roles. Growth in the fruit and vegetable sectors has increased the number of harvest workers needed. Vacancies have become increasingly hard to fill due to changes in the expectations of young people. Opportunities for formal education in farm skills have also declined – a chicken and egg scenario. As a result farms in Scotland have increasingly looked to the EU as a source of trained workers and young people willing to learn.

3. The Annual Economic Report on Scottish Agriculture reports on labour requirements (in full time equivalents) from the previous year. In 2018 the report showed:

	2017	2017
Main farm type	Holdings	Standard Labour Requirements
Specialist cereals	2,458	2,037
General cropping	1,724	4,537
Specialist horticulture & permanent crops	699	6,271
Specialist pigs	264	694
Specialist poultry	827	1,855
Specialist dairy	659	4,368
Cattle and sheep	17,963	29,016
Mixed holdings	4,350	6,210
General cropping ; forage	20,984	1,130
Unclassified	1,210	198
Total	51,138	56,316

4. The Scottish Government gathers farm employment data annually during its June Census. The report for June 2018 showed stability in permanent employment but an increase in migrant labour from 2017:

Farm Workers, Scotland	2017	2018
Regular full-time staff (excluding family)	8,173	8,192
Regular part-time staff (excluding family)	3,389	3,415
Casual and seasonal staff	8,249	8,215
Migrant labour (person working days)	659,138	710,381
Farm Occupiers, Scotland		
Full time	11,108	11,196
Half time or more	5,923	6,036
Less than half time	20,704	20,205

5. Difficulties in recruiting UK workers became evident for seasonal work sooner than for permanent workers. Foreign harvest workers have been coming to the UK for at least 65 years. This has been recognised by successive reviews undertaken by the MAC.

6. Although NFU Scotland does not represent the food processors or road haulage companies agriculture has become increasing dependent on those industries. Retailers have streamlined supply chains having fewer but larger warehouses and processing plants. The result is more road miles travelled by our food. The Road Haulage Association has estimated that there are at least 60,000 EU drivers working

in the UK domestic haulage sector and there is a long-standing shortage of drivers. In parallel, consumer demand for processed food continues to rise. It has been estimated that dependence on workers from the EU to process seafood, meat, fruit and vegetables is around 40 per cent but the figure is even higher for meat where the it is estimated to be 63 percent of the 75,000 workers. All the veterinary surgeons working Scottish abattoirs are non-UK. Those plants cannot legally operate without veterinary inspectors.

7. NFUS is very surprised that the MAC has taken the view that the UK can cope without 'low skilled' migration when the evidence from all advanced economies is a dependence on migration to fill less attractive jobs. In its May 2013 report which covered the impending closure of the Seasonal Agricultural Workers Scheme (SAWS) Professor Metcalf CBE noted that:

7.1. "A Seasonal Agricultural Workers Scheme (SAWS) has been in place for over sixty years." "The present quota is 21,250 who mostly work in horticulture." "The SAWS is extremely well managed by the UK Border Agency."

7.2. "Most parties gain from the SAWS. Growers get a supply of efficient labour tied to (living on) the farm and who cannot work in other sectors. Supermarkets receive a reliable supply of British produce – one major supermarket described the SAWS as "incredibly important". Consumers gain via prices for British goods which are lower than they otherwise would be. Migrants realize a good wage – normally over £300 per week and have low living costs. British workers are not displaced by SAWS workers (see below) and there are no real integration issues because the SAWS workers normally live on the farm."

7.3. "If there were to be a replacement SAWS, it is important to ponder who would lose out. "It is unlikely that British residents would lose because SAWS workers live on the farm and, therefore, do not cause congestion or integration problems. And UK workers generally are not prepared to supply their labour to this sector."

8. The summary of that same report says that:

8.1. "The proportion of UK workers in the seasonal workforce has decreased over time and it is unlikely this trend will reverse or that UK workers will replace the SAWS workers post-2013."

8.2. "in the medium term [after one or two years], farmers are likely to experience increasing difficulties sourcing the required level of seasonal labour from the EU (including the UK) labour market. A new source of seasonal labour is likely to be required." [Tables later in the report show that during the period 2004-2007 Ukraine, Russia, Belarus and Moldova supplied nearly two thirds of SAWS workers.]

NFU Scotland Additional Questions

9. To collect evidence NFU Scotland contacted farmer members whose activities spanned production of beef, lamb, pigs, poultry, eggs, combinable crops, potatoes, fruit, vegetables, rhubarb and daffodils. We asked some additional questions. The following replies are collated from a sample of 6 businesses:

10. Approximately how many non-UK workers do you employ each year on a seasonal and/or permanent basis and how important are they to your business?

Seasonal	370	Permanent	163+

Of vital importance. Harvest work would be impossible without seasonal workers. Shortages of skilled full-time workers make them very important too. Many businesses are reliant on non-UK workers.

11. Have you recently experienced any difficulties or new challenges in recruiting non-UK workers? If yes, what has been the impact on your business?

Yes, both for seasonal and permanent workers. Some permanent workers have left and have not been able to be replaced. Recruiting has become harder. In some cases existing workers have worked longer hours. In others, agency workers have filled gaps. Both of these options have pushed up costs and when permanent workers leave there is a loss of knowledge and skills. On some fruit farms less was harvested with crop going to waste. A 2018 NFUS survey found that comparing seasons the negative impact on 3 businesses of a lack of labour had been £500,000. That figure comprised crop losses due to lack of labour and additional labour costs incurred to minimise crop loss.

12**.** Do you anticipate these challenges to continue? How concerned are you about the impact labour shortages could have on your business in 2019 and beyond? Please explain reasons for your answers.

Yes, challenges are expected to get worse when free movement ends. Any further weakening of the pound would exacerbate the issue of sterling wage rates becoming less attractive. Comparing post-Brexit vote exchange rates with those of 2015 the impact on wages has been a 17 percent cut. Even if movement can take place there are likely to be hurdles which will make UK employment less attractive than working within the EU. The impact could be a reduction in activity, i.e. downscaling of activities reliant on labour such as growing fruit. Expansion of businesses to increase efficiency will not be possible unless enough workers can be found.

13. What, if any, measures are you putting in place to mitigate the impact of labour shortages in 2019 and beyond?

Some businesses are looking for new sources of labour. Others are stopping planned expansions or shifting production to crops that are less labour intensive. All are working hard to retain staff. Ways to make tasks less labour intensive or to automate functions not already mechanised are being considered.

The SRUC conducted research published as: 'Farm Workers in Scottish Agriculture: Case Studies in the International Seasonal Migrant Labour Market March 2018.' The project examined the use of seasonal migrant labour on Scottish farms. It did not investigate the use of permanent agricultural workers of non-UK origin.

Harvesting or picking was by far the main employment (60+ percent) with planting and crop husbandry and processing & packing being the other main tasks. Workers were also involved in maintenance tasks such as erecting polytunnels. This means that many workers could not be tied to a particular SOC.

Farmers and stakeholders commented on an overall decline in seasonal labour availability in 2017 and this was backed up by recruitment agencies. Concordia and Hops said they had experienced a 15-20 percent increase in demand for seasonal labour, with both agencies failing to fully supply demand with a 10-15 percent shortfall on requests in 2017. This pattern was repeated in 2018 with crop tonnage being lost due to lack of pickers.

Although the project only examined the use of seasonal migrant labour on Scottish farms and did not investigate the use of permanent agricultural workers of non-UK origin it did include some comments from other organisations, relating to non-permanent workers:

Estimated scale of the seasonal migrant workforce engaged in Scottish Agriculture (2017)

	Estimated Workers
Protected soft fruit	6,694
Field fruits	
Strawberry, Raspberry and Blueberries	567
Other Soft Fruit (including blackcurrants)	64
Potatoes	810
Flowers and Bulbs	223
Vegetables	
Cabbages	65
Calabrese	216
Cauliflower	39
Brussels Sprouts	281
Rhubarb	9

Other Veg for human consumption	289
Total seasonal migrant workforce	9,255

The survey indicated that 95 percent of the workers were of non-UK origin.

Quality Meat Scotland in 2017 reported that Food Standards Scotland had estimated that 98% of their official veterinarians were of non-UK origin. Figures from the Scottish Association of Meat Wholesalers suggested that 43% of meat processing sector workers came from the EU.

Also in 2017 the Royal Association of British Dairy Farmers estimated that 56% of dairy farmers employed workers from the EU. In 2016 half of the dairy farmers responding to a survey had experienced difficulty recruiting staff within the previous five years. Poland, Romania, Slovakia, Latvia and Hungary were common sources of overseas dairy labour. Some respondents to emphasised that their dairy labour force was significantly of EU. One farmer with two permanent Scottish and 16 permanent EU dairymen stressed that he could not source UK workers. His wage bill for the workers was about £400,000.

National Pig Association

National Pig Association

Agriculture House

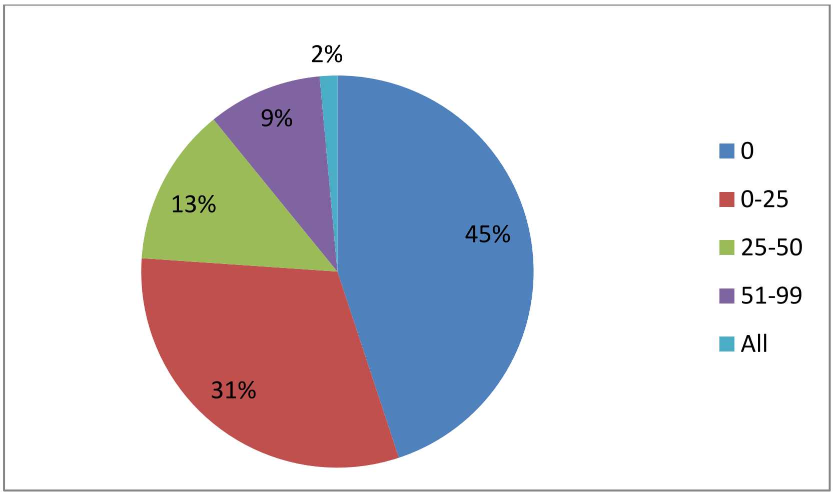
Stoneleigh Park

Warwickshire

CV8 2TZ

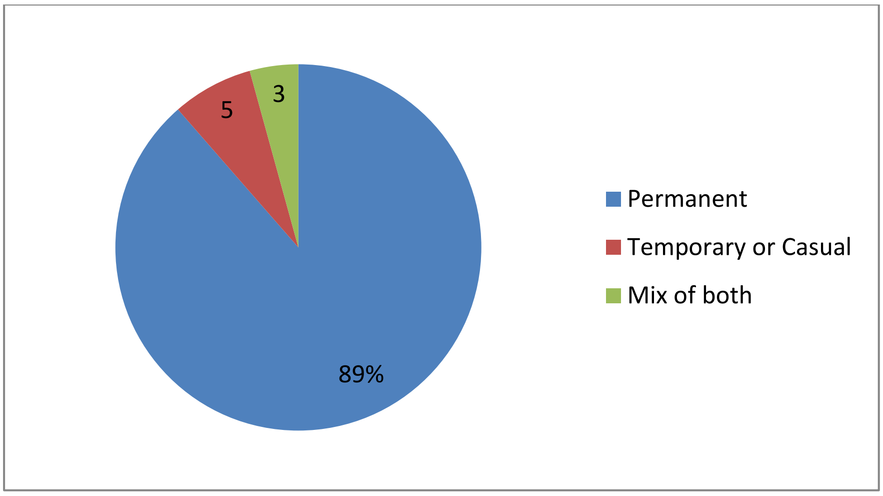
The National Pig Association (NPA) is the representative trade association for British commercial pig producers, is affiliated to the National Farmers Union (NFU) and represents the interests of NFU members that produce pigs and the pig industry interests of its Allied Industry members. In October 2017, the NPA commissioned a survey amongst its members[100] regarding labour, and the effects of Brexit upon sourcing and retaining employees in their business. We also explored what effect the Brexit vote has had already on finding new employees and the reliance that individual businesses have upon EEA migrants.

1. Percentage of labourers on pig farms, who are migrants

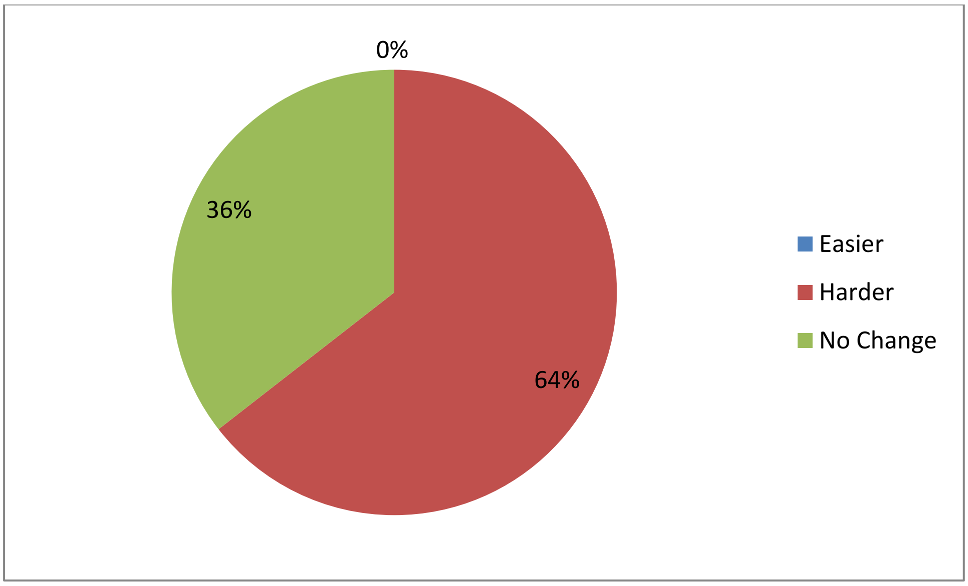


2. The nature of labour on pig farms

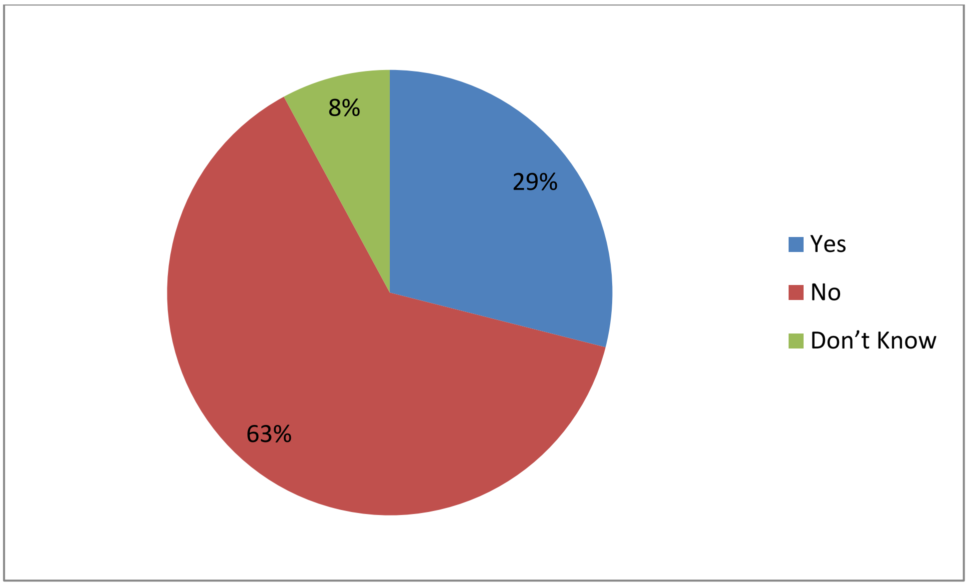
[100] The Survey was sent out in the months of September and October and received responses from 138 members, of which 127 were producer members, the rest being from allied industries.



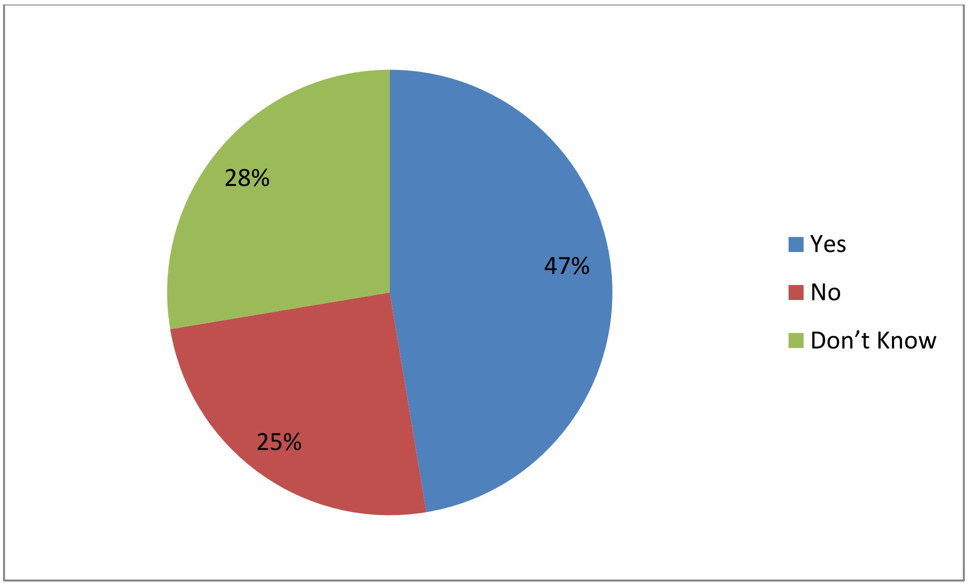
3. Following the vote to leave the EU last June, how have you found any change in the availability of EU labour?



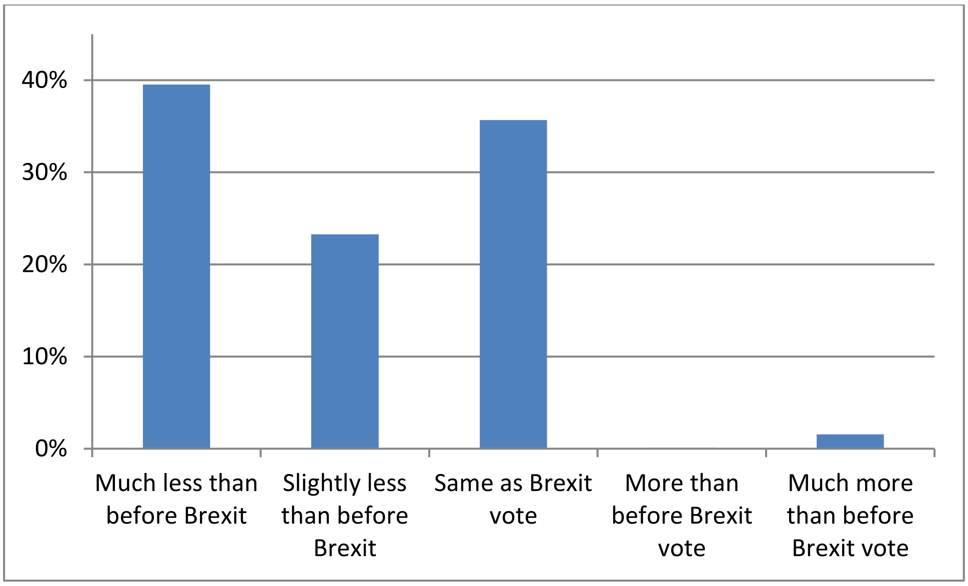
4. Have any of the EU workers you employ left the UK since the Brexit vote due to changing circumstances?



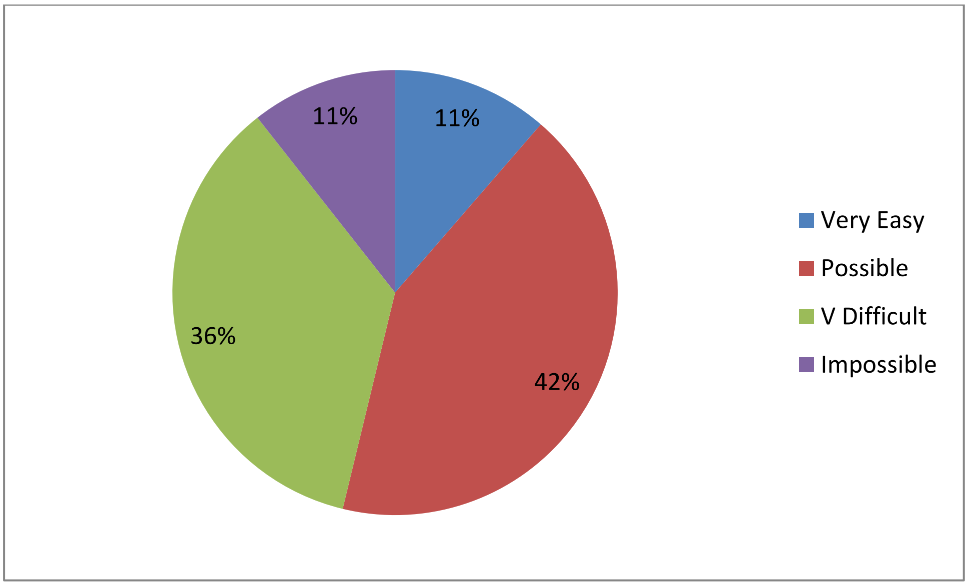
5. Are any EU workers you employ considering leaving the UK in the future due to uncertainty over Brexit?



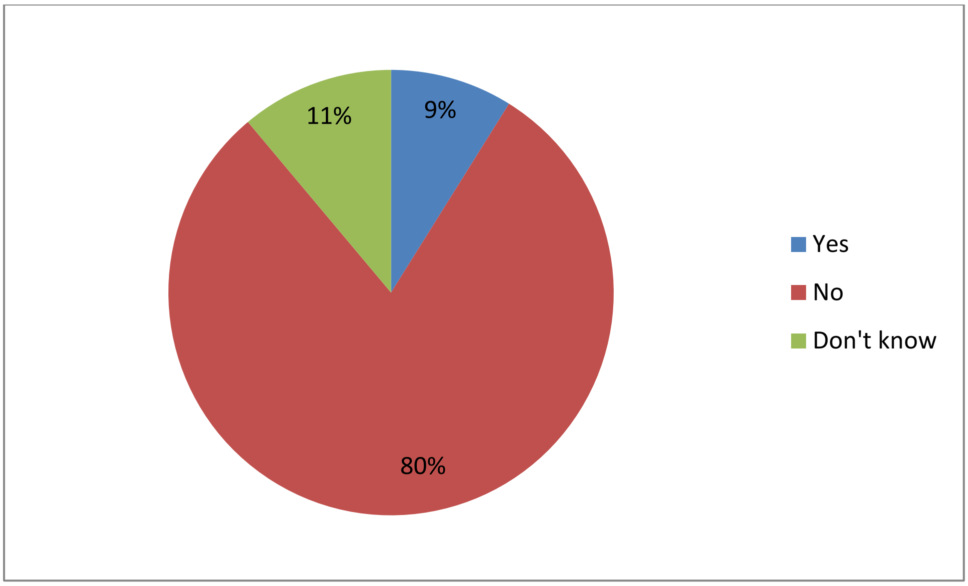
6. How confident are you that you will be able to source sufficient labour to meet the needs of your business over the next five years?



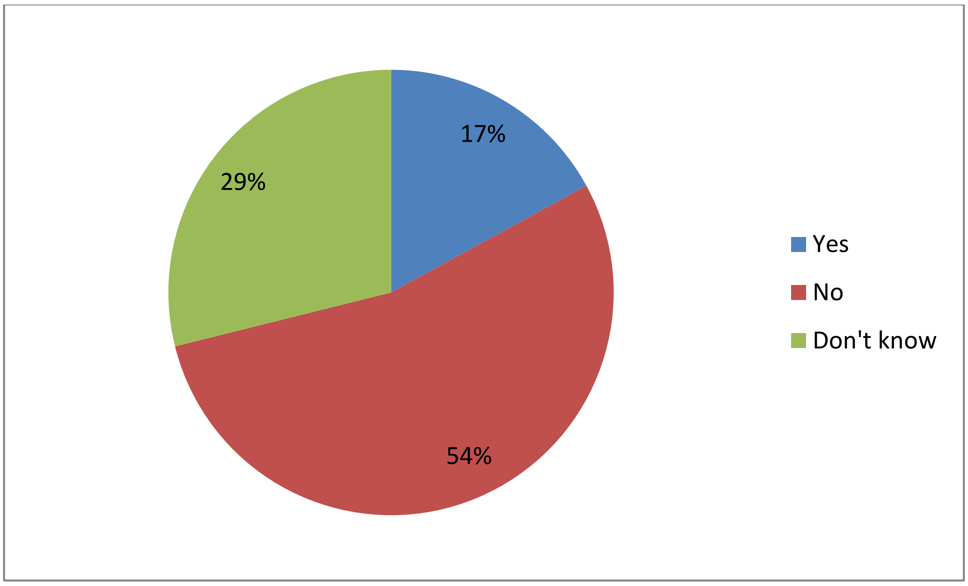
7. How easily could you source ALL your labour from the UK in future?



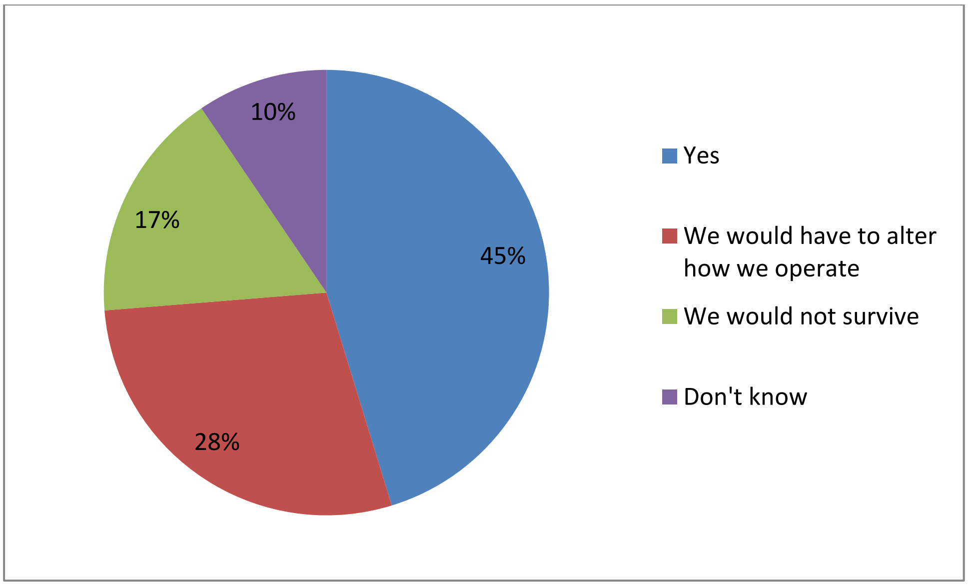
8. Do you think a career in farming is offered as an attractive proposition in UK educational establishments?



9. Do you feel colleges are providing employees with the skills needed to fill key roles in the pig industry?



10. Could your business survive in its current form without migrant labour?


10%
17%
45%
28%
Yes
We would have to alter how we operate
We would not survive
Don't know

N=138

NHS Employers

The NHS Employers submission to the Migration Advisory Committee (MAC) call for evidence 2018 (*final response for Annex B)*

Full review of the shortage occupation list

Questions

Please indicate from which of these industries you are providing evidence?

Health

If you wish, you can provide details of individual job titles you/your members have found hard to fill in the boxes below (maximum of 10). Please help us by matching the job titles you have provided with the closet standardised ONS job title and associated 4-digit occupation (SOC) code using the Office for National Statistics (ONS) Occupation Tool.

There is also space to list the sector(s) where shortages of candidates to fill these job titles has been most acute. If providing this information, please refer to the list in question 24.

Job title	Closest ONS job title	Closest ONS occupation code (4 digit)	Sectors most affected
All healthcare professions in shortage			

If there are more than 10 jobs in shortage, please use this space to provide the job titles, closest ONS job titles, ONS occupation code and sector most affected as above.

What do you think are the main reasons for job shortages (answered in question above), and or wider shortages in the sector(s)? Not to exceed 500 words.

1. In short, demand for healthcare is increasing. Employers and staff in the NHS are, and have for some time, been under considerable strain and pressure to meet the care requirements of an ageing population, with growing complex care needs. Accident and emergency attendance is growing at an unprecedented rate. In 2016/17, staff cared for 23 million A&E attendances, 1.2 million more than the three years prior. Latest NHS Improvement (NHSI) data[101] shows that there were 940 more emergency admissions per day compared to the same quarter last year. A total of 6.18 million people visited A&E during the quarter — 252,360 (4.3 per cent) more than the same period last year.
2. In parallel, there has been an increased focus on quality and staff to patient ratios which drives demand for clinical staff.
3. The Prime Minister made a very welcome announcement of additional investment into the NHS England budget in June 2018. This followed a period when plans about demand were based on assumptions that it would be managed to meet the resources available, and staff numbers were assumed to be only those that could be afforded.

[101] Quarterly performance of the NHS provider sector: quarter 2 2018/19

This investment will also drive demand for staff. Despite national efforts to train more clinical staff, the lead in time for clinical training is significant.

4. Uncertainty about the new immigration system and Brexit has resulted in increases to worker outflow along with a reduction of new EEA joiners. The most substantial changes in EEA leavers since the referendum has been seen in nursing and midwifery with an outflow of 600 EEA nurses in Q2 of 2017 alone[102].
5. Various IT and technical roles can be difficult for employers in the NHS to fill, often in relation to disparity between the salaries seen outside of the NHS, resulting in competition.

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research. Not to exceed 500 words.

Domestic supply/widening participation

Over the last three years, NHS organisations have focused on local community engagement as a proactive part of their recruitment campaigns and workforce supply strategies. This includes work experience programmes; pre-employment programmes; traineeships; internships; apprenticeships and targeted engagement with local communities.

NHS England's national television recruitment campaign which began in the summer of 2018 has helped to raise the profile of nursing careers, with Health Careers having seen a significant increase in their nurse resources' online views.

Pay deal

The refresh of the Agenda for Change contract in 2018, which saw an end to the lengthy pay freeze in the NHS has seen an increase to starting salaries, and for most staff, will shorten the time it takes to reach the top of the pay band. This was an important intervention and investment by the Government and the NHS, designed to retain the valuable staff currently in the NHS and to make careers in the NHS far more attractive.

Retention

The percentage of nurses leaving the NHS for non-retirement reasons was 8.7 per cent in 2016/17 - 5,000 more than in 2011/12.

Flexible working initiatives, a focus on staff health and wellbeing (particularly rapid access[103] for staff), skills development and utilising pay flexibilities are all part of employer strategies to support and improve staff retention.

Initial results of NHSI's own nurse retention programme[104] demonstrate that retention can be improved where trusts focus time, energy and resources on the problems.

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[102] NHS Employers (Nov 2018), *Cavendish Coalition: NHS could be short of 51,000 nurses p80*

[103] NHS Employers (March 2018), *Rapid access to treatment and rehabilitation for NHS staff*

[104] NHS Improvement (October 2018) *Staff retention and support programme: one year on*

Since the start of NHSI's programme in June 2017, national turnover rates of nursing staff have improved from 12.5 per cent to 12 per cent. This reflects trusts' increased focus on retention and has delivered an additional 1,000 WTE nurses working in the NHS compared to the stabilised position.

NHSI improvement have also developed a programme to specifically support a cohort of mental health trusts. Initial data from this cohort demonstrates that turnover rates have improved from 14.3 per cent to 13.5 per cent, equating to an additional 800 WTE clinical staff working in the NHS mental health sector.

Education and training reform

The Government's changes to education funding, which included the removal of the NHS bursary in August 2017 was designed to provide more training places and more healthcare workers for the NHS.

For some professions, these changes have seen a positive increase in course applications but unfortunately this hasn't yet translated across to all groups, with particular decline seen in applications for some of the smaller allied health professions. The government has also provided investment to support additional clinical placements to support this expansion.

Apprenticeships

Employers have been focussing on apprenticeships following the introduction of the levy in April 2017 and the Public-Sector Apprenticeship Target. The number of healthcare-specific apprenticeship standards has more than doubled since the introduction of the levy which is largely due to the engagement and investment of NHS employers in developing these new standards through trailblazer groups. The range of apprenticeships available has also grown significantly, with apprenticeships now available from level 2 to level 7 (masters level)[105].

The most popular apprenticeship framework in England in 2016/17[106] was health and social care, where starts have increased by 16,000 from 2011/12. In 2016/17 Health, Public Services and Care apprenticeships in England saw 138,000[107] starts, up 7,000 from 2015/16. Also, the range of standards within the NHS has increased offering more routes into healthcare roles.

Apprenticeships can help with the supply of registered nurses[108] following the introduction of the registered nursing degree apprenticeship standard in May 2017[109], in addition to traditional full-time university route programmes. Whilst we've seen a gradual take-up, employers have shared plans to make use of this standard in the coming years to support their ongoing nurse supply.

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105 Healthcare Apprenticeships Standards Online

106 House of Commons Library Briefing paper: Apprenticeships statistics England

107 House of Commons Library Briefing paper: Apprenticeships statistics England

108 Royal College of Nursing (February 2018), *Left to chance – the health and care nursing workforce supply in England*

109 NHS Employers (May 2017), *Nurse degree apprenticeship now available*

NHS Employers anticipates an increase in the numbers of regulated professions being trained through apprenticeship routes in the near future, partly because a number of standards are now available and because of the levy.

Nursing associates, new and extended roles, advanced clinical practice, and medical associate professions (MAPS)

The NHS has actively sought to create new roles and ways of working to mitigate some of its demand for registered nurses and medical staff. The 2016 'Reshaping the Workforce' report from the Nuffield Trust and NHS Employers highlighted the opportunities and benefits of developing the support workforce, expanding the physician's associate role, and exploring how the advanced clinical practice workforce could be scaled up and deployed more effectively. Since the introduction of the nurse associate role in 2017, numbers of trainees in the NHS have increased from 1000 in the pilot cohort, to a target of 5000 across the workforce in 2018.

- Advanced clinical practitioners have been used across the NHS workforce for several years to support the changing shape of care needed and to help manage supply challenges in other areas of the workforce.
- Increasing numbers of MAP students are progressing through training and NHS Employers has been working in partnership with Health Education England to raise awareness of the scope and potential of physician assistants, physician associates (anaesthesia), surgical care practitioners and advanced critical care practitioners. There are approximately 450 qualified physician associates and 1200 currently in training. The training pipeline will deliver 3,200 trained PAs by 2020 to work in general practice, acute (internal) medicine and emergency medicine. There are also an estimated 200 qualified surgical care practitioners, 180 qualified physicians' assistants (anaesthesia), and 130 qualified advanced clinical care practitioners currently working in the NHS, along with further cohorts currently in training.

Return to practice

Return to practice is a valuable element of an organisational workforce supply strategy, allowing practitioners whose registration has lapsed to undertake re-training. Return to practice initiatives have so far seen over 4,000[110] people commence training to return to practice in nursing and other professions, but more can be done.

Have these measured worked, if not why? Not to exceed 500 words.

The number of people in the NHS workforce has increased by 2 per cent in the year to April 2017 but not evenly across groups and despite growth, aren't allowing organisations to keep up with service demand. Staff groups with the highest rates of growth are those who provide support to clinical staff (2.5 per cent), medical consultants (3.5 per cent).

Apprenticeships

[110] HEE Facing the facts, shaping the future p7

Despite employers' appetite to make best use of the new and emerging degree apprenticeships, there are some challenges which NHS Employers has evidenced[111]. These include the range of standards available at degree level, placement and supervisory capacity, and the expense to backfill for supernumerary training time.

Medical Associates, nursing associates and advanced clinical practice

- Medical associate roles need to be fully embedded within the existing workforce and accepted by the medical profession as an integral part of the healthcare workforce.
- Given nurse associates are typically trained using apprenticeships, inflexibilities in the levy is impacting employer use of the role.
- In the last five years, national organisations have recognised that there has been a lack of consistency in the understanding of roles working at ACP level across the healthcare environment and a lack of governance and different approaches in how the practitioners were deployed. In response to this, the 'Multi-professional framework for advanced clinical practice in England[112] was published. NHS Employers is working in partnership with Health Education England to help build understanding, consistency and use of ACP-level roles in trusts across England.

Retention

Turnover remains high in the NHS in general, particularly in the nursing workforce. In a working environment of high vacancies, high turnover and difficult working conditions, trusts ability to fully implement initiatives to improve their retention is limited.

Although the initial evidence from NHSI's retention programme is promising, retention is a complex and multi-faceted issue, and it will require a continued focus over a period of years to narrow the gap between workforce supply and demand.

Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based system?

Yes ✓

No

If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles. Not to exceed 500 words.

We understand from the Home Office that the NHS utilises approximately 40 per cent of the 20,700 Tier 2 certificates of sponsorship (CoS) available each year for skilled professionals which equates to 8,296 successful visa applications. Whilst we don't have a recent official breakdown of the professions who mostly use the certificates, 2015 Government SOC code

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[111] NHS Employers written evidence June 2018
[112] Health Education England (2018), *Multi-professional framework for England*

data demonstrates that medical, natural social science roles and nurses were in the top ten used within Tier 2[113].

The demand for restricted certificates of sponsorship was highlighted to us by employers from December 2017 to June 2018 when the numbers of Tier 2 applications exceeded the availability of certificates. Intelligence from employers demonstrated the impact of the unavailability of certificates, specifically for doctors which in some cases, compromised service delivery. This was used in communications with Government which led to the temporary decision by the Home Office to remove doctors and nurses from the CoS cap in June 2018.

An international recruitment survey (mentioned later in this response), conducted with NHS trusts in early 2018, also demonstrated that many employers had recruited skilled staff from outside of the EEA in 2017 and were planning to again in 2018. Aside from nurses, radiographers and paramedics were the most common professions recruited from overseas in 2017.

If you have supporting evidence such as survey results from members, please attach here. Please remember to omit sensitive details before attaching.

Nurses

One of the greatest workforce challenges across health and social care is in nursing. One in eight posts are vacant and the recent NIESR report states that the NHS currently has a nursing workforce gap of around 41,700 nurses. It forecasts a shortfall of around 51,000 nurses in the NHS in England by end of the Brexit period – enough to staff 45 small to medium sized hospitals. The NIESR report (particularly Appendix C)[114] also includes statistics on NHS leavers and joiners which will be useful as part of this call for evidence.

Recent NMC data shows a decrease of 2,385 nurses and midwives from the EU joining the register[115]. It also shows that the number of people from the EU joining the register for the first time dropped by 219 in 2018. This follows a drop of 9,071 in 2017, largely attributed to Brexit. NHS Digital data shows that between July 2017 and July 2018, 1,584 more EU nurses and health visitors left their roles in the NHS than joined[116].

In social care, only 64 per cent of the registered nursing workforce in social care is British[117] highlighting the demand for skills from both within and outside of the EEA.

UCAS figures show that the numbers applying to begin nurse training in September 2018 have dropped 12 per cent compared to the same time last year, resulting in a total decline of 16,580 since March 2016, the last year students received financial support through the NHS bursary.

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[113] Review of the Tier 2 report, balancing migrant selectivity, investment in skills and impact on UK productivity and impact p44
[114] NHS Employers (Nov 2018) *Brexit and the health and social care workforce in the UK*
[115] The NMC Register 2018, The big picture
[116] HEE Facing the facts; shaping the future
[117] NHS Employers (Nov 2018), *Cavendish Coalition: NHS could be short of 51,000 nurses*

The numbers of nurses leaving the NHS is also worrying, particularly at the younger end of the spectrum. In 2016/17, 5000 more nurses left employment than in 2011/12[118]. UK nurse leaver rates have been higher than numbers of joiners in 2015/16 and 2016/17.

Medical

The number of hospital medical staff has grown substantially from 87,000 in 2004 to 113,500 in March 2018. Within that figure, the number of hospital consultants has risen by more than half – up from 30,650 in 2004 to 47,816 in March 2017[119]. Despite this growth, hospitals continue to face medical shortages across specialties.

Recent feedback from employers suggests that their clinical and medical oncology services are under strain due to the shortage of consultants available to enter these specialties. A report undertaken by the Royal College of Radiologists[120] highlights that cancer doctors will be more than 20 per cent understaffed by 2022. The five year forward view sets out a plan to ensure that we have the right number of skilled health professionals to meet the new demands of a personalised cancer service for patients. This includes investment in the number of radiology, diagnostic radiographers and nurse endoscopy training positions and an increase the number of clinical oncology, medical oncology, medical physics, therapy radiography and CNS training positions.

There are increasing shortages of non-British practising doctors. In 2017, 33 per cent of licensed doctors in the UK are non-British and the number of EEA doctors has declined from 22,967 in 2012 to 21,609 in 2017, a decrease of 5.9 per cent[121].

Applications for medical student places are decreasing. In 2011 there were 83,000 compared to less than 69,000 in 2017. The strongest decrease was for EU applicants with a 20 per cent reduction in applications[122].

The Royal College of Physicians reported in March 2017 that 84 per cent of their members were experiencing staffing shortages across the team, with rota gaps occurring on a regular or frequent basis[123].

Allied health professions

AHP's make up 1 in 7 of the clinical workforce and growth[124] has been steady, ranging between 1.6 per cent and 2.4 per cent per year. In 2016/17 this growth did reduce vacancies from 7.2 per cent to 5.1 per cent but the NHS is still not attracting the numbers of registered AHPs required. Only 45 per cent of AHP's registered with the Health and Care Professions Council work within the NHS, which demonstrates the attraction and flow to other sectors. AHP's employed in the NHS have increased by almost 8,000 fte (10.7 per cent) over the past

[118] Health Education England (2017), Facing the facts, shaping the future
[119] NHS Digital data, NHS HCHS workforce statistics
[120] Clinical oncology UK workforce census 2017 report
[121] NHS Employers (Nov 2018) *Brexit and the health and social care workforce in the UK*
[122] NHS Employers (Nov 2018) *Brexit and the health and social care workforce in the UK*
[123] Royal College of Physicians (2017), Physicians worried about future patient safety, whistleblowing and rota gaps. Royal College of Physicians.
[124] Health Education England, Facing the facts, shaping the future

five years. However, during the same period the NHS created almost 12,000 posts (15.7 per cent).

When looking at individual AHP professions, the situation varies. The physiotherapy profession has shown steady growth and is likely to be boosted by increased training numbers. Whilst paramedics saw a worrying decrease between 2012 to 2014, this was supported by investment in additional training and active recruitment and retention initiatives. Diagnostic radiography has risen but as the cancer plan shows demand is expected to continue to rise and therefore further supply effort is needed. Podiatry numbers have fallen in every year except 2014/15.

NHS Employers international recruitment survey

In January 2018, NHS Employers invited all NHS trusts in England to take part in an international recruitment survey. 102 (42 per cent) of organisations responded, representing all regions in England. The survey gathered information on the recruitment of qualified/registered overseas nurses and allied health professionals between January to December 2017. It also asked for projected 2018 recruitment data. Employers were also given the opportunity to share other key information relating to their overseas recruitment.

Key points:

- 55 organisations recruited nurses from overseas in 2017 and 45 said they were planning to again in 2018
- 15 per cent of respondents told us they recruited allied health professionals from overseas in 2017.

NHS Employers, NHS Providers and the Shelford Group EU workforce survey

For two years, under the umbrella of the Cavendish Coalition, NHS Employers, along with NHS Providers and the Shelford Group, have been surveying employers to understand local and national workforce issues since the vote to leave the EU in 2016.

Key data from the first year of collection includes:

- 19 per cent NHS trusts in 2016 said the impact of Brexit on their workforce would be negative. This increased to 41 per cent of trusts in 2017
- In 2016, 49 per cent of trusts had a recruitment strategy to recruit from the EU which fell to 35 per cent in 2017.

Statistics from the latest collection show that:

- approximately 40 per cent of organisations still think Brexit will have a negative impact.
- Only 42 per cent of employers think the Home Office EU settlement scheme will allow them to retain their existing EU staff and 34 per cent think it will allow them to recruit new EEA staff.
- Over one in five employers have changed their plans to recruit from the EEA following the vote. This has increased from just 6 per cent in September 2017.

- 65 per cent of employers don't currently have recruitment strategies to recruit from the EU.

If you have other information that might be useful for our call for evidence, please use the space below to explain. Not to exceed 500 words.

Despite Government measures to improve education and training, routes into professions and attraction into roles, there simply aren't enough skilled domestic staff across many professions to meet increasing service demand. The NHS is also seeing greater demand from staff for flexibility and part-time working, particularly in the fields of medicine and general practice.

Health Education England predicts that by 2027 the NHS in England alone will require an additional 190,000 workers, compared to a supply rate which would only add 72,000.

The NHS has in the region of 100,000 vacancies which equates to 1 in 11 posts and the vast majority of these are filled with expensive bank and agency staff[125]. Every vacancy carried causes pressure on other staff. Latest NHS Digital workforce statistics show that in March 2018 the highest percentage of vacancies were in nursing and midwifery, which accounted for 40 per cent of the 28,998 reported. This was followed by Administrative and Clerical which accounted for 21 per cent[126].

The health and social care sector is heavily reliant on recruiting talented professionals from overseas. For many employers, recruiting nurses from overseas forms a critical part of meeting demand and delivering high quality patient care. In social care, the contribution of EEA nationals is also important with them making up to 5.4 per cent of the workforce.

As of June 2018, 144,074 (12.7 per cent) of NHS staff are reported[127] to have a non-British nationality.

The recent National Institute of Economic and Social Research (NIESR) report[128] commissioned by the Cavendish Coalition[129] shows that just over 5 per cent of the regulated nursing profession, around 9 per cent of doctors, 16 per cent of dentists and 5 per cent of allied health professionals are from the EEA.

The shortage occupation list has had a very clear purpose and function within the current immigration system. It allows the NHS to quickly fill workforce shortages and allows skilled individuals to settle in the UK, removing the need to meet the current £35,000 salary threshold.

While we recognise that the timing of this review is not within the remit of the Migration Advisory Committee, it may present more challenge without knowing how the shortage

[125] NHS Improvement (2018) Performance of the NHS provider sector for the quarter ended 30 June 2018.
[126] NHS Digital vacancy statistics in England July 2018
[127] House of Commons Library, NHS staff from overseas statistics
[128] NHS Employers (Nov 2018), *Cavendish Coalition: NHS could be short of 51,000 nurses*
[129] The Cavendish Coalition

occupation list will fit into the future immigration system and what value it will add. For example, with the proposed removal of the resident labour market test, and certificates of sponsorship cap, the function of the shortage occupation list will be quite different to what it is now and possibly facilitate the recruitment of occupations and roles in shortage which do not qualify within the boundaries of the current Tier 2 rules.

About NHS Employers

NHS Employers is a national organisation and represents the views of NHS trusts in England and Wales. It is part of the NHS Confederation and supports workforce leads across the NHS in policy development by providing advice, guidance and through sharing good practice which helps employing organisations to put patients first.

Our response to this consultation has been informed by our strong engagement with employers on the domestic and overseas recruitment challenges faced and workforce data.

We have encouraged employers to respond directly to this consultation.

Northern Ireland Chamber of Commerce

16 January 2019

Migration Advisory Committee

2nd Floor Peel Building

2 Marsham Street

London

SW1P 4DF

Dear Sir / Madam

CALL FOR EVIDENCE: SHORTAGE OCCUPATION LIST REVIEW

Thank you for the opportunity to respond to the request for evidence into the review of the composition of the Shortage Occupation List (SOL) and the potential to create a separate SOL for Northern Ireland.

Northern Ireland Chamber of Commerce and Industry (NI Chamber) is the leading business organisation in Northern Ireland, with a primary focus on supporting business growth, working with a number of key stakeholders including Invest NI, InterTradeIreland and the Department for the Economy in Northern Ireland. NI Chamber is also a member of the British Chambers of Commerce and Chambers Ireland networks.

NI Chamber and its 1,000 strong membership strongly endorse the need for a separate SOL for Northern Ireland. As a region Northern Ireland have suffered the most serious fallout from the recession and have battled hard to get back to a more positive economic position. However, we still face inherent structural issues in terms of the shape of our economy including a small private sector and low productivity which both reflect our troubled past. We typically rank among the bottom performing regions across many key indicators. We believe that it is critical that, as with skills policy, migration policy needs to be tailored to meet this region's unique and challenging position. We would like to outline some of the key reasons why we believe this to be the case.

The issue of access to skills is of particular concern to NI Chamber and one that is becoming increasingly prevalent in discussions with our members. The NI Chamber / BDO Quarterly Economic Survey (QES), the largest private sector business survey in Northern Ireland, continually highlights skills shortages at critical levels in Northern Ireland. Around 3 in 4 of our members cannot find the right staff for the jobs on offer, largely skilled trades in manufacturing and professional/managerial staff in services. Half (50%) of members have reported that difficulties in recruiting the appropriate skills are having the greatest negative impact on productivity. We know from official statistics that skills gaps/vacancies are particularly prevalent in high and middle skilled occupations here including skilled trades occupations (23%), professionals (16%) and associate professionals (11%). This is putting serious pressure on competitiveness and growth aspirations of local businesses in what is an already challenging environment with major issues such as Brexit and indeed the lack of a local Assembly here to contend with.

As a result, Northern Ireland has increasingly relied on migrant labour to fill employment and skills gaps. In fact the region has been almost entirely dependent on employment from EU

(26) migrants for the growth in employment levels particularly from 2013 to 2017. This inward migration has been mostly economically based with the majority of inflowing people aged 16 to 39 and coming here for work purposes. While those workers do possess a wide range of skills, around 35% are classed in upper middle and high skills occupations. Migrant workers are critical to a wide range of sectors here including parts of manufacturing, engineering, computer programming and health.

Our 'Brexit Watch'1 has demonstrated the very significant and increasingly damaging impact on local businesses of losing/not being able to recruit non-nationals. In our latest QES2 almost one third (32%) of members said that their recruitment of non-nationals had been negatively affected by Brexit. This figure was just 5% when we asked it during the same quarter two years ago in 2016. This is also evidenced through official statistics which show a 26% reduction in the number of EU26 born people living in Northern Ireland over the last 2 years. The environment for recruiting/retaining migrant labour is already extremely challenging here.

This is in part a contributory factor to why we are also seeing some evidence from our QES 'Brexit Watch' of businesses setting up satellite premises outside the UK (largely in the Republic of Ireland). Businesses need to be assured that policy is place to support them to access the skilled labour that they need, locally and/or internationally, and make sure that it does not become even more attractive for some businesses to take steps to relocate all or parts of their business on the other side of the border or elsewhere. Northern Ireland businesses simply cannot afford to end up in position that they cannot access international skills in the same way as the Republic of Ireland because of UK migration policy. This is a very important point as the only region of the UK to have a land border with an EU country.

Northern Ireland has ambitious plans to grow. The draft Industrial Strategy strongly emphasises the need for Northern Ireland to be an internationally competitive economy where businesses can realise their high growth potential. There are targets sectors which are at the core of the Strategy and we need to make sure that the skills/occupations that are key to each are properly accommodated through a localised SOL. We need to be able to access the right people to make these plans work or Northern Ireland will find itself increasingly marginalised on an international stage.

We would like to make an additional point around the £30,000 minimum salary threshold. Northern Ireland has the lowest private sector earnings across the UK regions3, 20% of the UK average. The UK migration wage threshold of £30,000 is simply too high and in our view would cause inherent difficulties for Northern Ireland businesses to attract skilled workers. This would place us at a distinct disadvantage both nationally and internationally. Median full-time earnings in some of our most important existing and emerging sectors are below this threshold. For example, full-time median wages in manufacturing are around £25,000 and in professional services £28,500. We believe that £23,000 is a much more realistic minimum wage threshold which more adequately supports the labour market dynamic in this region.

We hope this evidence is helpful to the review. We appreciate that more detail will be required around the actual Shortage Occupation List and would welcome the opportunity to support the MAC in putting this together. You will be aware of the Northern Ireland Skills Barometer which does forecast skills needs for the Northern Ireland economy going forward and identifies the key occupational groups that are required.

1 Carried out through the NI Chamber/BDO Quarterly Economic Survey since Q3 2016

2 Q4 2018

3 The median full-time employee salary in Northern Ireland is £27,006 compared to £29,574 for the UK, around 90% of the UK average.

Northern Ireland Civil Service

Dear Professor Manning

CALL FOR EVIDENCE: SHORTAGE OCCUPATION LIST REVIEW
The UK Government has commissioned the Migration Advisory Committee (MAC) to carry out a full review of the composition of the Shortage Occupation List (SOL) and a call for evidence was launched on 13 November 2018. As Head of the Northern Ireland Civil Service (NICS), I am writing to highlight specific Northern Ireland issues and priorities in relation to this commission from the Home Secretary and the related call for evidence from the MAC.

I also note that the White Paper on "The UK's future skills-based immigration system[1]" set out the UK Government's intention to invite the MAC to compile a specific SOL for Northern Ireland. I welcome this development and officials within the NICS stand ready to engage with you in the coming weeks to discuss the outworking of this proposal and a schedule for stakeholder engagement.

[1] The UKs future skills-based-immigration system

I understand that the Department for the Economy facilitated a stakeholder event on 27 November 2018 where a wide range of issues were raised for your consideration. I anticipate that a number of stakeholders across Northern Ireland will want to respond directly to your call for evidence in order to provide the level of detail you require for shortages in their respective areas.

This response is intended to give a broader overview of the skills and labour market position in Northern Ireland both now and in the future as we move towards exit from the European Union (EU). This letter should also be read in conjunction with my responses to recent MAC calls for evidence[2] [3] as a number of the themes I raised at that stage remain relevant to this commission.

[2] HOCS letter to Professor Alan Manning 2/11/17
[3] HOCS letter to Professor Alan Manning 9/05/18
[4] ASHE Public and Private sector median salaries by region

For example, I have raised previously the wage differential between Northern Ireland and other regions within the UK. Employers here make the point that they are disadvantaged by wage thresholds which form part of the UK Immigration system but are not set at levels which reflect the NI labour market. This differential is particularly stark in the private sector where the most recent Annual Survey of Hours and Earnings[4] shows that private sector salaries in Northern Ireland are the lowest of all UK regions and 20% below the private sector median salary. I believe this is an issue that should be considered in the development and application of the SOL, particularly where one is developed specifically for Northern Ireland.
Ensuring employers in Northern Ireland have access to appropriately skilled people is imperative if the region is to achieve its economic ambitions. In 2017 the Northern Ireland Department for the Economy published "Economy 2030: A Consultation on an Industrial Strategy for Northern Ireland' which sets out a vision of a globally competitive economy that works for everyone. It recognises that skills are integral to success and the skills agenda remains at the heart of the Northern Ireland draft Programme for Government. The Northern Ireland Skills Strategy – Success through Skills, is already enabling people

to access and progress up the skills ladder. It aims to raise the skills level of the whole workforce, enhance social inclusion; and secure Northern Ireland's future in a global marketplace. However, as we progress along this pathway, maintaining access to the skills migrant workers can offer remains critically important.

Despite that strong focus on upskilling and reskilling, the evidence points to continued skills shortages in the local economy. The Northern Ireland Employer Skills Survey[5] reported that 16% of NI businesses recorded a vacancy in 2017. The sectors with the highest vacancy rates (vacancies as a proportion of employment) were hospitality (4.5%), construction (4.2%) and financial services (4.1%). Of those businesses that reported having vacancies**,** 21% stated that the vacancies were difficult to fill because of skill shortages. The occupations with the highest rate of skill-shortage vacancies were skilled trades (39% of all vacancies in that occupational area), machine operatives (30%) and professionals (26%). The survey also shows that while many employers are taking actions to address these shortage vacancies, they do have a profound impact on productivity including, for example, on delays in the development of new products and services.

[5]Employer Skills Survey 2017

Health and Social Care are particular areas of vulnerability in Northern Ireland, where there are occupation shortages right across the public and independent sectors. A Northern Ireland SOL could be of considerable benefit. The Northern Ireland Health and Social Care Service employs approximately 65,000 people (health and social care in Northern Ireland are integrated and provided by Trusts, unlike in England where local government is responsible for social care). The latest vacancy numbers (June 2018) show that there were 6,089 vacancies across the public sector service, an increase from 4,820 at the same point in 2017. The latest vacancy figures include, and are not limited to, 1,907 nurses, 600 social care/domiciliary care workers, 470 allied health professionals and nearly 200 medics/dentists – across a number of specialties.

The service is reliant on the independent social care sector. The Northern Ireland Social Care Council has stated in the Social Care Matters[1] report (2017) that Social Care Providers "have difficulties with both the recruitment and retention of social care workers and experience a significant churn in this workforce. All Providers across all social care provision report vacancies in their workforce and job recruitment sites show rolling vacancies for social care workers."

[1] https://niscc.info/storage/resources/boc-niscc-reportv02-1.pdf
[2] https://www.health-ni.gov.uk/sites/default/files/publications/health/power-to-people-full-report.PDF
[3] https://www.health-ni.gov.uk/sites/default/files/publications/health/expert-panel-full-report.pdf
[4] https://www.health-ni.gov.uk/sites/default/files/publications/health/hsc-workforce-strategy-2016.pdf

An independent review of social care – Power to People**[2]** – identified significant workforce issues that need to be addressed in order to reboot adult care and support in Northern Ireland.

Health and Social Care in Northern Ireland is already making use of the current SOL, through International Nursing and Medical Recruitment projects which have been in operation since 2016. Furthermore, the Health and Social Care system in Northern Ireland is in the early stages of a wide-scale transformation project, to ensure that the service survives on a sustainable footing into the future. The Systems not Structures**[3]** report (2016) concluded that "Faced with demographic shifts and increased demand, the current service model is not financially or practically sustainable in the medium to long term". It identified a number of workforce issues and a Workforce Strategy**[4]** (2018) has been developed as a means of addressing these by 2026.

Looking forward, the Northern Ireland Skills Barometer[6] provides a detailed understanding of the skill requirements for the Northern Ireland economy by qualification level, subject area, sector and occupation in the period up to 2026. This barometer sets out the type of skills that will be required in order that Northern Ireland's economic ambitions can be delivered. It also assesses where skill shortages are likely to appear. The most recent update of June 2017 indicated that the greatest shortages will be for people with National Qualification Framework (NQF) Level 3 and NQF Level 4-5 qualifications and that; the subjects with the greatest shortages at NQF 4-5 will include nursing, science, engineering and ICT.

[6] Northern Ireland Skills Barometer

Related to this, the sectors that are estimated to create the most new vacancies by 2026 include professional scientific and technical, information and communication and manufacturing. In parallel and from an occupational perspective, greatest expansion is anticipated for elementary administration and service jobs, business and public service professionals and science and technology professionals.

It should be noted that the current Skills Barometer did not seek to build in the potential impacts that EU Exit might have on the local job market. Nevertheless, the Department for the Economy plans to publish a further update of the Skills Barometer in early 2019 which will be shared with you to assist with considerations for any Northern Ireland SOL. It is important that the UK immigration system and the SOL in particular, is designed in a manner that can support growth without skill bottlenecks emerging. In that context the draft Industrial Strategy identifies six broad sectors of the economy, across manufacturing and services, where Northern Ireland already has clear world class capabilities and has significant potential for growth. These sectors are:

- Financial, business and professional services;
- Digital and creative technologies;
- Advanced manufacturing, materials and engineering;
- Life and health sciences;
- Agri-food; and,
- Construction and materials handling.

As EU Exit approaches, I have pointed out previously that there is a particularly unique need for Northern Ireland to maintain access to migrant labour as the only region of the UK to share a land border with the EU. Our stakeholders have already made the point that, if Northern Ireland employers find themselves in a scenario where they had access to skills and labour on a more constrained basis than their Republic of Ireland counterparts, there is a very real risk that they would be forced to relocate activity south of the land border to protect their competitive position. I know this is a point that has been accepted by the MAC and by UK Government and I would urge you to consider it carefully as you take forward this particular review.

Figures from the Northern Ireland Statistics and Research Agency further illustrate that access to skills/labour issues have become more constrained in the period following the EU Exit Referendum. They show that there has been a statistically significant decrease in EU26 born people employed in Northern Ireland since the second quarter of 2016 (54,000) to the second quarter of 2018 (40,000), a reduction of 26%. In contrast the Republic of Ireland has experienced an increase in the number of EU 26 migrant workers over the same period. Stakeholders report that these patterns have been generated, at least in part, by the outworkings of the EU Exit Referendum with the fall off in the value of Sterling and a perception that the remaining EU27 countries have become more attractive in relative terms.

My responses to previous MAC consultations have pointed out that many sectors here, from agri-food right through to the university sector, benefit from the skills that EU workers have brought. If the number of EU workers in Northern Ireland continues to reduce that will inevitably lead to an increase in labour and skill shortages. In addition, EU Exit itself could generate changes in the demand for skills in certain areas. By way of illustration, the need for veterinarians could increase significantly in order to provide the additional export health certification that UK exports to the EU may require. This increasing need would be disproportionately felt in Northern Ireland given the scale of the agri-food sector here and the nature of its exports. It is accepted that there would be insufficient numbers of qualified UK and ROI nationals to meet this demand. I am aware that colleagues from the Department of Agriculture, Environment and Rural Affairs are actively engaging in the DEFRA-led, Veterinary Capacity and Capability Project (VCCP) which seeks inclusion of veterinarians onto the Shortage Occupation List. I understand that VCCP has made representations to the MAC, together with industry partners, in order to raise this point.

While these are issues for immediate consideration, given the context, I believe that it is essential to keep both the UK and any regional SOLs under review so that they can respond with pace to changes to skill needs that emerge in what is already a significant period of flux.

I trust this letter is helpful to your considerations and that the MAC will reflect on these issues, the related evidence, and the evidence that will follow in your ultimate findings and recommendations to the Home Secretary.

Finally, I must stress that this letter has been drafted by officials and seeks to include relevant statistical evidence and the views of local stakeholders, but it has had no political input. I have no doubt that a returning Executive will want to engage on these matters in due course.

I am sending copies of this letter to Mark Sedwill, Cabinet Secretary, Philip Rutnam, Home Office, Philip Rycroft, DExEU, Alex Chisholm, BEIS, and Sir Jonathan Stephens NIO.

NSAR

The Potential Impact of Brexit

on the Rail Industry

NSAR Report – October 2018

1. Executive Summary

- The proportion of EU workers is approximately 15% (equates to approximately 35,000 workers in UK rail today), a reduction of 2% from the last survey, which could indicate some non UK EU workers have already left the industry
- The industry will already require more people in 2021 (approx. 20,000 more) as a result of increasing investment levels
- There are potential retirees of 7,868 by 2021
- If we lost those non UK EU staff, and all those retired who reached 65, we could face a total shortage of 62,000 workers in 2021.
- Biggest gaps are in primarily operational and construction related roles
- Skill bands C and A could be affected, dependent on immigration policy
- West Midlands and London demonstrate the largest potential gaps for EU workers
- Contribution to a diverse workforce
- Economic value

2. Background, Introduction and Purpose

In 2016, the National Skills Academy for Rail (NSAR) carried out a survey about how organisations thought Brexit might impact upon their business. The results of this survey showed, that whilst some organisations though they would be affected, they were not entirely clear as to what this effect would be, or indeed the impact of the decision to leave the European Union, upon their business.

NSAR has been involved with the consultation and has contributed to the Migration Advisory Committee (MAC) report on EEA migration. The MAC report outlines the impact of EEA migration on areas such as the labour market, productivity and innovation and how a new immigration system may further impact these areas based upon the free movement of people.

With the deadline for the UK to leave the European Union fast approaching and although some of the details have become clearer through the issue of the white paper, NSAR have decided to revisit this survey to assess if organisations feel any differently about how leaving the EU will affect their business.

The response rate for this recent survey has been lower than anticipated, so we have amalgamated the responses of both surveys to generate a narrative about how employers feel about the UK leaving the European Union. The data considers both sets of results and the proportions of European Union workers have been calculated accordingly. From the results, we have been able to identify which skill levels and subsequently which roles are likely to feel the keenest impact.

The purpose of this report is to identify which roles in which regions are most at risk.

3. Today's Workforce Demographics

It is important to know what the rail workforce looks like today and what proportion of the workforce which encompasses non-British European Union workers. We can then use this information to determine what level of impact, any changes to the 'free movement of people' through any new immigration policy may have. The graphics in this section look at the demographics today.

Figure 1 Today's workforce split by work type

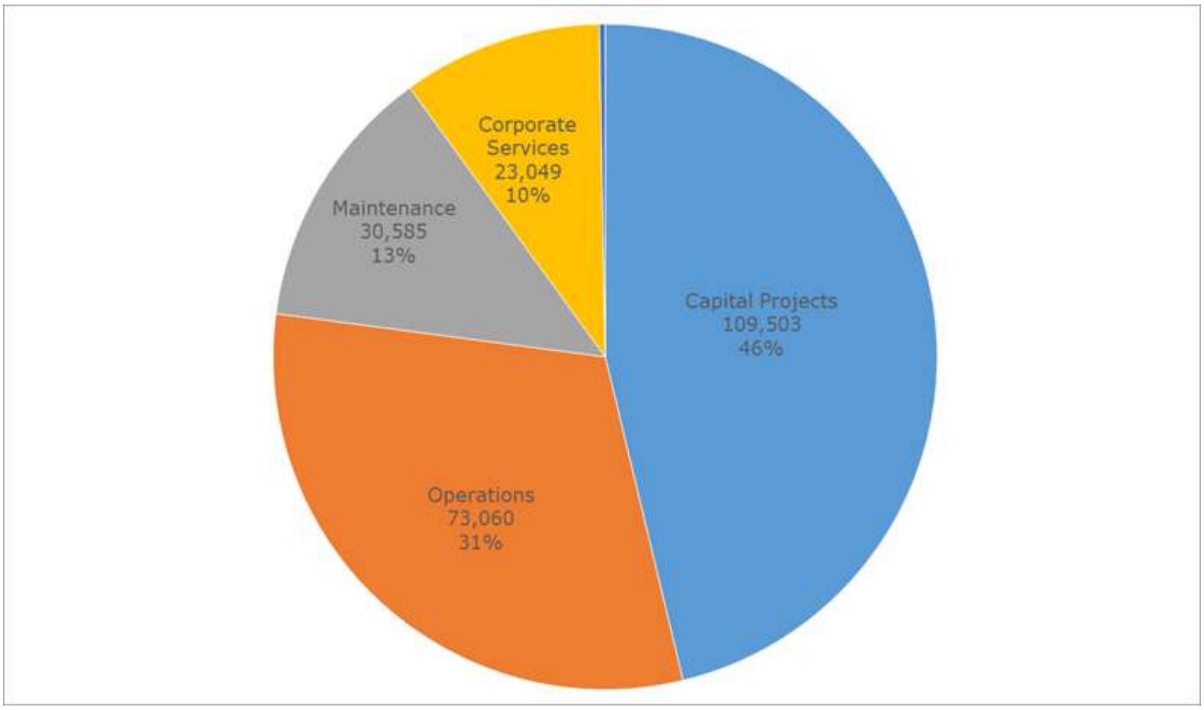


Figure 1 shows the split by age of today's current rail workforce, of around 235,000. Nearly half of the workforce is associated with capital project work that involves either renewals activities or enhancement activities and the supply chain employs most of that workforce. Nearly a third of the workforce is associated with operations activities, be it either infrastructure operations or train operations. This covers most of the Train Operators staff and the signalling and control staff of Network Rail. Maintenance of all infrastructure and rolling stock accounts for 13% of the workforce with the remainder being in corporate services roles (HR, Finance, IT etc) regardless of the main function of the business.

Figure 2 Age profile of today's workforce

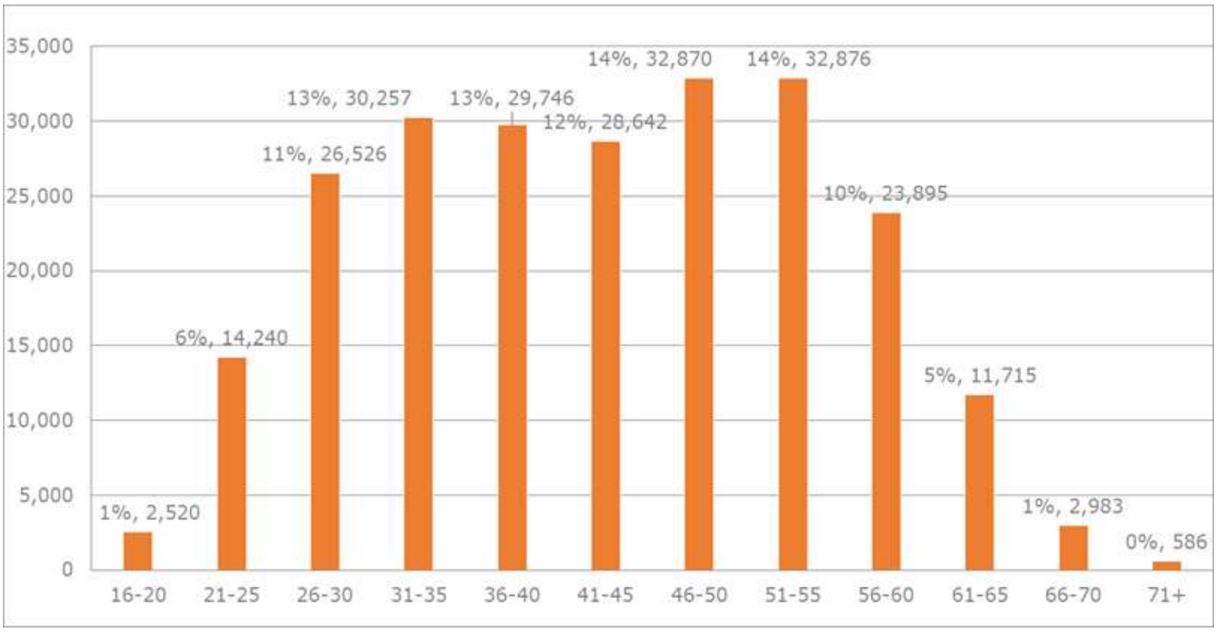


Figure 2 illustrates the age profile of workers in the rail industry. With mean and median ages around 43 (close to the UK working population mean and median ages), the rail industry does not appear, at first sight, to have an unusually aged workforce. However, with over 30% of the rail workforce population over the age of 50 now, indications are, there is likely to be a large outflow of workers in the industry before 2030, possibly up to 75,000 who we believe, will retire.

Both maintenance and operations activities possess workforces with more than 35% over 50 whereas capital projects and corporate services have a younger age demographic.

Figure 3 Today's workforce split by skill band

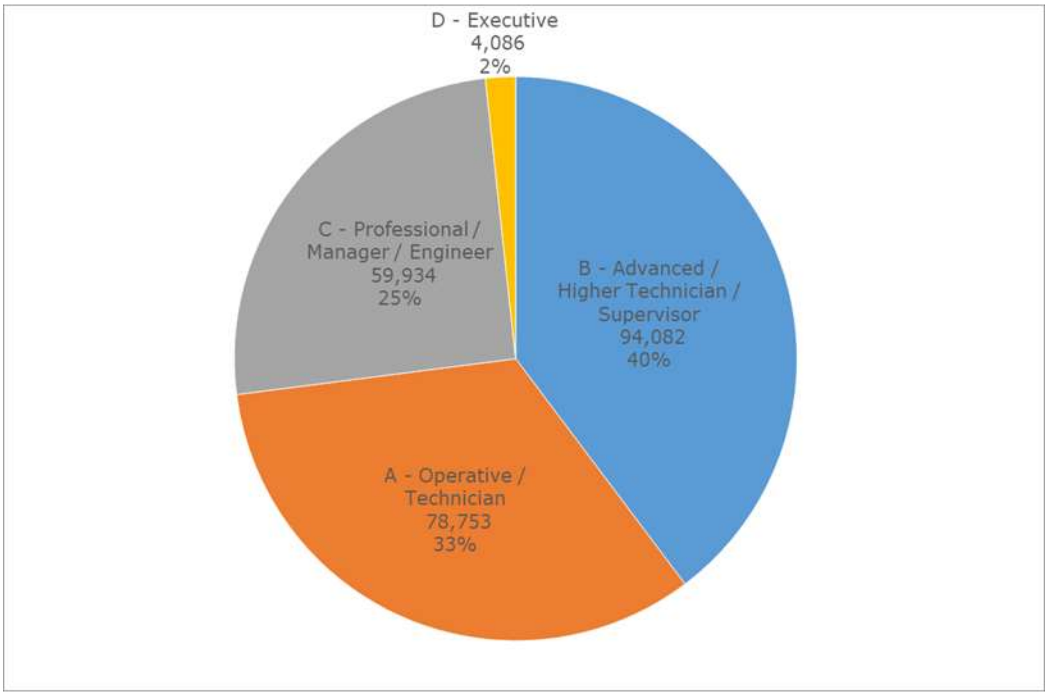


Figure 3 shows the split by skill band of today's current rail workforce, around 235,000. We classify each role into a particular skill band with the following explanation:

- Skill band A is NQF levels 1 and 2 (up to GCSE level)
- Skill band B is NQF levels 3 and 4 (A Level to HNC level)
- Skill band C is NQF levels 5 and 6 (HND to Bachelor's Degree)
- Skill band D is NQF levels 7 and 8 (Masters and Doctorate level)

It is important to note that we judge each role on its required skill level, not each person that might be filling the role.

Across the rail industry, we have found that nearly 40% of the roles require an A-level or equivalent education qualification. This has increased significantly in the last two years primarily because Train Drivers (of which there are approximately 19,000 in the industry) have been reclassified at Level 3 rather than Level 2. One third of the workforce is in skill band A and the remainder (approximately a quarter) require a degree or more at Levels 5 and above. It is worth stating though that the Sentinel data (over 90,000 people) does not provide job roles and therefore we have excluded this data from the results. However, if the Sentinel data were to be included, it is likely that the number of workers in skill band A would significantly increase from those shown and then skill level A would form the largest group in the industry.

Figure 4 Today's workforce split by region

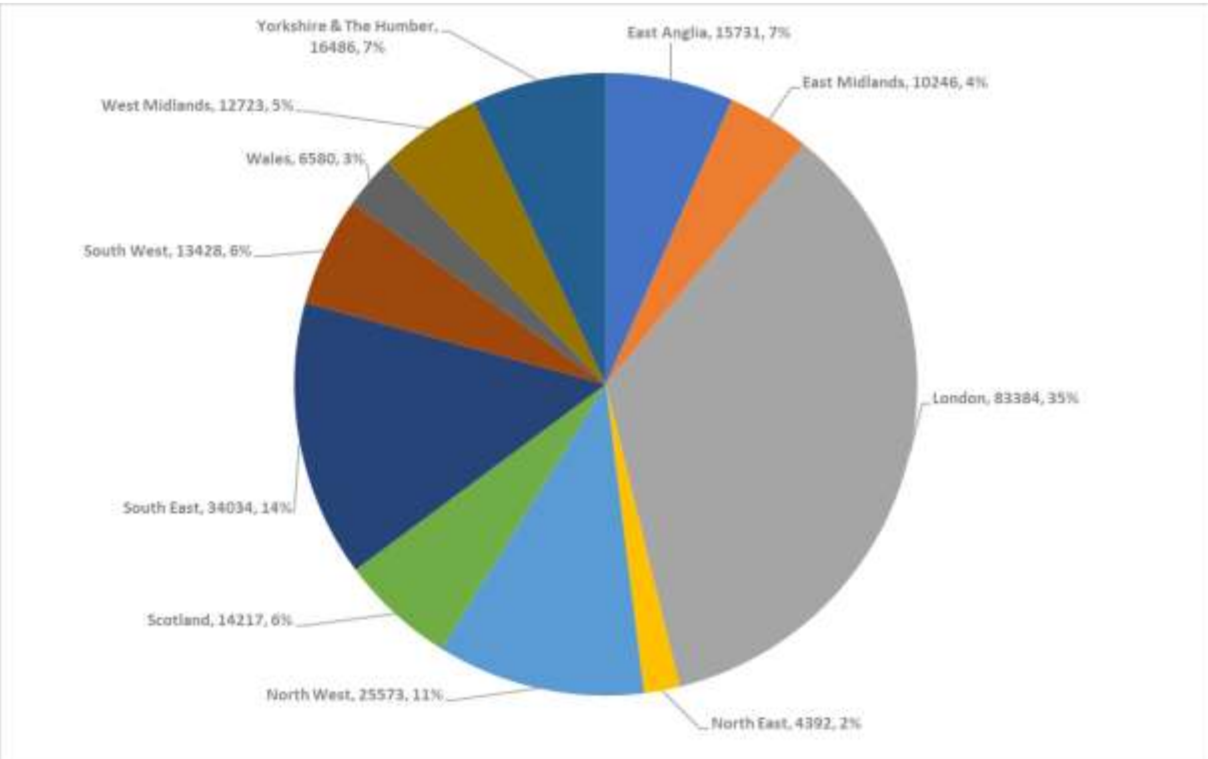


Figure 4 shows the split by region of today's current rail workforce, around 235,000. This is based on where people work, not their home locations. What is evident here is that well over half of those employed in UK rail work in London and the South East. Even removing Transport for London from the analysis would still generate around 85,000 people in London and South East alone. In itself, this is not surprising given the density of the train services, the infrastructure and the frequency of the services in and out of London. Other regions struggle to get above 10% by comparison.

It is important to note which roles have higher numbers of European Union workers to try and identify where some of the potential gaps may exist in the future. Whilst few organisations, historically have recorded the nationality status of their employees, in a recent refresh of our employer data, we have been able to collate some data in this aspect. From the 236,000 records received, approximately 1,200 employees declared their nationality. This number represents less than 1% of the total rail workforce.

Whilst this number may appear small and represent only a small proportion of the UK rail workforce, the impact of these roles currently filled with EU workers within some organisations could be significant. We can use this information, combined with the figure generated from our survey to identify roles which may be a challenge to fill after the UK has left the European Union.

From a skill level perspective, the 1% of European Union workers identified are currently filling roles centred around skill band C and skill band A as illustrated in Figure 5. Whilst, the underlying numbers are low, the percentages indicate where there could potentially be gaps, especially if there is to be a curb on low-skilled immigration post Brexit. Whilst nothing is certain, at the time of writing this report, we need to be mindful of the gaps which may exist if this were to be the policy decision.

***Figure 5 Percentage of EU workers in each skill band*[130]**

	A - Operative / Technician	B - Advanced / Higher Technician / Supervisor	C - Professional / Manager / Engineer	D - Executive
Percentage in band	34.49%	26.67%	37.27%	1.56%

4. Survey Results

From the results of the 2016 Brexit survey, the companies interviewed collectively agreed the proportion of non-British EU workers, accounted for approximately 17% of the workforce.

Having repeated this survey, we have found the figure to now be 15%. This could be due some employers providing a conservative figure or estimate as the information is not recorded or retained, or possibly because some EU workers have already decided they no longer want to work in the UK because of Brexit and have taken steps to relocate.

This section of the report looks at the results of the survey and highlights some of the employer's concerns, considering the deadline for a Brexit deal is fast approaching and as yet we are not entirely sure what this mean for the labour market or what the impact will be.

Figure 6 Brexit affect responses

[130] Percentages are based on known European Union workers only

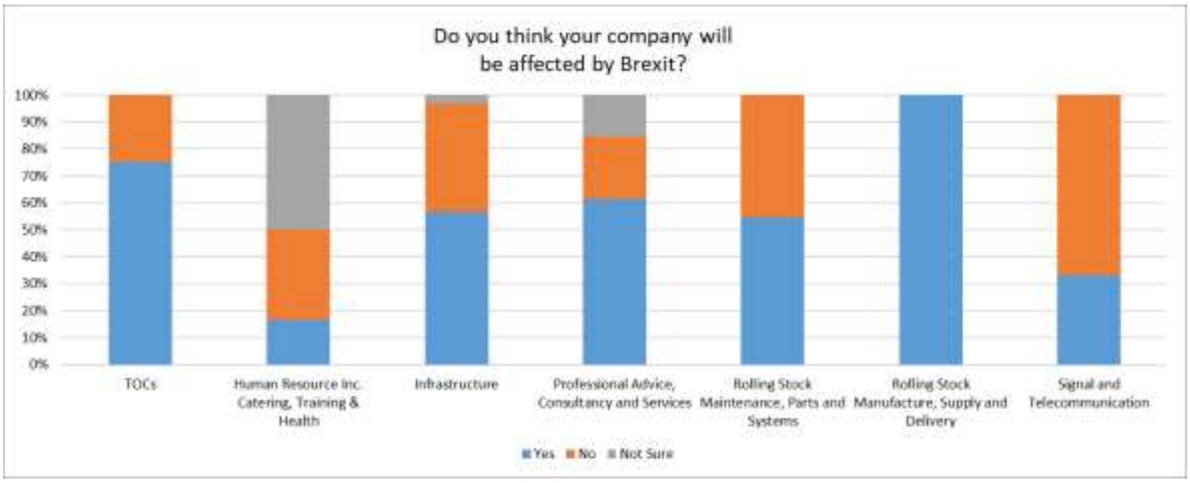


Figure ***6*** illustrates the responses received from the survey and indicates there are still areas within the industry where organisations are uncertain about the impact of Brexit for them. There does, however appear to be certainty around Brexit having an impact.

Figure 7 Employment of EU workers

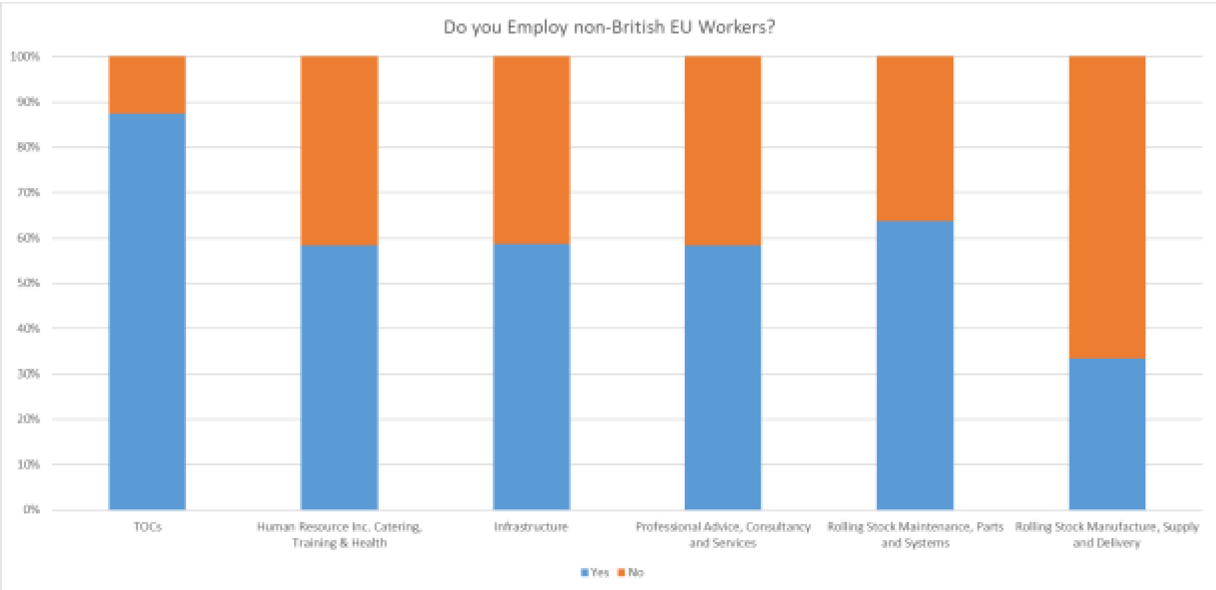


Figure 7 illustrates the types of companies who employ workers from the European Union, with Train Operating Companies being the highest area from our survey responses. Over 50% of respondents in each category, with the exception of Rolling Stock Manufacturers (around 30%) said they employed workers from the European Union.

From the discussions which took place the main concerns about the impact of Brexit were:

- Negative impact on revenue
- Smaller pool of talent to recruit from as EU nationals will not be readily available

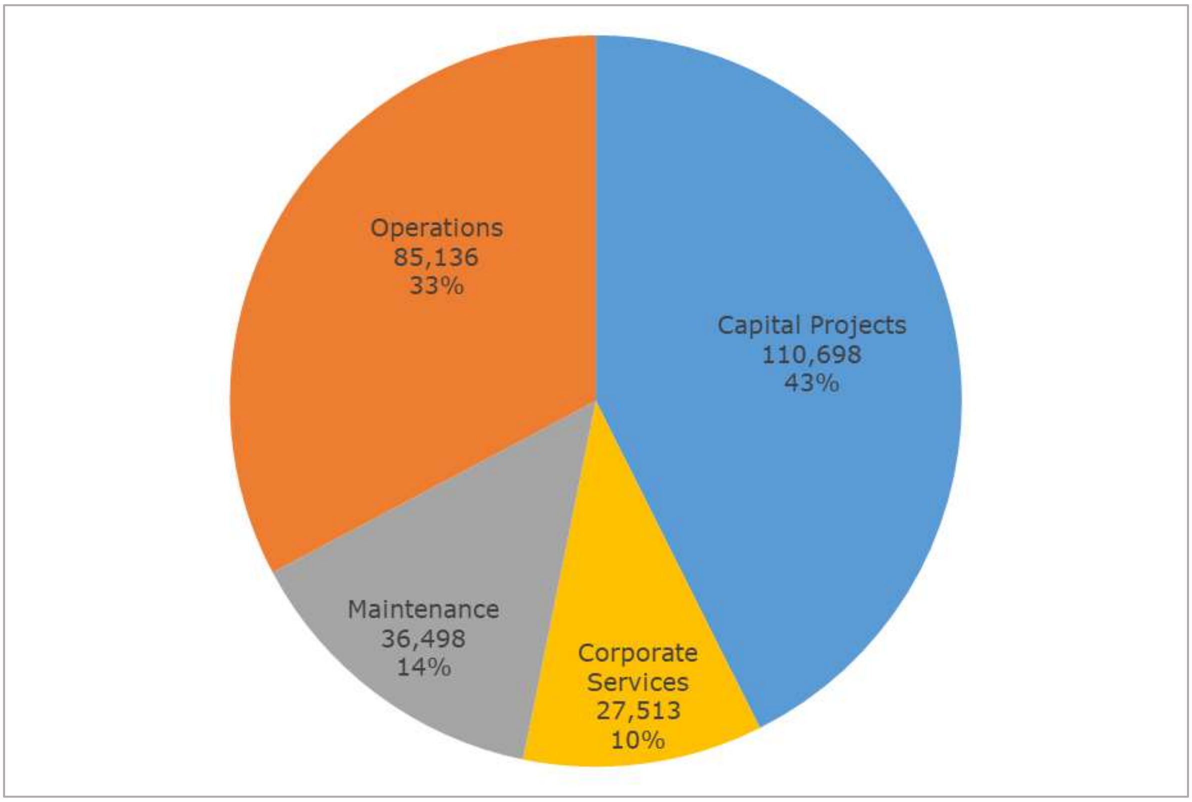
- Importing goods could be affected by additional tariffs and a poor exchange rate, as well as increase in raw material prices
- 'No-deal' could trigger economic downturn
- Access to funding for research and development

The full list of responses can be seen in Appendix 2.

5. Future Workforce at the end of the Transition Period (2021)

In looking ahead at the future workforce, the year of 2021 has been selected as by this time, the transition period for the UK leaving the European Union should be completed. The funding which has been indicated for CP6 has used to generate a workforce for the period of 2019 to 2023, with the peak of this workforce being required in 2021, at 259,845.

Figure 8 2021 workforce by work type



In Figure 8 the main demands are in operations and capital projects, replicating what is seen in today's workforce. There is an increase in the total numbers required to meet the planned investment profile.

Figure 9 2021 workforce by skill band

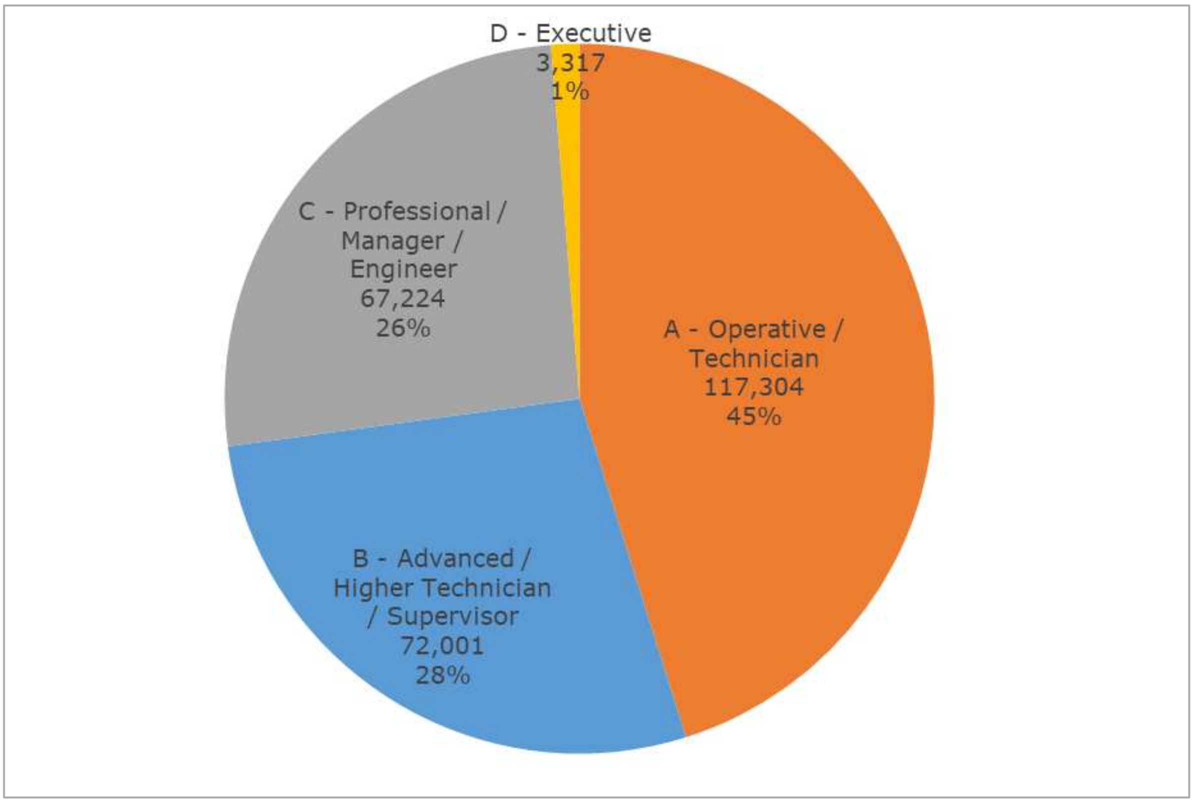
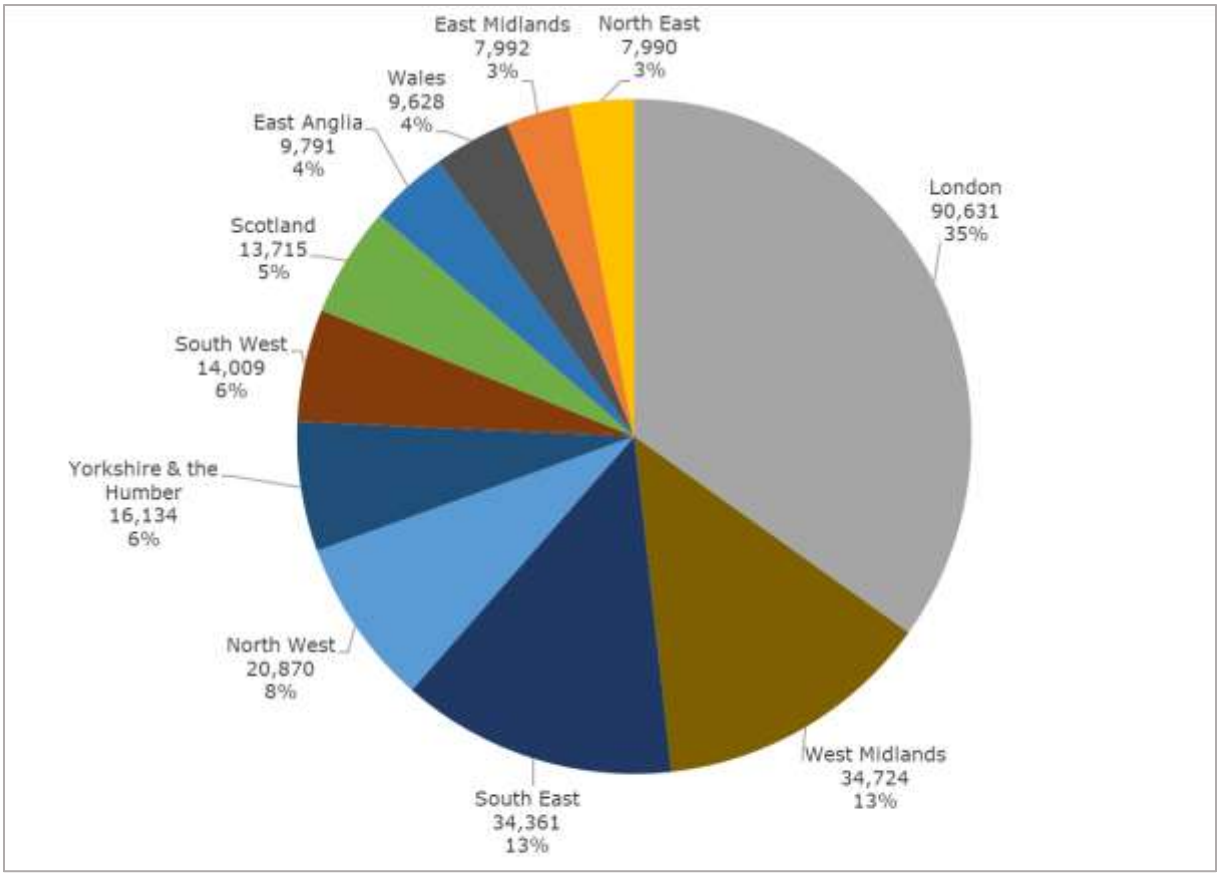


Figure 9 shows the requirements of employees in each skill band at the point of the transition period coming to an end. Whilst the number of employees at the lower end of the spectrum show an increase from today's workforce, the majority of the workforce are still required in bands B and C, accounting for approximately 55% of the total workforce numbers.

Figure 10 2021 workforce by region



The noticeable difference in the regional demand in 2021 is in the West Midlands, where demand here has risen from 5% of the workforce to being represented by 13% of the workforce. This is related to the major works of HS2 Phase 1, as this is built from London through to the West Midlands. There is an overall growth required in the total workforce numbers, meaning very little shift in the other regions. London and the South East remain the dominant regions in the rail transport network.

6. Analysis of Gaps and Shortages

From the results of the survey, we have established approximately 15% of the rail workforce in the UK are non-British EU workers. We have taken this value and extrapolated against the figures we have from today's workforce to identify potential gaps and specific job roles.

When looking at the numbers of European Union workers in the workforce, there are a number of roles which in the future, depending on the policy decision for immigration, recruitment of skilled workers from European countries could be challenging.

From the analysis, the proportions of European Union workers by work type, show the largest shortfalls to be in operations. This encompasses roles such as, Operatives, Customer Service Assistant and Signallers. Figure 11 illustrates the potential gaps by work types for European Union workers. We have assumed EU workers will continue to represent 15% of the total workforce to generate a gap analysis between today's workforce and that required for 2021.

Figure 11 Potential gaps in 2021 by work type, EU workers

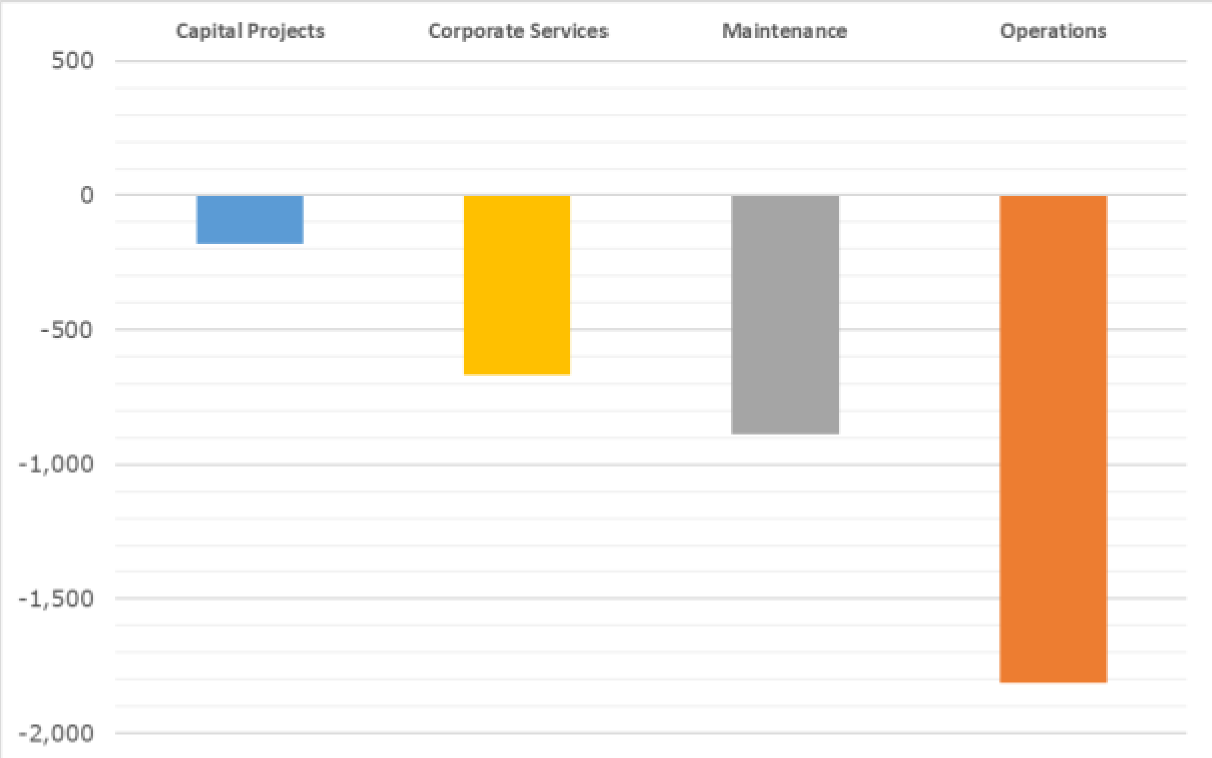


Figure 12 Potential gaps in 2021 by skill band, EU workers

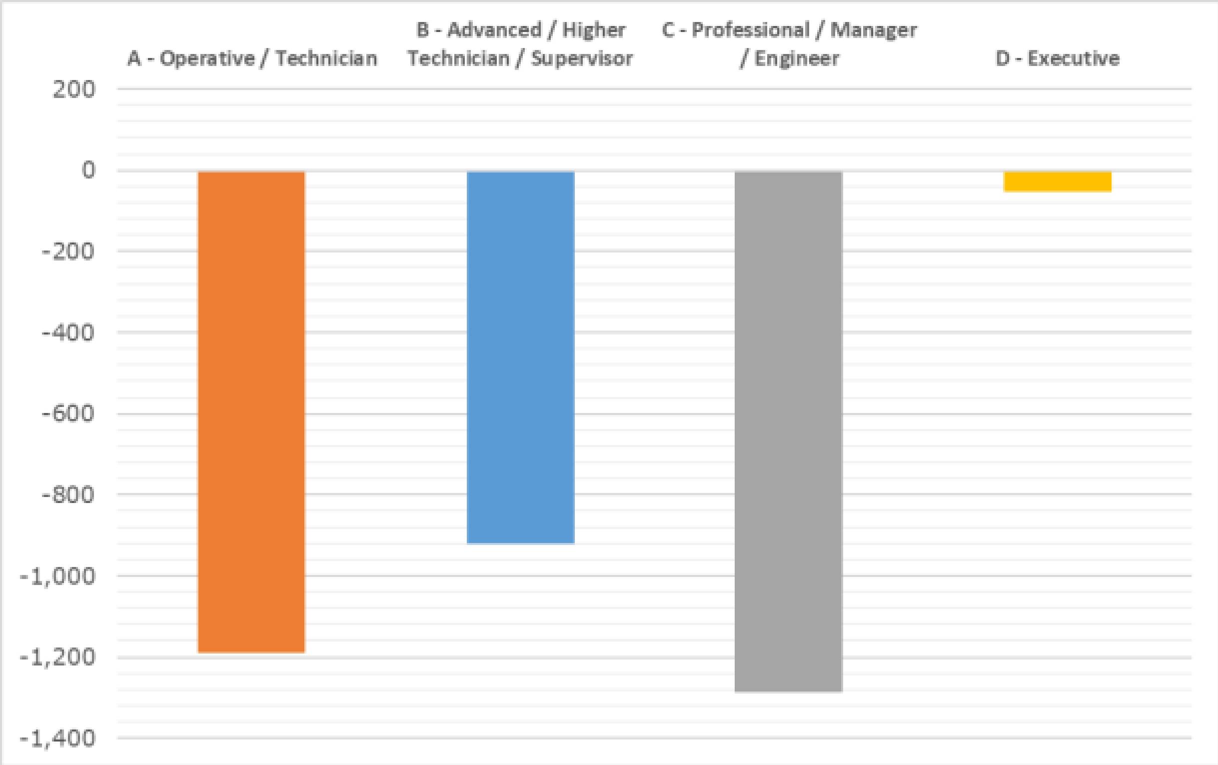
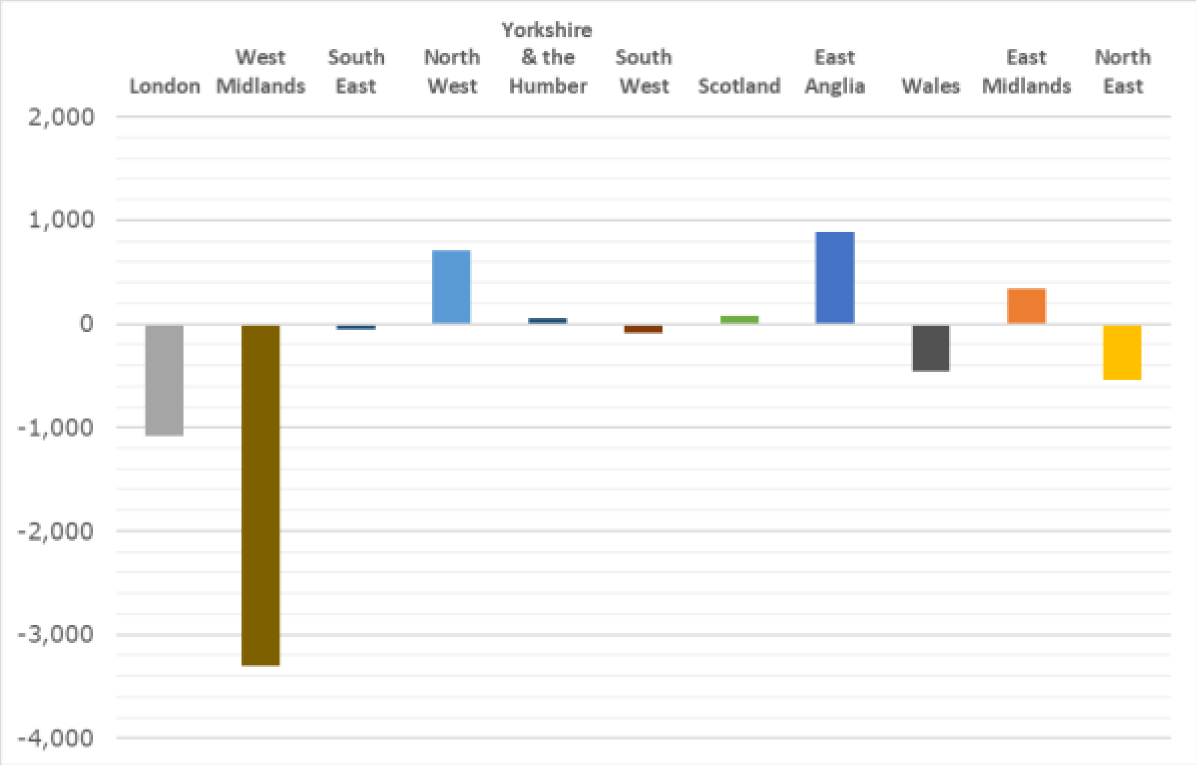


Figure 12 highlights potential gaps for European Union workers by skill band. The largest gap is potentially in skill band C by raw number, closely followed by skill level A. Interestingly, there are very few skill band D employees from the European Union.

From a regional perspective, the biggest impacts are likely to be felt in the West Midlands. The demands in London exist, but not to the same extent as for the West Midlands. This is related to the growth of demand in this area as HS2 phase 1 continues to advance. This is illustrated in Figure 13.

Figure 13 Potential gaps in 2021 by region, EU workers



These gaps at a regional level can be further explored as the table in Figure 14 identifies job role gaps, which are the highest for EU workers by region. Some regions do not show any gaps for roles in which EU workers are currently employed.

A full list of roles and gaps can be found in the Appendix document.

Figure 14 Gaps by job role, by region, EU workers

Region	**Job Role**	**Top 5 Significant Skills Gap per Region**
London	Project Manager	-48
London	Supervisor	-51
London	Technician	-69
London	Operative	-133
London	Customer Service Assistant	-201
North East	Signaller	-67
North East	Customer Service Manager	-67
North East	Customer Service Supervisor	-67
North East	Driver	-67
North East	Customer Service Assistant	-135
South East	Operative	-2
South East	Technician	-2
South East	Project Manager	-2
South East	Engineer	-4
South East	Customer Service Assistant	-4
South West	Engineer	-4
South West	Assistant Engineer	-5
South West	Graduate Engineer	-5

South West	Operative	-5
South West	Senior Engineer	-7
Wales	Clerk	-44
Wales	Engineer	-44
Wales	Maintenance Engineer	-65
Wales	Senior Engineer	-65
Wales	Supervisor	-109
West Midlands	Maintenance Manager	-189
West Midlands	Project Manager	-283
West Midlands	Customer Service Assistant	-377
West Midlands	Design Engineer	-377
West Midlands	Operative	-660

Customer Service Assistants, Operatives and Engineers are the roles identified with the biggest gaps.

Once the immigration legislation has been published, we will know what difficulties recruiting to these roles in the future will exist. In the meantime, to be aware of the potential gaps means a plan can be established for future role recruitment based on skills required.

7. Conclusions

This report has identified that nationality information within the current Rail workforce is not easily obtainable, either because it has not been declared or organisations do not record this information. Our survey has established approximately 15% of the workforce are of a non UK European nationality, a decrease of 2% when the survey was previously carried out.

The work type which may see the largest impact of a restriction of the free movement of people within the EU, is operations. This has the potential to cause a problem, as some staff in these roles work to keep the railways running. There are also those that work on board the trains themselves in Customer Service facing roles.

The number of EU workers at levels C and A are the highest bands. Workers in these roles, but more specifically in skill band C have a specific skill set appropriate to the role they are undertaking. There is potentially less risk to these roles, if the immigration policy remains set to allow skilled workers into the EU has a priority over low skilled workers, as outlined in the MAC report release in September 2018.

The areas likely to feel the biggest impact of not being able to recruit EU workers is the West Midlands and London. This is a concern, particularly as HS2, phase 1 is progressing by 2021 and Phases 2a, 2b and 2c will also require a workforce based in this region to be able to deliver the project on time and on budget.

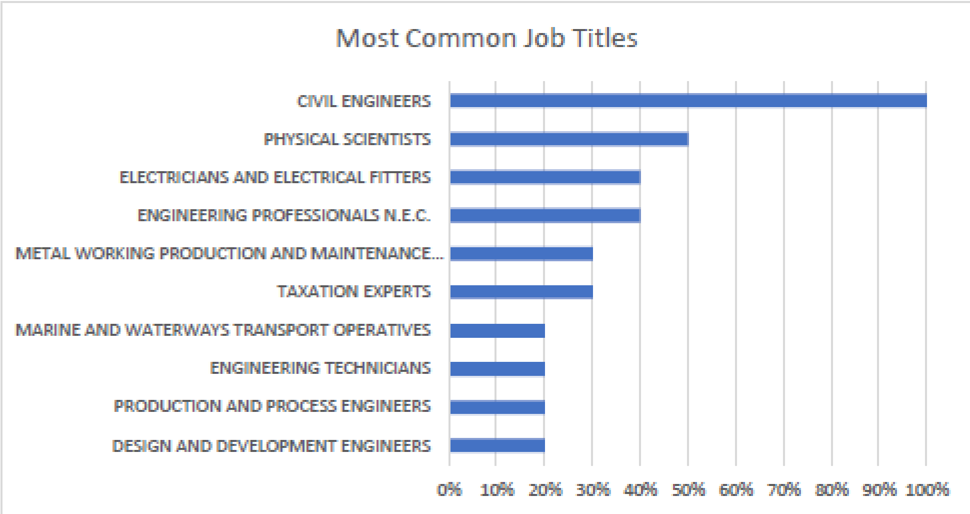
There is always a risk of not being able to recruit suitable qualified candidates for the roles required, so a clear plan needs to be established, with perhaps a review of how employers are currently using the Apprenticeship standards. There is a need for succession planning to be higher profile, as the potential issues of tomorrow need to be addressed to day. One of the biggest challenges is making the railway appealing to all types of new recruits, whether it be school leavers, skilled workers from other sectors or career changers. More transparency in career pathways would be helpful for all potential employees, with perhaps a time frame, so they are able to plan adequately for the future.

This will also help negate any issues which may exist around wage inflation, as there will be skilled people ready to take on these roles.

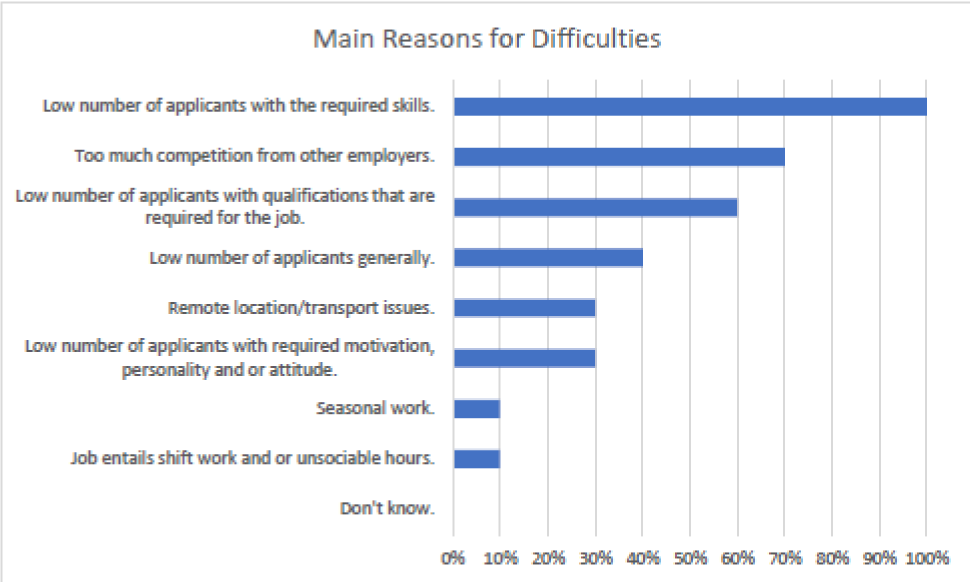
We also need to consider the change in immigration policy, not in isolation, but alongside a plan for those who may potentially retire. Furthermore, consideration also needs to be given to the ageing population as whole and what opportunities exist for older workers who may not want to retire but may wish to join the rail industry to do something completely different later in life.

Finally, consideration needs to be given to the impact of the digitalisation programme. In planning for the future, if we are able to identify which skill sets may be required, we can ensure there is suitable high-quality training available either through an Apprenticeship programme, through upskilling or on an independent training programme.

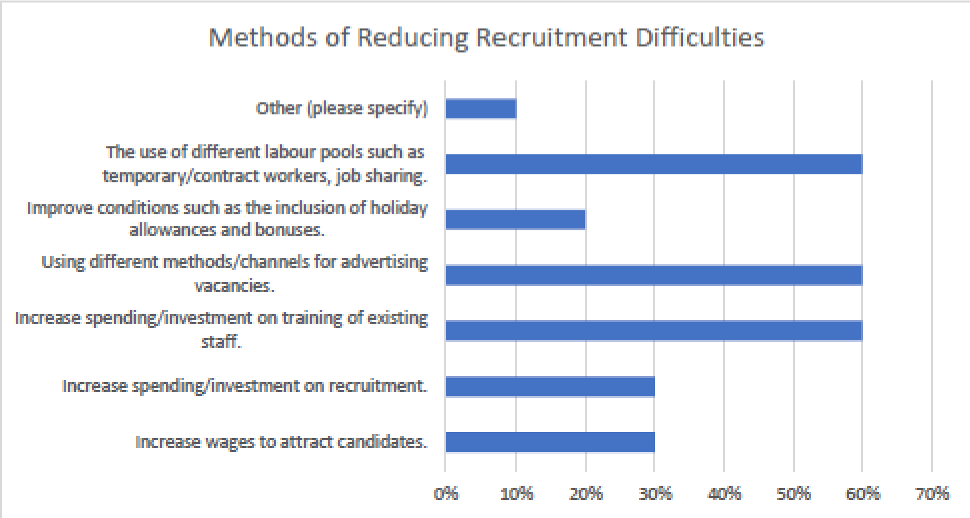
Oil & Gas UK



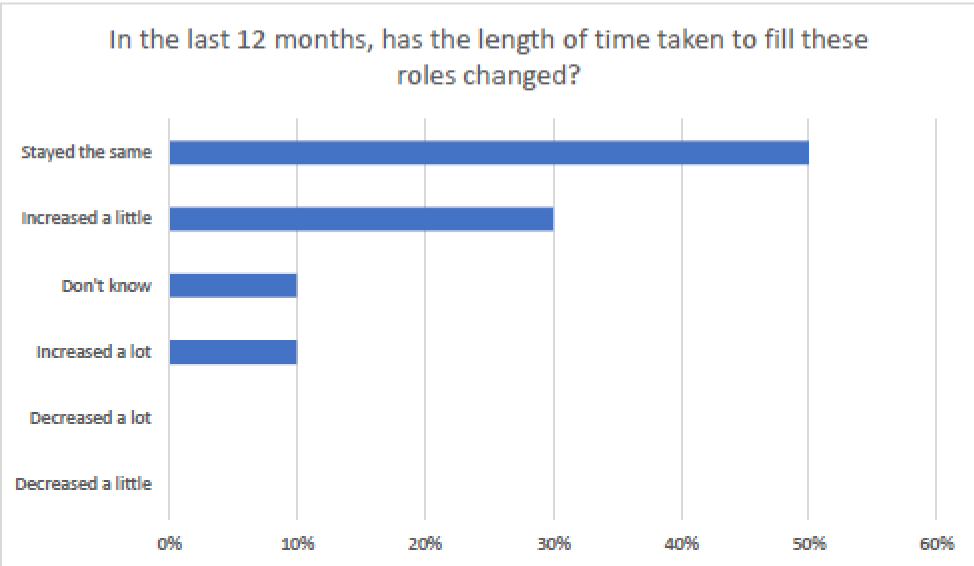
OGUK MEMBER SURVEY RESULTS IN RELATION TO QUESTION 8



OGUK MEMBER SURVEY RESULTS IN RELATION TO QUESTION 9



OGUK MEMBER Survey Results in relation to Question 10



OGUK MEMBER Survey Results in relation to Question 11

Recruitment & Employment Confederation

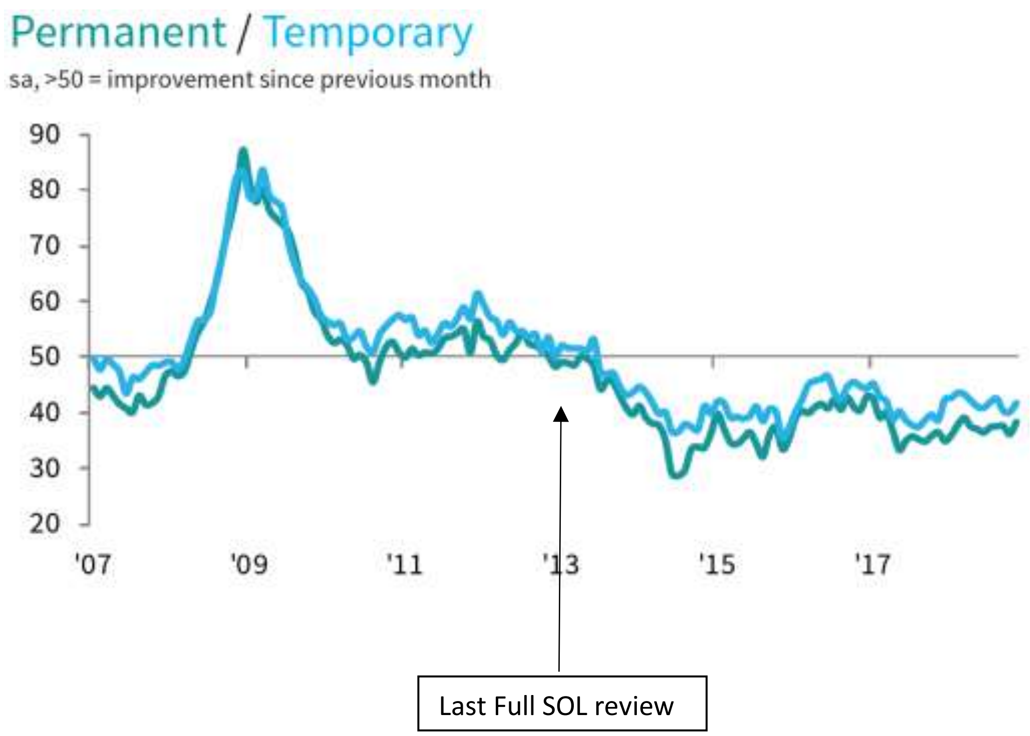
Introduction
The Recruitment & Employment Confederation (REC) welcomes the opportunity to provide written evidence to the Migration Advisory Committee (MAC) Shortage Occupation List (SOL) review.

The REC represent over 3,500 recruitment businesses and over 11,000 individual recruiters through our Institute of Recruitment Professionals. The REC's membership approximately accounts for 80% of the UK's £35.7 billion recruitment industry by turnover. REC members provide people into temporary and permanent work in every sector of the UK economy. This means that our members are on the coalface of the labour market across all sectors and regions of the UK, and well informed on areas of shortage.

The MAC's review correctly identifies recruitment agencies as a key stakeholder to gather data. As we are unable to give granular detail of shortages in each sector, we have encouraged our members through various forms of communications to respond directly to the review. We would also be more than happy to facilitate more formal engagement between our members and the MAC, through roundtables, webinars or meetings.

This submission, rather than giving detailed analysis of shortages in different sectors, provides a high level overview of our survey data on roles commonly reported by recruiters as being in shortage. We have this data for each month going back to 1997 and we are happy to send the raw data behind this submission to the MAC.

Report on Jobs – Staff Availability Index
Every month IHS Markit, in association with the REC and KPMG, survey a panel of 400 UK recruitment and employment consultancies. This provides the first indication each month of labour market trends. One area respondents are asked to report on is whether availability of permanent and temporary staff has changed on the previous month, which is converted into the Staff Availability Index (see Figure 1).



Permanent Staff Availability Index

sa, >50 = improvement since previous month

	UK	London	South	Midlands	North
Jun '18	36.4	34.8	32.8	39.3	37.7
Jul '18	37.3	36.4	35.1	39.8	37.3
Aug '18	37.4	38.3	34.0	37.5	37.4
Sep '18	37.5	38.8	33.7	36.8	43.1
Oct '18	36.1	38.5	31.6	37.8	41.5
Nov '18	38.2	41.7	37.1	34.8	38.3

Temporary Staff Availability Index

sa, >50 = improvement since previous month

	UK	London	South	Midlands	North
Jun '18	40.9	44.1	41.6	40.2	35.1
Jul '18	41.9	42.3	43.2	38.6	41.8
Aug '18	42.5	45.0	46.0	40.8	41.9
Sep '18	40.3	44.6	38.5	42.8	45.9
Oct '18	40.1	41.1	40.2	36.4	45.2
Nov '18	41.7	44.4	41.4	37.7	44.5

Figure 1: *REC/KPMG Report on Jobs, December 2018, Staff Availability Index*

Need for more regular reviews of the Shortage Occupation List and use of real-time data

As Figure 1 illustrates, since the last full and comprehensive review of the SOL in 2013, the *Report on Jobs Staff Availability Index* has been below 50, which indicates that availability of staff has been deteriorating month on month. This is not surprising, considering the record high employment rates and low unemployment rates seen over the last five years, as well as the considerable fall in net EU migration seen more recently.

Recruitment consultancies are also asked in *Report on Jobs* to specify any areas in which they have encountered skill shortages during the latest month. To give an indication of the scale of shortages recruiters are seeing across different sectors, compared with the last full review of the Shortage Occupation List (SOL) in 2013, Appendix A lists the shortage areas as reported in *Report on Jobs*, December 2018 alongside the reported shortage areas in February 2013. This clearly demonstrates an exponential growth in the number of roles reported in shortage when comparing both dates.

This review of the SOL is therefore long-overdue, as the labour market has significantly changed in the last five years. Previously there was a full review of the SOL every year (2008, 2009, 2010, 2011) with one in 2013 and then a few partial reviews and now this full review in 2018. In order to keep up with changes in the labour market the MAC should aim for more regular reviews of the SOL, perhaps moving even to quarterly reviews. Eventually, the government should move to a system of Real Time Information using data such as Burning Glass Job Vacancy data and as well as from jobs boards and recruitment agencies, in order to ensure that government have the most up to date data.

Top roles reported in shortage in 2018

Below we have put together the roles most often listed as being in shortage in *Report on Jobs* over the last year, for both temporary and permanent roles, along with the closest ONS job title and occupation code. This should help inform the MAC's review. We are unable to provide any detailed information about these roles, but it does give an indication of the sectors and roles in shortage.

Role	Closest ONS job title	Closest ONS occupation code (4 digital)	Sector most affected
'Accountant'	Chartered and certified accountants	2421	Accounting and Finance
'Audit'	Book-keepers, payroll managers, and wage clerks	4122	Accounting and Finance
'Finance'	Financier	3534	Accountancy and Finance

‘Risk’	Management Consultants and Business Analysts	2423	Accountancy and Finance
‘Treasury’	Financial administrative occupations	4129	Accountancy and Finance
‘HGV Driver’	Large Goods Vehicle Drivers	8211	Logistics
‘Forklift Driver’	Fork-Lift Truck Drivers	8222	Logistics
‘Warehouse staff’	Elementary Storage Occupations	9260	Logistics
‘Engineers’	Engineering professionals not elsewhere classified	2129	Engineering
‘Electrical Engineer’	Electrical Engineers	2123	Engineering
‘Legal’	Legal professionals	2419	Executive/Professional
‘Marketing’	Marketing association professional	3543	Executive/Professional
‘Project Managers’	Business and financial project management professionals	2424	Executive/Professional
‘Chefs’	Chefs	5434	Hospitality
‘CAD’	Draughtspersons	3122	Technology
‘Digital’	Web design and development professionals	2137	Technology
‘Gaming’	Programmers and software development professionals	2136	Technology
‘IT’	IT operations technicians	3131	Technology
‘Care workers’	Care workers and home carers	6145	Social care
‘Customer service’	Call and contact centre occupations	7211	Office professionals
‘Sales’	Business sales executives	3542	Office professionals

APPENDIX A: Roles list in shortage in Report on Jobs February 2013 (Last full review of SOL) compared with December 2018

Roles in shortage February 2013	Roles in shortage December 2018
Permanent	**Permanent**
Accountancy/Financial	**Accountancy/Financial**
Part-qualified accounts	Accountants
Blue Collar	Accounts
CNC operators	Audit
Engineers/Construction	Bankers
Building Surveyors	Compliance
CAD	Credit Controllers
Engineers	Estimators
Estimators	Finance
Oil and gas	Financial Directors
Renewables	Financial Services
IT and Computing	Payroll
Business analysts	Risk
C#	Tax
Enterprise software sales	Treasury
General IT	**Blue Collar**
Java	Forklift Drivers
Linux	HGV Drivers
.Net	LGV Drivers
PHP developers	Production
Programmers	Skilled workers
Sharepoint	Unskilled workers
Software sales	Warehouse operatives
Telecommunications	Welders
Other	**Construction**
Health & Safety	Architects
Media sales	Boatbuilders
Regulatory	Construction
Telesales	Construction sales
Temporary	Property sales
Accountancy/Financial	Quantity Surveyors
Management accountants	Real-estate
Blue Collar	**Engineering**
Drivers	CNC Operators
Engineering/Construction	Electrical Engineers
Building services	Electronic Design Engineers
Engineers	Engineers
Technical	Gas Engineers
Hotels/catering	Maintenance technicians
Chefs	Manufacturing Engineers
IT/Computing	Mechanical Design Engineers
C# developers	Mechanical Engineers
General IT	Planning Engineers
.Net developers	Principal Design Engineers
PHP	Qualified Automotive
Sharepoint	Senior Civil Engineers
Nursing/Medical/Care	**Executive/Professional**
Medical engineers	Account Managers

Secretarial/clerical	Executives
Administration	Law
General office support	Legal Secretaries
Other	Litigation Executives
Customer service	Marketing
	Media
	Portal Fee Earners
	Project Managers
	Science
	Hotel/Catering
	Baristas
	Chefs
	Hospitality
	Waiters/waitresses
	IT/Computing
	Automation testers
	C#
	C++
	CAD
	Data
	DevOps
	Digital
	Gaming
	ICT Managers
	IT
	Linux
	Programmers
	Puppet
	Salesforce
	Software Developers
	Software Engineers
	Systems Architects
	Technology
	Nursing/Medical/Care
	Care workers
	Healthcare
	Healthcare Assistants
	Home Carers
	Support workers
	Retail
	Retail staff
	Secretarial/Clerical
	Clerical
	Pensions Administrator
	Receptionists
	Senior Administrators
	Support Staff
	Other
	B2B sales
	Buyers
	Customer Services
	Export Sales
	Sales

[redacted]	Security
[redacted]	Teachers
[redacted]	Telesales
[redacted]	**Temporary**
[redacted]	**Accountancy/Financial**
[redacted]	Accountants
[redacted]	Accounts
[redacted]	Audit
[redacted]	Compliance
[redacted]	Credit Controllers
[redacted]	Finance
[redacted]	Payroll
[redacted]	Pensions Admin
[redacted]	Procurement
[redacted]	Risk
[redacted]	Tax
[redacted]	Treasury
[redacted]	**Blue Collar**
[redacted]	Blue Collar
[redacted]	Cleaners
[redacted]	Drivers
[redacted]	Forklift Drivers
[redacted]	HGV Drivers
[redacted]	Industrial
[redacted]	LGV Drivers
[redacted]	Operations Manager
[redacted]	Packers and Pickers
[redacted]	Plumbers
[redacted]	Production Operatives
[redacted]	Semi-skilled workers
[redacted]	Site Managers
[redacted]	Unskilled workers
[redacted]	Warehouse Operatives
[redacted]	Welders
[redacted]	**Construction**
[redacted]	Bricklayers
[redacted]	Construction
[redacted]	Construction workers
[redacted]	Rail supervisors
[redacted]	**Engineering**
[redacted]	Automotive Design Engineers
[redacted]	CNC Programmers
[redacted]	Engineers
[redacted]	Stress Engineers
[redacted]	**Executive/Professional**
[redacted]	Legal
[redacted]	Legal Secretaries
[redacted]	Litigation Executives
[redacted]	Marketing
[redacted]	Portal Fee Earners
[redacted]	Science
[redacted]	**Hotel/Catering**
[redacted]	Baristas

[redacted]	Catering
[redacted]	Chefs
[redacted]	Hospitality
[redacted]	**IT/Computing**
[redacted]	Automation testers
[redacted]	C++
[redacted]	CAD
[redacted]	Cloud
[redacted]	Data
[redacted]	DevOps
[redacted]	Digital
[redacted]	Gaming
[redacted]	IT
[redacted]	Oracle Fusion
[redacted]	Pen Testers
[redacted]	Revit CAD Designers
[redacted]	SAP Hybrids
[redacted]	Software Developers
[redacted]	System Architects
[redacted]	Technology
[redacted]	**Nursing/Medical/Care**
[redacted]	Care workers
[redacted]	Health Care Assistants
[redacted]	Home Carers
[redacted]	Social Workers
[redacted]	Support Workers
[redacted]	**Secretarial/Clerical**
[redacted]	Administration
[redacted]	Clerical
[redacted]	Office Staff
[redacted]	Pensions Administrator
[redacted]	Receptionists
[redacted]	**Other**
[redacted]	B2B Sales
[redacted]	Buyers
[redacted]	Call Centre
[redacted]	Conference Producer
[redacted]	Customer Service
[redacted]	Health and Safety Managers
[redacted]	Sales
[redacted]	Security

Representatives of three organisations: The King's Fund; Nuffield Trust; The Health Foundation

14 January 2019

To Whom It May Concern,

The King's Fund, the Health Foundation and Nuffield Trust welcome the opportunity to respond to the Migration Advisory Committee's (MAC) call for evidence to inform their current review of the shortage occupation list (SOL). Since 2015, our three organisations have come together around major events to present a collective view on key challenges faced by the health and social care system in England. Given the scale of the workforce challenges now facing the health service, along with the threat this poses to the delivery and quality of care over the next 10 years, we have chosen to come together once more to present our analysis and recommendations on this issue.

In our recent briefing The health care workforce in England: make or break?, the three organisations laid out the challenges facing the NHS workforce. We projected that the gap between available and needed staff could reach 250,000 by 2030 if no action is taken. The recommendations we make here seek to ensure that the review of the SOL supports the mitigation of this gap. We note that the Committee's recent report on European Economic Area (EEA) migration after Brexit highlighted the important role that EEA migrants play in maintaining essential health services. The review of the SOL should reflect this sentiment through the following recommendations. We note that some, but not all, of these may be mitigated in the longer term by the government's recent immigration white paper. However, in the short term the issues we raise here are immediately pressing.

Nurses remain in shortage, despite having been added to the shortage occupation list. Factors such as language restrictions and a slow take-up of international recruitment among employers have prevented international nurses from being a major part of filling immediate vacancies. However, in 2018 this has begun to change, as active international recruitment schemes are being scaled up. As the NHS attempts to tackle major workforce shortages, international recruitment of nurses is the most significant lever available to it to fill vacancies in the short term. We recommend nurses be retained on the SOL, along with their salary exemption.

Doctors are also suffering from shortages and the current SOL omits some crucial specialties – for example, child and adolescent psychiatry – that are currently in shortage in England. Changes proposed in the recent white paper that remove the need for a resident labour market test will reduce the barriers to employers wanting to recruit for these specialties. However, these specialties are in shortage today and so there needs to be more immediate action. We recommend that the number of medical specialties on the list should be broader.

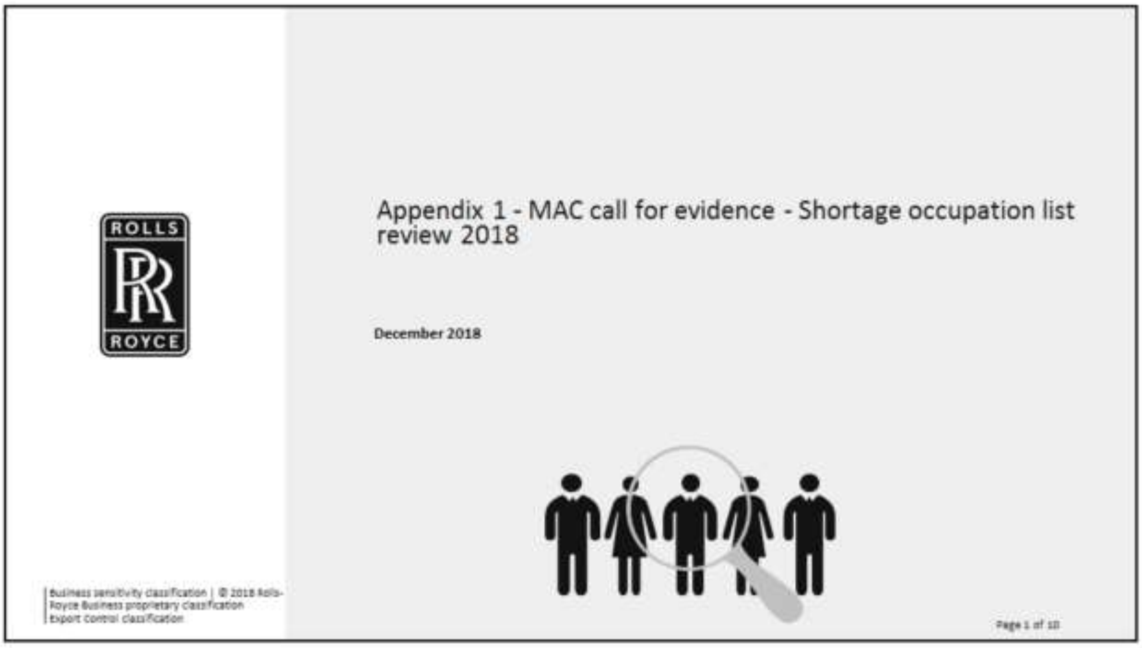
But the NHS is more than its doctors and nurses. Some Allied Health Professionals (AHPs), like occupational therapists and therapeutic radiographers, are not on the list despite being in shortage. Many do not earn over the salary floor of £30,000. Even where there is less evidence of professions being in shortage, AHPs will have an increasing role to play in the NHS over the coming years as they move to provide more support to clinicians outside of their traditional roles. With this future in mind, we cannot afford to pull the drawbridge up on this part of the workforce. On this basis, we recommend that Allied Health Professionals be added to the SOL.

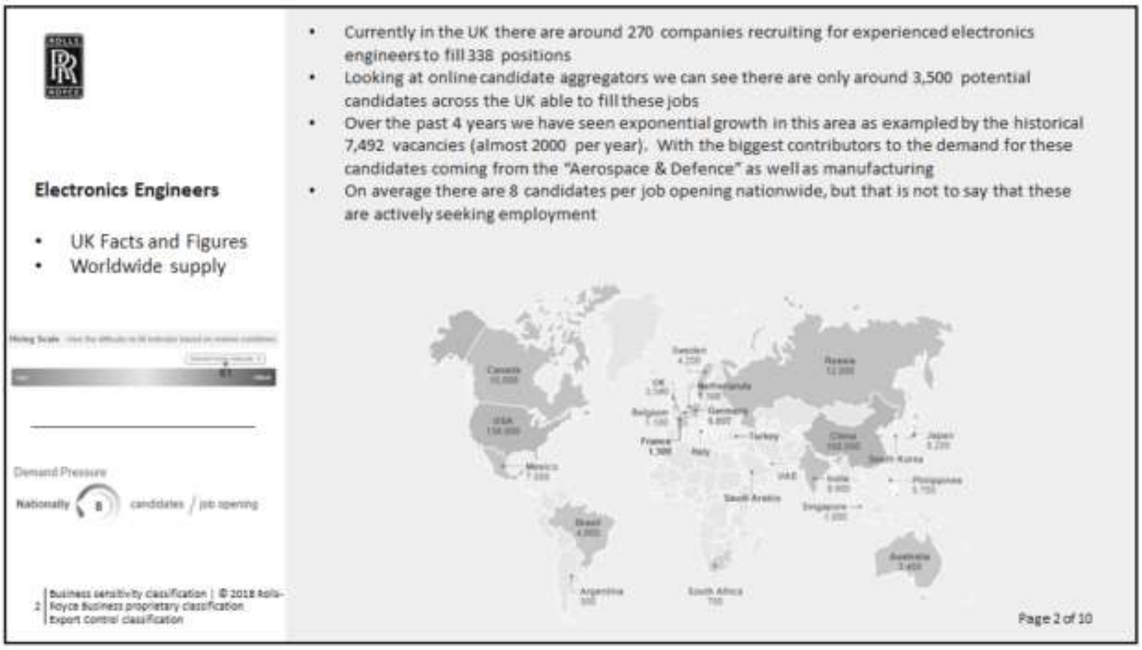
The final area that the Committee should consider is social care. On care workers, we agree with the Committee's assessment: government and social care providers should ensure that pay and conditions are addressed so that the sector is able to attract more care workers domestically. The challenges facing the social care workforce are extensive,and government will need to find a way of addressing them. In the short to medium term, we do not believe that proposals in the government's white paper for temporary, 12-month visas will be an effective solution. On this basis, it is challenging to see how, after freedom of movement ends, social care workforce shortages are managed. However, registered social care managers are a skilled profession with a vacancy rate of 12 per cent, many of whom do not earn over the £30,000 salary threshold. Good management in social care is one of the biggest indicators of provider quality. Just like health professionals, experienced social care managers play an essential role in the health and care system. We therefore recommend that social care managers be added to the SOL.

Our forthcoming report from The King's Fund, the Health Foundation and Nuffield Trust will recommend further steps that government, national bodies and local employers should take to ensure both health and social care are equipped with a sustainable workforce in the short, medium and longer term. This will look beyond international recruitment as a policy lever. However, in the short term international recruitment is indispensable if we are to staff the health and social care system at an adequate level. To do this, we need a shortage occupation list that guarantees the position of international health and care professionals in England.

Rolls Royce Appendices

APPENDIX 1





Electronics Engineering

1: UKESF - https://www.ukesf.org/news/ukesf-infographic-2017-update/

2: Redline Group Ltd - https://www.redlinegroup.com/insights/how-electronics-engineers-are-shaping-tomorrows-industries-82881615453

3: EE Times - https://www.eetimes.com/author.asp?section_id=36&doc_id=1334004&page_number=1

4: The Engineer – https://www.theengineer.co.uk/inspiration/engineering-degrees-have-highest-rate-of-drop-outs/

- The UK has the 6th largest Electronics industry in the world with more than one million related jobs and £98 billion annual turnover and the Electronics sector contributes 6% to the total UK GDP, with this being an import part of the UK economy we must ensure we have an adequate supply of candidates to match our growth.
- 66% of employers in the Electronics sector are currently recruiting engineering and technology staff
- 55% of employers say lack of available candidates is a problem when recruiting graduates
- UK companies have found it increasingly difficult to recruit electronics and embedded systems engineers and have resorted to hiring from countries in Eastern Europe and countries like India
- Companies have had to work with government policy which is putting more and more restrictions on visas for overseas job applicants
- The Indian government sees visas as the number one issue in its relations with the UK, and India has one of the largest populations of Electronics engineers (as evidenced by the numerous UK company's with manufacturing operations there)
- According to UKESF, there were only 3,330 UK students enrolled in electronic and electrical engineering degrees in 2017 (of which 12%-19% will not complete their degree). In addition, UKESF said the electronics skills crisis is likely to worsen post-Brexit, adversely affecting the country's economic prosperity
- The UK's **#TurnOnToElectronics** initiative, supported by companies like Arm, Dialog Semiconductor and Qualcomm, will create a buzz around the electronics industry to encourage more young people into pursuing careers in the sector
- There are estimates that the UK will need an additional 1.8 million Engineers by 2025, many in Electronics

Senior Electrical Engineers

- UK Facts and Figures
- Worldwide supply

- Currently in the UK (as of today) there are around 135 companies recruiting for experienced Senior Electrical Engineers to fill 283 positions
- Looking at online candidate aggregators we can see there are only around 4,700 potential candidates across the UK able to fill these jobs
- Over the past 4 years we have seen explosive growth in this area as exampled by the historical 6,524 vacancies (around 1600 per year). With the biggest contributors to the demand for these candidates coming from the Engineering and Manufacturing.
- On average there are 4 candidates per job opening nationwide, but that is not to say that these are actively seeking employment.

Senior Electrical

- The UK is seen as a European centre for electric vehicles because of government incentives for carmakers to invest in production capacity[1]
- According to the National Infrastructure Commission, battery power could save the UK £8bn a year by 2030 as electrification is estimated to reduce energy usage by around 50%[1]
- DNV GL's Energy Transition Outlook says that growth in electricity consumption is increasing rapidly and will double by 2050[1]
- A study by Emu Analytics has shown that there will be more than one million electric vehicles (EVs) registered in the UK by 2020[1]
- The UK has the most electric buses in Europe. Hybrid electric buses currently run in numerous British cities, representing 18 per cent of Europe's entire fleet[1]
- Electrifying UK transport services means more electrical energy will be required from the National Grid[1]
- Electrical Engineers are in growing demand in the mining, manufacturing and OEM sector due to the resurgence of the mining industry[2]
- According to Monster[3], the global employment website, Electrical Engineers positions are in high demand in the UK with some big companies winning contracts recently which means they will hire potential candidates and therefore, may decrease the actual talent supply.[3]
- Wood has recently won a contract to support the UK's Office for Nuclear Regulation with technical safety advice and support[4]
- Assystem has received an engineering design contract from the UK Atomic Energy Authority (UKAEA) to provide engineering support services across multiple disciplines. The company will deliver services for various including electrical and control and instrumentation amongst others[5]

1: Raconteur - https://www.raconteur.net/business-innovation/electric-vehicles-future-uk

2: HAYS - https://www.hays.com.au/report/engineering-1791

3: Monster - https://www.monster.co.uk/career-advice/article/best-performing-engineering-sectors-uk

4: In-Cumbria - http://www.in-cumbria.com/news/17245425.wood-wins-contract-to-support-office-for-nuclear-regulation/

5: Power-Technology - https://www.power-technology.com/news/assystem-contract-uk-atomic-energy/

Artificial Intelligence / Big Data

- UK Facts and Figures
- Worldwide supply

- Currently in the UK (as of today) there are around 38 companies recruiting for experienced AI / Big Data professional to fill 42 positions
- Looking at online candidate aggregators we can see there are only around 2,200 potential candidates across the UK able to fill these jobs, over the past 4 years we have seen steady growth in this area as exampled by the historical 649 vacancies (around 160 per year), but is set to explode in the coming years. With the biggest contributors to the demand for these candidates coming from the Business Consultancies (& outsourcers) as well as Software firms
- On average there are 16 candidates per job opening nationwide, but that is not to say that these are actively seeking employment, and importantly with these roles we must take into account the fact that out of the 2200 potential candidates 60% have only been in their current role for 2 years or less
- Another important thing to note is that this is not a UK problem but a worldwide problem and without looking to include the global market as part of our talent pool (as many other countries are already doing) we will fall behind in this vital and evolving technology sphere

Artificial Intelligence / Big Data

1: IT West - https://www.itwest.co.uk/huge-uk-increase-demand-ai-professionals/

2: Computer Business Review (CBR) - https://www.cbronline.com/news/demand-ai-skills-triple-uk

3: Alphr - https://www.alphr.com/business/1009859/britain-ai-brain-drain-talent

4: PwC - The economic impact of artificial intelligence on the UK economy - https://www.pwc.co.uk/economic-services/assets/ai-uk-report-v2.pdf

5: Technology Review – https://www.technologyreview.com/s/612582/data-that-illuminates-the-ai-boom/

- A study by job website 'Indeed' based on job postings on its site since 2015 has found that demand for skills in AI and machine learning has almost tripled in 3 years[1]
- The "Indeed" figures show that there are six times more AI roles available in Britain than there are candidates to fill them
- One of the reasons why companies are willing to pay high salaries is that experts of this kind are hard to find in a labour market where there is a real tech skills gap and, Brexit is only likely to make matters worse
- According to a Royal Society for the encouragement of Arts, Manufactures and Commerce (RSA) report from late 2017, UK receives up to 80% of its funding for autonomous systems and robotics directly from the EU
- A report from Gartner found that AI is expected to bring 2.3 million jobs[2]
- According to the Telegraph, the UK is facing a potential brain drain in artificial intelligence as Silicon Valley is attracting the countries top university talent[3]
- The UK GDP will be up to 10.3% higher in 2030 as a result of AI – the equivalent of an additional £232bn[4]
- AI startups have more than doubled in the last 3 years putting pressure on an already tight recruitment market[5]

SMR Nuclear

- UK Facts and Figures
- Worldwide supply

- Currently in the UK there are 3 companies recruiting for SMR Nuclear experienced professionals to fill 22 position
- Looking at online candidate aggregators we can see there are only around 100-200 potential candidates across the UK able to fill these jobs, SMR is still a fairly new technology as evidenced by the low number of historical vacancies (33), with the majority of them coming from Power Generation companies and University's conducting research
- On average there are 5 candidates per job opening nationwide

SMR / Nuclear – Skills Shortage

- According to Peter Cornish (director of business development in nuclear, energy, oil & gas at Acorn Recruitment), the nuclear industry is facing an important skills shortage which could jeopardise its future[1]
- The ageing of the existing workforce implies that many technical specialists will soon retire. Out of the 7,000 – 8,000 engineers expected to be required every year until 2021, a fifth of these will replace retirees[1], and for SMR to grow these new Nuclear engineers will need to be cross skilled and trained putting even more pressure on existing nuclear and new SMR Nuclear
- The expected fall of migrant labourers post-Brexit, the rigorous safety and security regulations in nuclear engineering and the remote site locations are worsening the situation[1]
- Additionally, recruitment of large numbers of nuclear engineers has dropped in recent years compared to previous decades[1], due in part to uncertainty around the future of existing nuclear
- The Nuclear Workforce Assessment projections show nuclear workforce demand is forecast to rise from 87,560 full time employees in 2017 to 100,619 by 2021[2],
- According to an article from Wired, the UK is already in desperate need for talent to complete nuclear projects. It is estimated that to build enough SMRs the country would need an extra 40,000 skilled workers[3]

1: Recruitment International - https://www.recruitment-international.co.uk/blog/2018/06/the-nuclear-skills-shortage-is-imminent

2: Nuclear Industry Association (NIA) - https://www.niauk.org/industry-issues/skills/

3: Wired - https://www.wired.co.uk/article/mini-nuclear-reactors-need-subsidies-offshore-wind-turbines

Nuclear - Insights

1: Power Technology - https://www.power-technology.com/features/kickstarting-smrs-uk-government-subsidise-small-reactors/

2: The Guardian - https://www.theguardian.com/environment/2018/aug/07/uk-should-support-mini-nuclear-reactor-projects-says-official-review

3: UK Nuclear SMR - https://www.uknuclearsmr.org/news/british-small-nuclear-plants-can-deliver-low-cost-low-carbon-electricity-report-issued-today/

4: Business Green - https://www.businessgreen.com/bg/news/3065884/going-nuclear-uk-readies-gbp32m-small-modular-reactor-testing-scheme

5: Wired - https://www.wired.co.uk/article/mini-nuclear-reactors-need-subsidies-offshore-wind-turbines

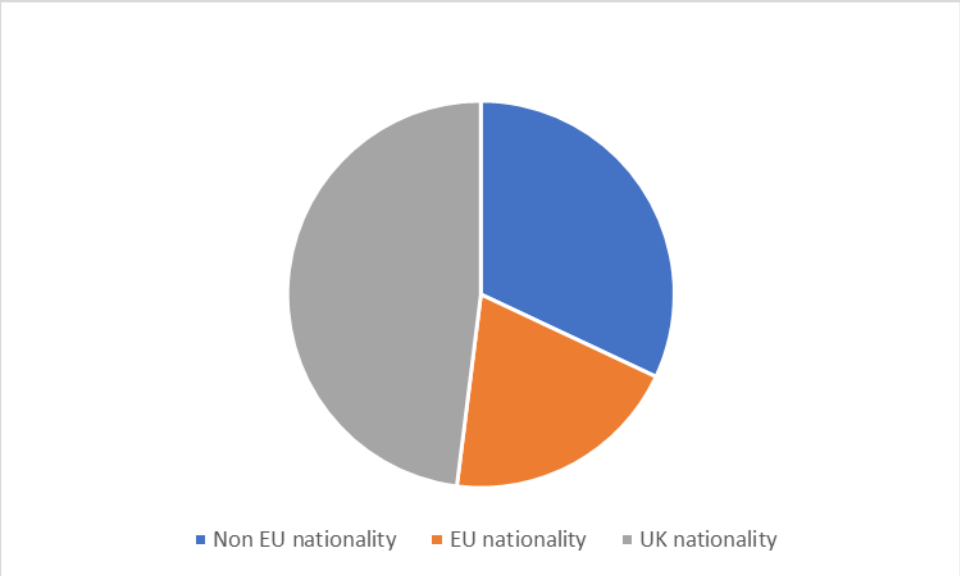
- A report commissioned by the UK Government has recommended that subsidies should be extended to SMRs to help establish a supply chain and reduce technology costs[1]
- As coal power plants are taken offline and aged nuclear plants begin to close, the UK will need considerable capacity additions in the 2020s to meet energy demand. SMRs could provide a source of zero-carbon fuel, without the complications of large-scale nuclear projects[1]
- SMRs could be the ideal model to meet both energy demand and keep prices stable[1]
- Rolls-Royce has launched a bid to build SMRs as part of a UK consortium with Amec Foster Wheeler, Nuvia, Arup and Laing O'Rourke[2] – it could produce energy for as low as £60 per megawatt hour[3]
- According to the study "UK SMR: A National Endeavour", British plants could create 40,000 skilled jobs, contribute £100bn to the economy and open up a potential £400bn global export market[3]
- According to Business Green, the energy minister, Richard Harrington, announced plans for a £32m Advanced Manufacturing and Construction Programme for SMRs. The government believes the first SMR could be built as soon as 2030 and play a key role in the future with potential for exports worldwide[4]
- In June, the UK government pledged £56 million for research into advanced versions of smaller-scale power plants. The parts are small enough to be transported by truck or train, which means they can maximise the use of factory-built and therefore bringing down the costs[5]

APPENDIX 2a (for further detail on Q14)

Aerothermal Engineers and Stress Engineers in the Aerospace industry are currently included on the Shortage Occupation list

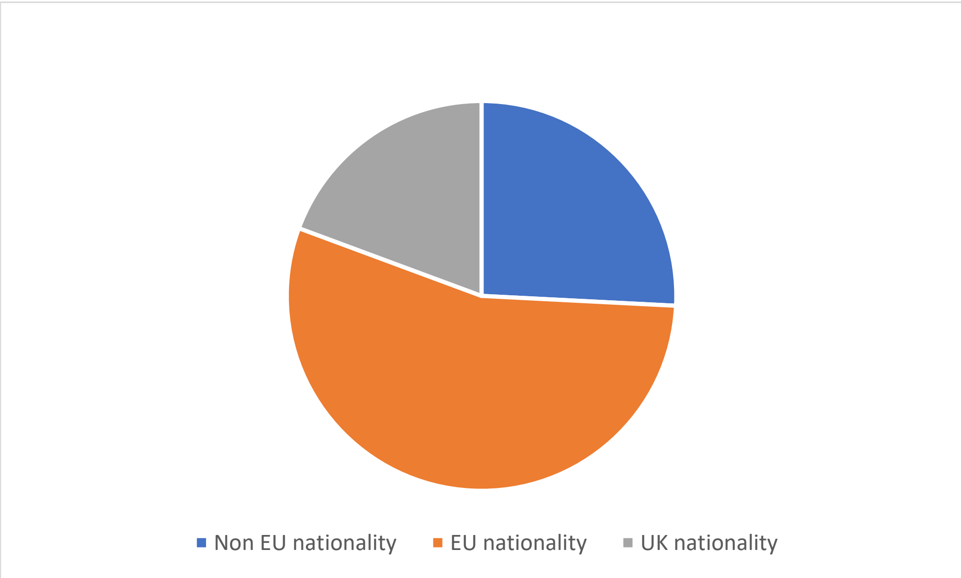
25 x Aerothermal Engineers externally hired in last 5 years (January 2014 – December 2018)

52% Aerothermal engineers sourced from outside of the UK, 20% of which are EU nationals. Our concern being that post Brexit this supply will not be readiliy accessible.



81 x Stress Engineers externally hired in last 5 years

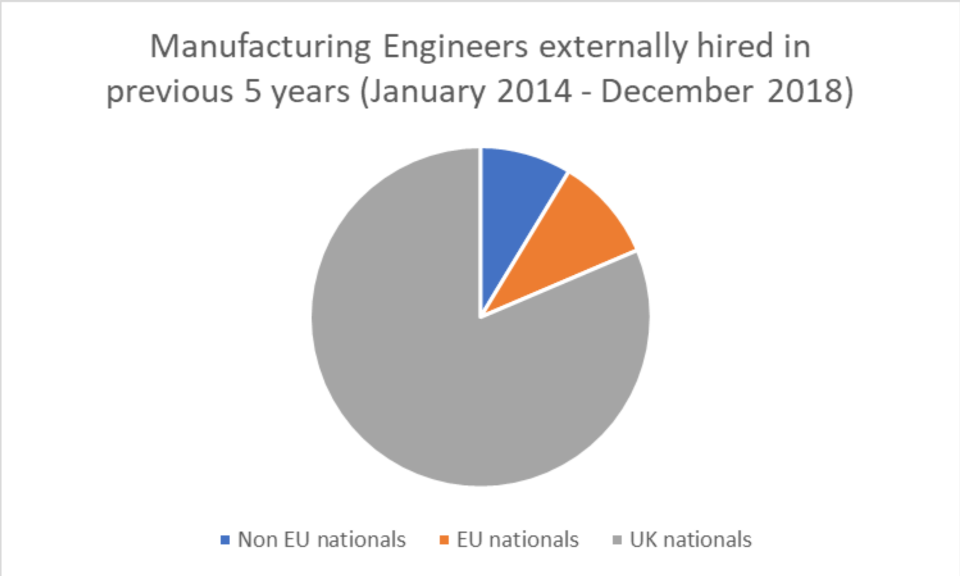
31% Stress engineers sources from outside of the UK, 21% of which are EU nationals. Our concern being that post Brexit this supply will not be readily accessible.



APPENDIX 2b

Manufacturing Engineers - Process planning in the Aerospace industry are currently included on the Shortage Occupation list

323 x Manufacturing Engineers externally hired in last 5 years. Almost 20% of these were sourced from outside of the UK. 10% of which are EU nationals. Our concern is that post Brexit this supply will not be readily accessible.



<u>APPENDIX 3</u> – for detail on Q14

JOB SHORTAGE ROLE – DESIGN ENGINEER CIVIL NUCLEAR (SMALL MODULE REACTORS)

Two roles to be considered as shortage in relation to the UK's Civil Nuclear programme:

Design Engineer – Civil Nuclear and **Thermofluids engineer**

The SMR (Small Modular Reactors) programme will be a government backed project that is likely to start later this year with the aim of designing and manufacturing smaller nuclear reactors, this will mean a requirement of up to 3,000 people to work directly for Rolls-Royce and potentially 40,000 additional jobs across the whole programme over time. This will require large numbers of experienced mechanical and thermofluids engineers to work on the initial design. These are both scarce skills as there has been no design of new nuclear plants in the UK for 30 years and there is large competition from the conventional nuclear new build projects. The UK is keen to become a world leader in this technology but is behind many other countries who have designed and built nuclear power plants recently.

<u>Appendix 4a – In response to Q18</u>

Summary of Rolls-Royce STEM Outreach

Description of benefit activity	Status of activity (current or planned)	Quantification of benefit (financial or time investment)	Timescale benefit covers (historic or future)	Other comments if required
To continue to innovate and remain at the leading edge of technology in power systems we require a pipeline of diverse STEM talent. **To help achieve this we in Rolls-Royce believe that every young person should have access to high quality STEM education and inspiration. Whilst we don't have the resources and global presence to reach all young people in the world we have set ourselves an ambitious & publically declared goal – "to reach 6 million people globally through our STEM programmes and activities by 2020"** **6 million is a big number that:** **+ encourages delivery locally in our communities across the UK & around the world** **+ encourages more creativity & innovation in how we reach out including reflecting our Group strategy around electrification and digitilisation** **+ encourages more inclusion and diversity in who we reach out to.** **In addition to the quantitative measure we have a qualitative measure based on tiers of reach where the impact of what we do on choices (subject & career) of a young person & on life outcomes are proportionate to the depth and quality of reach – Tier 1**	Ongoing	In 2017 we invested £4.9M in STEM Education globally (£2.4M cash, 69,000 employee hours <£2.4M> and £0.1M gift in kind) Investment in UK - £3.5M (£1.6M cash and 56,000 employee hours <£1.9M>) We reached 1.035 million people globally through our STEM programmes & activities in 2017 (3.8million since our launch year 2015) 0.8 million of those reached in 2017 were in the UK (2.7 million in UK since launch in 2015) We have over 1,400 STEM Ambassadors around the world and are the **single largest private employer / provider of STEM Ambassadors in the UK with over 1,200** And we are making progress on the diversity of our early	Ongoing	**Examples of Rolls-Royce #RollsRoyceSTEM across the UK:** Rolls-Royce Science Prize (encouraging & celebrating great teaching in STEM across primary & secondary) including ENTHUSE funded CPD, Teach First (supporting great teaching in STEM, in areas of great socio economic disadvantage), Starrship (www.starrship.com) with the RAF and a Tomorrow's engineers Robotics challenge in collaboration with the RAF, Trent900 engine experience (built half in /half outside of experience centre) with Emirates, Bloodhound supersonic car, biggest provider of one week STEM work experiences (790 in 2018), our Young Apprentice programme and 2000 brownies (girlguides) taking the Rolls-Royce science badge every month in the UK, Electrification of flight for primary with Institute of Imagination and Your digital future

Connect, Tier 2 Engage, Tier 3 Learn, Tier 4 Sustained Learning. **Paul Broadhead, Head of Community Investment & Education Outreach, Rolls-Royce**		career recruitment – for example in our Apprenticeships: Planned (offers accepted) for Sept18 – 370 (20% female & 13% BAME) versus 190 actual starts in Sept17 (17% female & 9% BAME)		2030 through our own digital STEM Ambassadors. We have just launched 26 STEM community projects in Derby alone purposefully engaging the passion and energy of our newly recruited graduates and apprentices. We are principal partners to #ThisisEngineering advertising campaign with RAEng seeking to rebrand engineering with young people and encouraging them to follow what they love into engineering. Videos have seen over 23millions views year todate. We sit on the Opportunity Area board for Derby and Careers Enterprise Company Cornerstone Employer, Employer Advisory group and Employer adviser network. And much more. From around the world we have: Science in a van and science on a bike delivering STEM activities to communities in rural India National STEM teacher award in collaboration with USAirForce and First Robotics (help high school children design, build and compete) Championships in North America

				Generation Aerospace STEM roadshow (collaborating with Singapore Airlines and others) in Singapore Formula Student (F1 based) and House of the Little Scientist programme (for early years) in Germany (including collaboration with Lufthansa) STEM skills for Elementary Teachers with Quark in Indonesia STEM ‘care’ packs for children in rural China (where our employees visited local schools “just 3 hours train journey away” Newton room for inspiring / empowering children through science in Alesund, Norway USAIRE and Spark! Contests for students exploring nuclear power innovation and digitalisation of aerospace in France (collaborating with Dassault, KLM, EDF and others) Aero design challenge in Brazil **And many many more examples after all, on any day in every week there will be at least 1 STEM**

				activity supported by Rolls-Royce taking place somewhere in the world.
Rolls-Royce is committed to improving the communities we impact locally, nationally and globally. In addition to STEM education we focus on 3 other areas Social Investment, Environment and Arts, culture & heritage **Paul Broadhead, Head of Community Investment & Education Outreach, Rolls-Royce**	Ongoing	Our total investment in Community (including STEM) in 2017. Global: £7.7M of which £4.3M cash, £3.3M employee hours (94,000) and £0.1M gift in Kind Of which UK: £4.8M split £2.1M cash and £2.7M employee hours (76,000)	Ongoing	Dow Jones Sustainability Index (DJSI): Despite our cash investment in the community falling in the bottom 10% of company contributions in this area (LBG global corporate community benchmark data) our strategic approach to community & STEM and our huge employee engagement in that strategy resulted in **a score of 95 (from max 100) in 2017 - significantly better than the industry average of 47.** Rolls-Royce were ranked 21st in the inaugural UK Social Mobility Index in Mar 2017 (social mobility commission). **Our work with young people (through our STEM & community strategy) was ranked in the top decile** – and for which we were shortlisted for Social Mobility Award employer of the year

APPENDIX 4b – in response to Q18

For Early Careers development Rolls-Royce has well established Graduate and Apprenticeship schemes where we recruit for a wide range of skills to future proof our business.

In 2018 we recruited 316 apprentices and 257 Graduates, of which 230 were recruited into Engineering roles.

We have numerous initiatives to encourage students to apply for places on to our programmes.

- These include partnering with external providers on careers events specific to apprentices and graduates.
- We have a huge presence at UK universities to promote opportunities at Rolls-Royce.
- We work with local schools to promote apprenticeship programmes amongst key influencers of students such as parents/carers and teachers.
- Targeted social media campaigns
- We also have apprentices open evenings across some of our sites to showcase our apprenticeship programmes to students and parents.
- We work with our local communities to encourage applications on our programmes.
- We have a Work experience programme where we offer places to over 600 students annually, so individuals can gain experience of working in Engineering.

Royal College of Anaesthetists

Royal College of Anaesthetists Submission to MAC SOL -Additional Information

Q.9 If you have any other information that might be useful for our call for evidence please use the space below to explain.

Current Situation

Anaesthesia National Recruitment

	ST3 2015			ST3 2016			ST3 2017			ST3 2018		
Unit of Application	Posts	Accepted	Fill Rate	Posts	Accepted	Fill Rate	Posts	Accepted	Fill Rate	Posts	Accepted	Fill Rate
HEE East Midlands	25	25	100%	32	20	62.50%	26	18	69.23%	19	19	100%
HEE East of England	8	8	100%	12	12	100%	16	16	100%	20	20	100%
HEE Kent, Surrey & Sussex	24	24	100%	26	26	100%	22	22	100%	24	24	100%
HEE London	85	85	100%	83	83	100%	79	79	100%	82	82	100%
HEE North East	27	15	55.56%	25	17	68%	24	16	66.67%	28	23	82.14%
HEE North West (Mersey)	20	20	100%	Included in North West			Included in North West			Included in North West		
HEE North West	24	20	83.33%	40	40	100%	40	39	97.50%	39	38	97.44%
HEE South West	24	24	100%	20	20	100%	17	17	100%	21	21	100%
HEE Thames Valley	12	12	100%	10	8	80%	11	11	100%	9	9	100%
HEE Wessex	11	11	100%	7	7	100%	6	6	100%	9	9	100%
HEE West Midlands	27	27	100%	17	17	100%	30	20	66.67%	33	29	87.88%
HEE Yorkshire and the Humber	25	25	100%	24	17	70.83%	44	22	50.00%	27	21	77.78%
Northern Ireland	15	14	93.33%	10	10	100%	19	18	94.74%	16	15	93.75%
Scotland	43	36	83.72%	48	37	77.08%	47	42	89.36%	43	43	100%
Wales	18	18	100%	20	19	95.00%	17	17	100%	19	19	100%
Totals	385	332	93.81%	374	333	89.04%	398	343	86.18%	389	372	95.63%

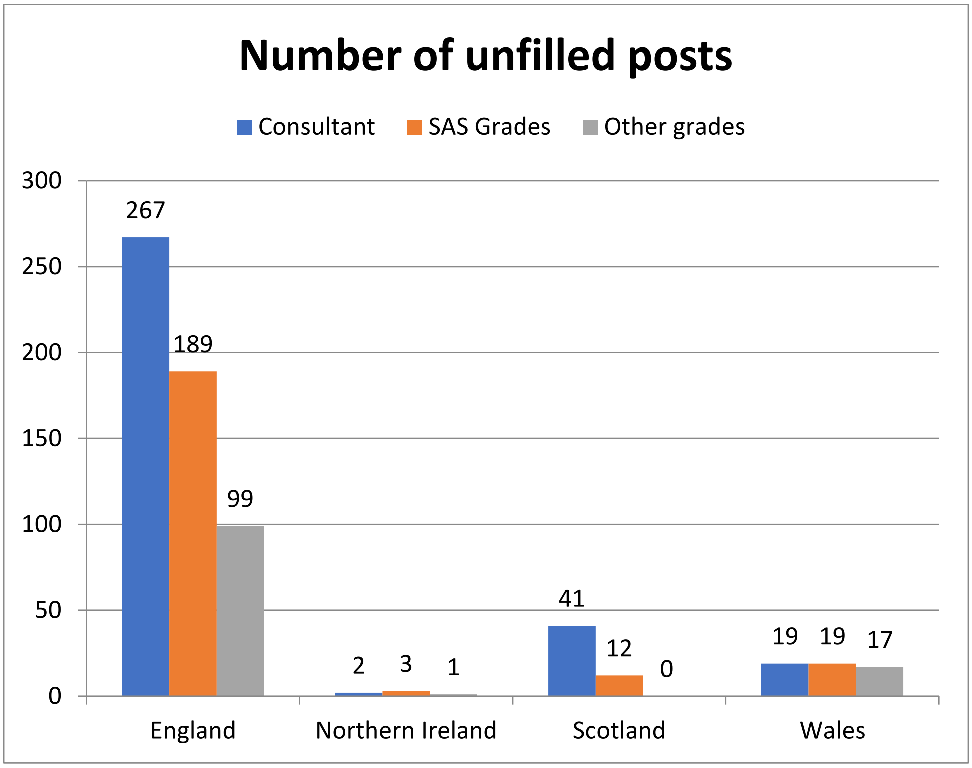
The above table refers to the content in the online form under question 9.

RCoA Medical Workforce Census 2015- key findings

The RCoA Medical Workforce Census 2015[xxv] achieved 100% response rate from anaesthetic departments. It is the most recent, comprehensive information we have reflecting the state of the UK wide anaesthesia workforce, on the ground. These are some of the findings from the report.

Vacancies

The graph below illustrates the number of unfilled consultants, Staff Associated Specialists (SAS) and trust posts.

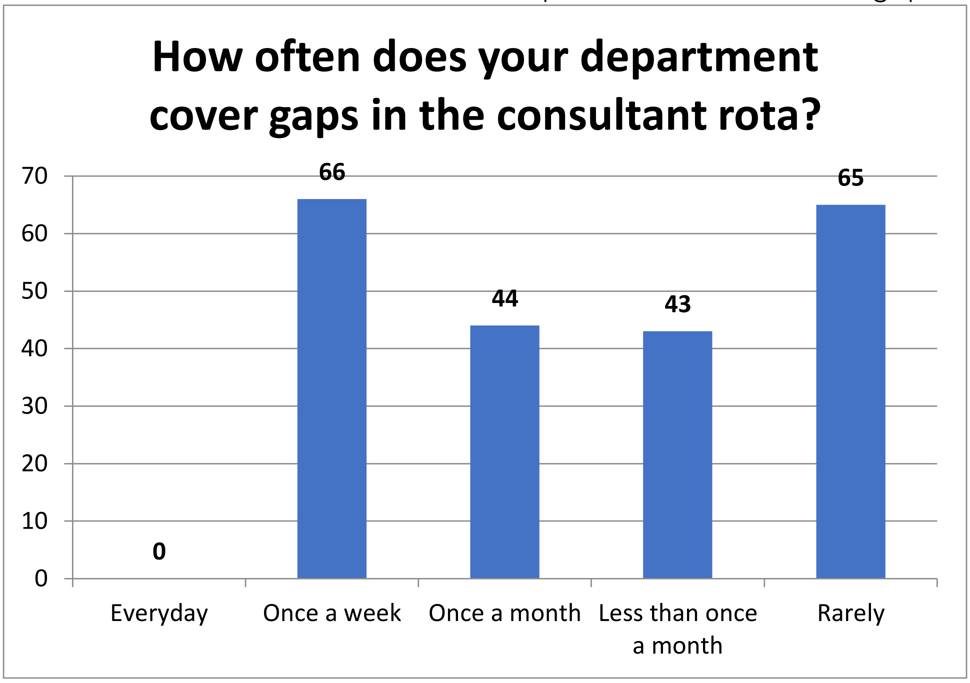


It indicates that in the UK, 4.4% of consultant posts and 11% of SAS and trust-grade doctor posts are empty.

When asked how such vacancies are covered, the majority of respondents said they use internal locums – that is they cover vacancies from the existing complement of staff. Only a relatively small proportion use external locums cover.

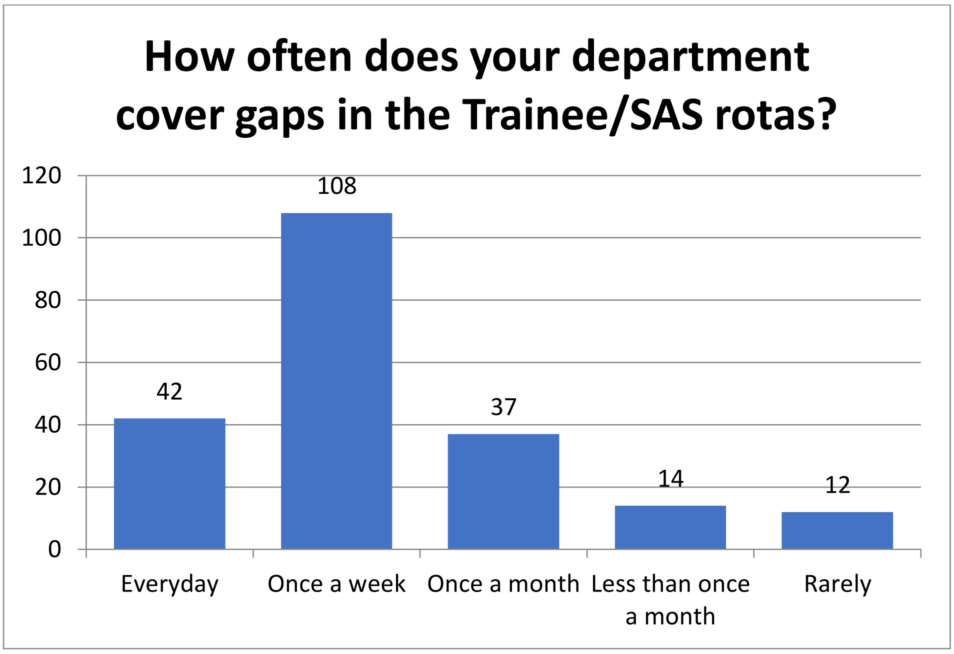
Gaps in the consultant rota

The graph below illustrates the frequency with which departments have to cover gaps in the consultant rota. It indicates that 30% of departments need to cover gaps about once a week.



Gaps in the trainee/SAS rotas

The graph below illustrates the frequency with which departments have to cover gaps in the trainee/SAS rotas. It indicates that overall, nearly 70% of anaesthetic departments have to cover gaps more frequently than once a week, with 19% needing to do so every day.



When asked how such gaps are covered, 98% of respondents said they use internal locums, almost three-quarters (74%) use external locums and nearly half (48%) use consultants 'acting down'. Furthermore, trainees themselves are increasingly being asked to fill rota gaps an average of six times each month.[xxvi]

Unmet need

The census highlights a regular need to cover gaps in the consultant, SAS and trainee rota's. Other findings in the report show an ageing consultant population and that nearly 75% of consultants work more than ten PAs. This raises concerns over sustainability and perhaps confirming the findings of the Centre for Workforce Intelligence in-depth[xxvii] review that there is a level of **unmet need.**

With 100% response rate the census provides a clear national picture of the insufficiencies within the labour market across the UK to meet demand, identifying a national shortage. The College recommends that consultant and specialty doctor grades in anaesthesia are included on the SOL.

SAS Doctors

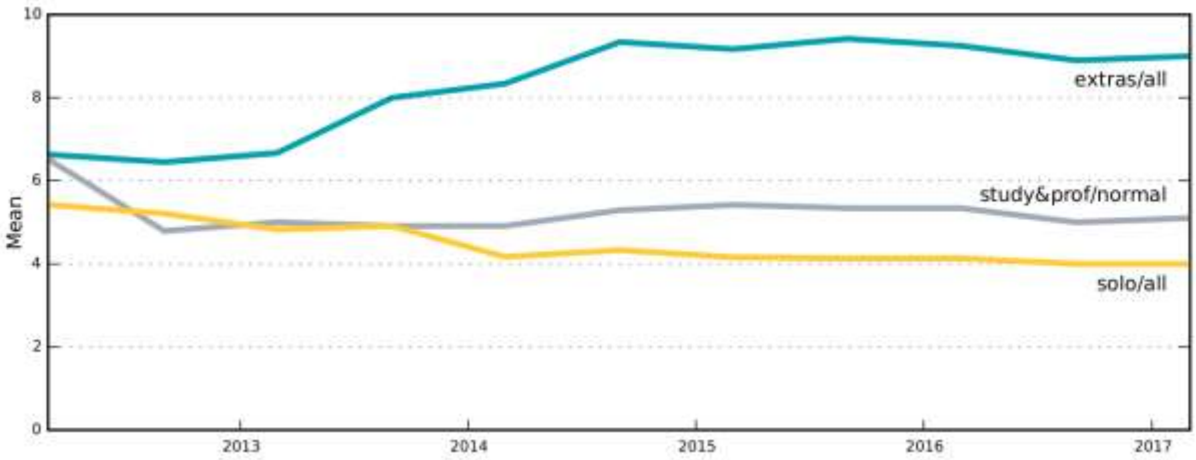
SAS doctors continue to make a significant contribution to the anaesthesia workforce (22% of headcount)[xxviii] in terms of numbers and clinical–service delivery. With increasing anaesthetists in training gaps in the on-call rotas, it is even more vital to recruit and retain a motivated workforce in the SAS grade.

A survey of SAS anaesthetists[xxix] carried out by the RCoA reported that 55% were from non-EU countries and 14% from the EU, 31% were UK graduates.
The report also highlighted that the vast majority plan to stay in UK practice.
The workforce census highlighted the likely shortage of anaesthetists in coming years. Many SAS anaesthetists are extremely competent, often coming to work in the UK with a wealth of experience abroad. The gaps in consultant posts result in an increased requirement for specialty doctor cover across all four nations. The NSOL previously included non-consultant, non-training, medical staff posts on the list. **The RCoA SAS survey provides evidence of lack of UK and EEA supply, supports the RCoA recommendation that specialty doctor grades in anaesthesia are included on the NSOL.**

Rotamap

Rotamap's CLWRota service is currently used by over 100 NHS departments to coordinate over 10,000 anaesthetists (including those in training) in planning and reporting on their activity.

Rotamap provides six monthly cross -departmental benchmark reports. Factors included in the benchmark reports are the proportion of extra sessions to all departmental direct clinical care (DCC) activity, the proportion of trainee 'solo' activity to all DCC activity, and the proportion of study and professional leave to all standard consultant-led DCC sessions. The graph below, provided by Rotamap,[xxx] shows how the average of these factors has changed over time. It should be noted that due to more departments acquiring CLWRota the sample size has increased throughout the analysis period.



The College's analysis of this data shows that the dependence on extra sessions has been growing over the last four years. It also shows that although there was a slight decline in extra sessions at the end of 2016, it continues to rise again in 2017.

Based upon the College's analysis it can be seen from the graph that, in order to cover list work, departments rely much more heavily now than they did four years ago on doctors undertaking additional sessions beyond their job plan, for which they are paid extra. Despite the fact that it is paid work, this cover does, nonetheless, depend heavily on the goodwill of doctors; the more doctors feel burnt out, pressurised and undervalued, the less effective this becomes as a way of meeting patient need.

There has been an increase in demand for three- session days and weekend work, much of which is being provided as extra sessions worked by existing anaesthetists or by consultants on the retire –and- return scheme.[xxxi] Therefore, **although there is a rise in activity resulting from three-session days and from extra paid list work, this is being achieved without a corresponding significant increase in the number of anaesthetists.**

The crucial point about this is that the College feels it reveals a significant increase in extra work undertaken beyond full-time contracts. This is a strong consolidated measure of **unmet need and of the corresponding increased pressure on existing staff.**

National Audit Project

The National Audit Project (NAP) looks at rare but serious complications relating to anaesthesia and issues that are important to patients and anaesthetists.

In May 2018, the College launched a report and findings of its 6th NAP,[xxxii] investigating perioperative anaphylaxis. This is usually an allergic reaction to one of the many drugs administered during anaesthesia and it can occur suddenly in any patient, regardless of allergy history or previous uneventful anaesthesia.

As part of NAP6, project 356 NHS hospitals were surveyed to determine anaesthesia activity in October 2016. 95% (342) of hospitals responded and each reported 96% of their cases.

Key findings in regards to anaesthesia workload;

- The total annual anaesthetic workload is 3.13 million cases.
- Approximately 95% of elective work, 72% of emergency work and 87% of all work is performed on weekdays.

- Senior anaesthetists lead 90% of cases, and those with less than two years anaesthetic experience lead less than 1%.
- During weekends the urgency of work increases, the proportion of healthy patients reduces and the case mix changes.
- Obstetric anaesthesia care is evenly distributed through the week and is associated with the lowest levels of senior anaesthetic involvement (69%), especially at weekends (45%).
- Senior involvement in emergency orthopaedic procedures is high during the week (93%) and at weekends (89%).
- There were increases in the proportion of patients with obesity and in elective weekend working compared with data from 2013.

This survey represents the most recent, comprehensive snapshot of anaesthetic activity and drug use in the United Kingdom. By using similar methods to those used in the NAP5[xxxiii] project (Survey 2014) it is possible to estimate changes in anaesthetic practice since 2013. NAP5 collected data in two-day epochs, rather on a single-day basis, and the current survey provides a more precise reflection of how the anaesthetic workforce is working throughout the week. The College believes that this is the first detailed examination of the variability in anaesthetic workload over the days of the week and **highlights the high proportion of cases under the direct supervision of senior anaesthetists**.

Further the survey shows that weekend elective work was almost exclusively carried out by consultant or career grade anaesthetists (98.8%). Significant changes in the working practice of consultants would be needed to maintain such a high proportion of senior care for elective operations at the weekend should the number of cases increase. **We recommend consultants and specialty doctor grades in anaesthesia are included on the NSOL to provide the flexibility needed to support service demand across the UK.**

The European Economic Area Workforce in the UK labour market

The NHS relies heavily on doctors trained outside of the UK and, as the largest single hospital specialty, anaesthesia is a service delivered by a diverse and international workforce.

Around 12% of all NHS staff working in England are citizens of a country other than the UK and almost 10% of doctors working in the NHS in England have an EU nationality other than the UK. In addition, 6.8% of NHS staff working in England are citizens of a non-EU country.[xxxiv]

Following the introduction of English language requirements in June 2014, the number of new doctors who graduated in the European Economic Area (EEA) joining the profession in the UK nearly halved from 3,387 to 1,777 (a 48% decrease) from 2014 to 2015.[xxxv]

A previous tightening of immigration rules for non-EU citizens brought in by the government between 2008 and 2010 has been shown to be the most significant factor in the reduction of healthcare workers from non-EU countries. However, during that period, workforce shortages in the NHS were mitigated by an influx of EEA staff that had the right of free movement throughout the EU.[xxxvi]

There are indications that the uncertainty created by Brexit is undermining the position of health and social care staff. Surveys conducted by the GMC and the British Medical Association (both in 2017) reported that over 40% of surveyed doctors from the EEA are considering leaving the UK in the near future.[xxxvii,xxxviii,xxxix]

While we acknowledge the restrictions on the availability of evidence at this stage, it is our view that **limitations to the freedom of movement between the UK and the EU will limit the ability of the NHS to solve workforce shortages in the future.**

Workforce Fatigue

Working long hours, particularly at the relentless pace required in the NHS, leads to fatigue. Tiredness affects logical reasoning skills, vigilance, flexibility and the ability to learn & retain information. Mood worsens and people lose the ability to be empathic. Indeed a 2017 survey[xl] of over 2000 trainee anaesthetists [59%] of all trainees, showed that fatigue has had negative affects on their physical health (74%), psychological wellbeing (71%), personal relationships (68%) ability to manage exam revision, audit, projects etc.(85%) and ability to do their job (55%).

The level of fatigue meant that 84% felt too tired to drive home after a night shift and 57% report having an accident or near miss when travelling home following a night shift.

Thus current levels of fatigue may be affecting safety both for patients and doctors. Adding to this by doing extra shifts because of rota gaps can only exacerbate the problem. Furthermore, the effects of fatigue get worse as we age, making it unwise to rely on consultants 'acting down' to fill out of hours rota gaps.

Evidence throughout this paper points towards an insufficient labour supply with the anaesthesia workforce. Adding fatigue to this issue, as a result of working long hours and covering gaps in the rota does not help the situation. **We therefore recommend consultants and specialty doctor grades in anaesthesia are included on the NSOL to provide the flexibility needed to support service demand across the UK.**

Physicians' Assistants (Anaesthesia) and Advanced Critical Care Practitioners

The RCoA believes that non-medically qualified staff can make a valuable contribution towards a sustainable anaesthetic workforce. In October 2018 the College was pleased to hear that the role of the PA(A) was regulated, however, legislation for this can take up to 18 to 24 months to come into place.

Medical Training Initiative Doctors

The Royal College of Anaesthetists offers training opportunities for Anaesthetists from Low and Lower Middle Income Countries via the Medical Training Initiative (MTI). The scheme provides a route for high quality International Medical Graduates to obtain sponsorship for their GMC registration and also sponsorship for a Tier 5 visa, which will allow them to undertake a training placement in a UK hospital for a maximum period of 24 months.

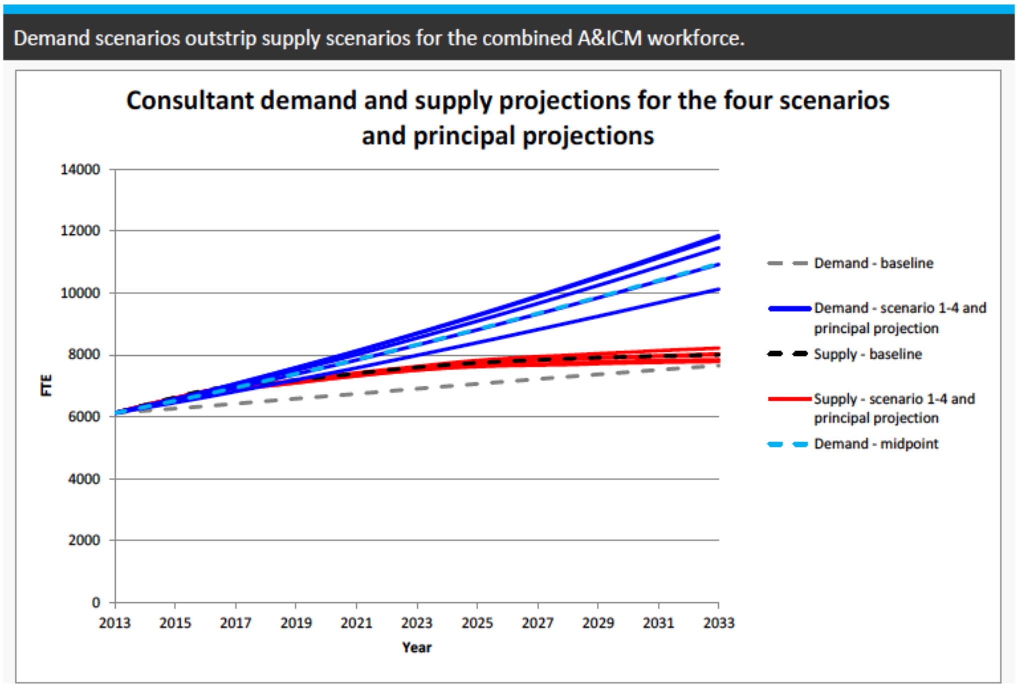
This scheme is successful and the College currently have 130 MTI doctors[xli] working across the UK. After 24 months, the doctor returns to his or her own country. **This is a philanthropic scheme and therefore the NHS hospitals should not rely on the MTI scheme to ease the pressure on the national staffing shortage.** However, it is becoming increasingly apparent that MTI doctors are being appointed into other posts to plug training/service gaps, underscoring the desperation in which hospitals and departments find themselves in as a result of the current workforce shortages.

Future Predictions

Centre for Workforce Intelligence In-Depth Review of Anaesthesia and ICM 2015

In 2015, the CfWI (whose functions now exists with HEE), undertook an in-depth review of anaesthesia and ICM in England.[xlii] The RCoA made a significant contribution to this report, along with a range of expert stakeholders. The report highlighted the forecast that the demand for Anaesthesia and ICM services will outstrip supply over the next 20 years, and notes a need for growth of 4.7% per annum in both specialties. It also recognised an existing unmet need of 15% for anaesthetics and 25% for ICM.

The graph below is taken from the CfWI report. The black dotted line represents the current supply of training numbers, and the workforce behaviour with no changes to key modelling assumptions. The four blue lines represent the expected or most likely future demand according to the expert Delphi panel on the four scenarios that was presented to them. All of the possible future demand scenarios are higher than the supply line.



To summarise, the CfWI Delphi process suggested that **15% of current anaesthetic need and 25% of ICM current need is unmet today.** The baseline **demand for anaesthetic services is expected to increase by 25% by 2033** due to demographic changes alone. The baseline supply of anaesthetists up to 2033 based on scenarios generated in the in-depth-review shows an **undersupply in the anaesthetic workforce.**

Retirement Projections and Required CCT Output

The required CCT output will depend on a number of factors, including the existing manpower gap, growth in demand and retirement rates. In terms of retirement, the College has analysed retirement projections and required CCT output using Scottish modelling assumptions (retiral age 60 x 1.4) + 1% annual growth),[xliii] which maps to a required CCT output. The 2015 census confirms a baseline figure of around 6,000 consultants in England. Compound expansion across a 10-year period can be calculated for a range of rates of consultant expansion rates demonstrating dramatically different requirements.

	1%	2%	3%	4%	5%
Average number of **new** posts ***per year*** over a 10 year period	63	131	206	288	377

A 1% expansion would initially equate to an additional 60 posts per annum. However, the CfWI report suggests expansion is more likely to be nearer 5%. If we take a mid-point and assume a 3% on-going compound consultant growth, we could assume around 206 posts per year. If we accept a retirement, projection of 211 per annum for the period 2023-27, this would require a baseline CCT output of 417. Moving to the higher retirement figure of around 260 per year for the period from 2028 onward this would equate to a baseline CCT output of 497 per annum.[xliv]

It should be noted that these calculations are of the need for English consultant posts only. However, these figures greatly exceed our current UK CCT output, and support the case that an increase in CCT output is required in order to meet future demand.

Although only England based, the calculations suggests that we will need a bigger CCT output than we currently have to meet future demand in that there will be a shortage of new consultants. We therefore recommend consultants and specialty doctor grades in anaesthesia are included on the NSOL to provide the flexibility needed to support service demand across the UK.

The Increase in Medical School Training Places

While we have welcomed the plans to increase medical school places[xlv], this new cohort of medical students will not graduate until 2023 and are anticipated to complete specialist training in anaesthesia in 2032 and cannot, therefore, be considered a short-term 'auxiliary' in the immediate post-Brexit period after 2019.

Other Relevant Information

Background

Anaesthesia was previously on the NSOL. In 2014 the College responded directly to the Migration Advisory Committee (MAC) to state that our position still remained the same, that Anaesthesia- should remain on the NSOL and that we were still awaiting publication of the Centre for Workforce Intelligence (CfWI) in depth review of Anaesthesia and Intensive Care Medicine.
The MAC partial review of SOL 2015, removed anaesthesia from the list, this decision was made before the published CfWI report. At the time, the MAC considered evidence from Health and Social Care Information Centre and from the CfWI, which showed an increase in recruitment into this specialty. On the basis of the information received, the MAC considered that shortages in this specialty were occurring only at the local level, and not at the national level required to be added to the SOL. Whilst the College agreed with the MAC that there were shortages at local level, we noted that this decision was not based on any evidence of a clear National picture.

When the CfWI report on Anaesthesia was published in 2015 it confirmed the demand for services provided by anaesthetists and intensivists will exceed the supply of CCT doctors out to 2033. We recommended at this time that in light of this report anaesthesia should be reinstated to the NSOL.

Anaesthesia as a Specialty

Anaesthetists underpin the safe provision of a wide range of essential NHS services. As well as anaesthesia and perioperative care for elective and emergency surgical patients, anaesthetists are also essential in the provision of other services including maternity, critical care, acute and chronic pain management, management of trauma, resuscitation, stabilisation and transfer of patients and pre-hospital emergency medicine.

Unlike many other specialties there is no potential for cross-cover from doctors in other specialties to meet the staffing gap for anaesthesia as the ability to deliver a safe anaesthetic for even the most straightforward of cases are simply not part of the wider skill set of doctors outside of our specialty.

How long will the shortage last?

- Under recruitment is a major issue in many UK regions.
- The population is ageing which means that those living longer in retirement are making more demands on the NHS and social services.[xlvi]
- We also have an ageing cohort of consultant anaesthetists and SAS doctors trying to meet this increasing demand on anaesthetic services.
- The time it takes to train. RCoA data suggests an average time from entry to Core Training to CCT of 8 years and 5 months. [xlvii]
- Current medical school expansion will not be available for recruitment to the discipline until 2026 [a minimum of 7 years from 2019]
- The RCoA continues to press HEE and equivalent devolved bodies to increase the numbers entering training by increasing the core and specialty training establishment, recognising that this is ultimately a more stable solution, though with a long implementation lead-time.

Conclusion

The RCoA is concerned that current labour market shortages for all grades of anaesthetist cannot be met in the short term by internal or EEA supply. We are concerned that this current situation represents evidence of risk to patient safety and service sustainability. **Based on the breadth of evidence presented in this paper, the on- line form and from a range of sources, from within and outside the College, the RCoA strongly recommends to the Migration Advisory Committee that consultant and specialty doctor grades are included on the UK SOL.**

Royal College of Emergency Medicine

Shortage occupation list 2018: call for evidence

Consultation description

In June 2018, the government commissioned the Migration Advisory Committee (MAC) to carry out a full review of the composition of the **shortage occupation list (SOL)**, to report in spring 2019. The MAC was asked to start the review of the SOL in the autumn.

This call for evidence identifies the sort of information that the MAC will find most helpful to receive during the initial phase of its consideration of the government's commission, and details of how to submit your evidence.

We are requesting that evidence be submitted using the online form detailed in the call for evidence. This allows the MAC to assess and analyse the information in a structured and methodological way, assessing all information using the same criteria. This is the most effective way for the MAC to consider evidence from stakeholders.

2nd January 2019- Written evidence submitted on behalf of the Royal College of Emergency Medicine

The Royal College of Emergency Medicine is the single authoritative body for Emergency Medicine in the UK. The Royal College works to ensure high quality care by setting and monitoring standards of care and providing expert guidance and advice on policy to relevant bodies on matters relating to Emergency Medicine.

Annex B: Evidence of shortages within sectors MAC Review of the Shortage Occupation List This form is for anyone providing evidence of current sector/wider recruitment shortages, evidence provided on behalf of members, or from academic institutions, and think tanks. Please use this form to gather evidence for completion of the online form.

Question: Please indicate from which of these industries are you providing evidence?

The Health Sector.

Question: If you wish, you can provide details of individual jobs titles you/your members have found hard to fill in the boxes below. Please help us by matching the job titles you have provided with the closest standardised ONS job title and associated 4-digit occupation (SOC) code using the Office for National Statistics (ONS) Occupation Tool

Consultant Emergency Medicine – ONS Job Title Consultant Medical – ONS Occupation Code 2211 Medical Practitioners.

ST4 to ST7 trainee(s) in emergency medicine – ONS Occupation Code 2211 Medical Practitioners.

Question: What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)?

In October 2017, alongside Health Education England, NHS England and NHS Improvement the Royal College of Emergency Medicine co-authored '*Securing the future workforce for emergency departments in England'*[131]

This document summed up these issues as follows:

"A number of previous initiatives have looked to address the workforce challenge and adapt the model of care to better suit the needs of the changing environment. As such, we have moved towards a service that is increasingly led by consultant emergency physicians seven days a week, supported by a broader multiprofessional workforce to manage the vast variety of patients coming through the doors.

"However, despite the positive effect previous work has had, clinical staff remain stretched to deliver safe, effective patient care due to the historical mismatch in supply and demand. This intense working environment of the ED is well recognised to be a leading cause of medical staff dissatisfaction, attrition and premature career 'burnout', increasing the burden on the staff who remain. It also compromises the attractiveness of the specialty for the next generation of doctors who will be vital over the next decade.

"In summary, we need more clinical staff – both senior decision-makers and those making up the broader clinical workforce – to meet the significant pressures on EDs. Evidence of the pressure facing EDs is clear from the high spending on locums and agency staffing in EDs (emergency medicine accounted for 20% of all medical locum spend in a sample of 52 liaison trusts), attrition rates for those in training and early retirement of experienced senior emergency physicians."[132]

In addition to these comments to further points should be made. Firstly, as was acknowledged in Health Education England *'Facing the Facts, Shaping the Future in 2017'* NHS pay restraint has made it more difficult to recruit and retain staff.[133] In this

[131] Securing the future workforce for emergency departments in England
[132] Securing the future workforce for emergency departments in England
[133] Health Education England Facing the Facts, Shaping the Future

context it can only be welcome new that the era of NHS pay restraint appears to be over.[134]

Secondly, while acknowledgement of problems with professional ‘burnout’ are welcome this is by no means the end of the issue. The truth of the matter is that in what is already a highly demanding and stressful medical specialism, large numbers of clinical staff are leaving NHS, and vacancies are generally continuing to rise, because conditions on front line have steadily deteriorated.

This can be illustrated quite clearly by looking at the continuing decline in Four-Hour Standard performance on the one hand (currently around 80% in Type 1 departments);[135] or bed occupancy rates – a fair yardstick as to whether there are beds available to admit patients from an Emergency Department should this be necessary – which have risen steadily and are now routinely around 95%.[136]

Question: Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research?

In October 2017 *‘Securing the future workforce for emergency departments in England’*[137] outlined a number of measures to achieve just that. These included:

“HEE will work with RCEM to recruit an additional 100 doctors per year for four years into other training programmes that develop skills in emergency medicine at a range of levels to ensure the best mix of junior and middle grade expertise for emergency departments (EDs). These will include the defined route of entry into emergency medicine (DRE-EM) training programme, international recruitment, particularly as part of ‘work, learn and return’ schemes with countries such as India and Pakistan, and other routes.

“This will mean a total of 400 people entering emergency medicine training for a period of four years from next year as compared to 300 this year.
“We will invest in the growth of the advanced clinical practitioner (ACP) workforce in emergency care, with funding for 42 ACPs across 14 trusts this year, rising to 84 ACPs next year.

“Royal College of Emergency Medicine (RCEM) and NHS Improvement will continue to encourage and share best practice on Certificate of Eligibility Specialist Registration (CESR) programmes. A series of development events run by RCEM and HEE and a best practice toolkit from RCEM, supported by HEE, will support alternative routes to becoming an emergency medicine consultant.

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[134] 21st March 2018 NHS Workforce: Written statement - HCWS574
[135] RCEM Winter Flow Project - Weekly Report 21st December 2018
[136] NHS England Winter Daily SitRep 2018-19 Data
[137] Securing the future workforce for emergency departments in England

“From April 2018, we will invest in a leadership/personal development training programme for every emergency medicine trainee in England to help reduce attrition and improve the support for trainees in this intense and pressurised specialty. The offer of training support will increase in breadth and complexity as people progress through their training to prepare them for becoming consultants.
“Starting in April 2018, we will provide funding to and work with a third of the trusts (45) highlighted in the General Medical Council (GMC) training survey as having the biggest problems with their training environment, to develop and implement clinical educator strategies. These support all staff working in EDs by improving the training and working environment. Learning from this approach and good practice will be rapidly shared with other trusts. All trusts will be expected to consider clinical educator strategies as part of their overall emergency care workforce planning.

“From August 2017 HEE is piloting less than full time (LTFT) training for all ST4 and above trainees in emergency medicine. Following a successful pilot, the General Medical Council (GMC) has approved permanently incorporating run-through training into the curriculum.

“RCEM will develop a range of post Certificate of Completion of Training (CCT) fellowships in areas such as geriatric emergency medicine, ambulatory emergency care and humanitarian work. These will be supportive of and attractive to certain types of systems and also support thinking on new models of care in these areas.

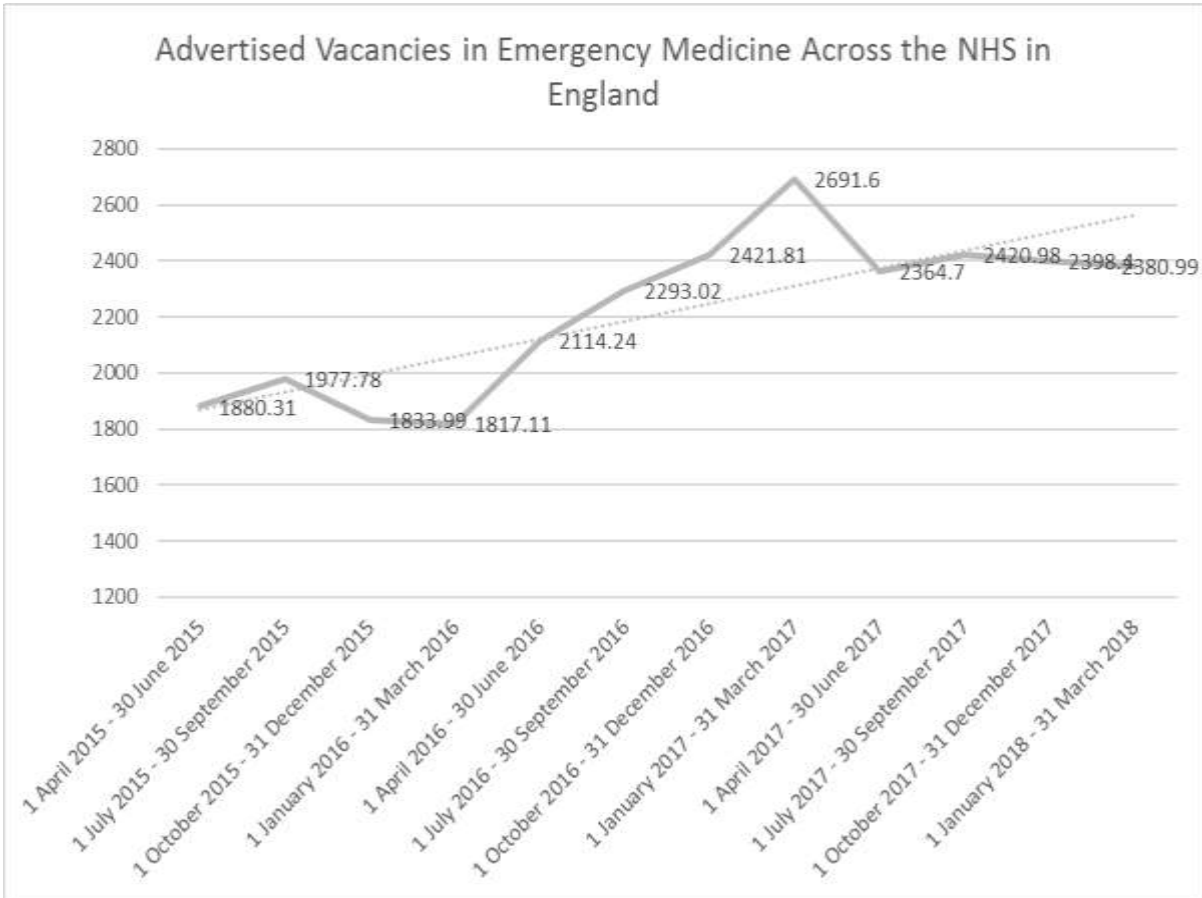
“RCEM will publish a best practice clinical development fellows toolkit to support the creation of such roles as a way to both broaden the workforce and RCEM and NHS Improvement will jointly publish a best practice guide that trusts will be expected to use to improve their recruitment and retention in EDs.

“RCEM and NHS Improvement will work together to jointly describe how we can better support emergency medicine consultants at different stages of their careers”[138]

Question: Have these measures worked, if not why?

The chart given below indicates the number of vacancies in Emergency Medicine across the NHS in England up to the final Quarter of 2017-18.[139]

[138] Securing the future workforce for emergency departments in England
[139] NHS Digital NHS Vacancy Statistics Feb 2015 - Mar 2018, Tables - Excel



What this shows is that while the general trend in the number of vacancies is still upwards there has been some stabilisation in the last two Quarters for which we have collated data.

This suggests that – all other things being equal – some of the more short-term measures within *'Securing the future workforce for emergency departments in England'* have had or are beginning to have a beneficial effect. There are however a number of reasons why these measures on their own are unlikely to resolve the profound and immediate workforce shortages within the specialty and indeed have not done so.

Firstly, while the College welcomes the commitment to additional training places, our own analysis has shown that at present rates of attrition in training this is unlikely to result in the necessary additional 2200 Emergency Medicine Consultants[140] before 2028.[141] Furthermore, this would require the present commitment to 400 training places per annum to be extended for an additional two years.

[140] Royal College of Emergency Medicine Vision 2020
[141] Royal College of Emergency Medicine analysis. January 2019

Secondly, while additional clinical staff are undoubtedly helpful, they are only part of the picture. Conditions for clinicians on the frontline are challenging, and are likely to remain so, for two very straightforward reasons.

Bed occupancy rates remain far above levels that are considered safe (85%)[142] and this leads to poor Four-Hour Standard Performance, overcrowding, Exit Block and avoidable mortality. This then has a negative impact on recruitment and retention.

To resolve this, additional bed provision is necessary, rather than, as is the case at present, continued attrition. To return bed occupancy rates to 85% we estimate that the NHS would require an extra 7600 beds at an annual cost of £970 million per annum.[143]

Finally, we need a proper settlement for the social care sector to address rising levels of unmet need.[144] This leaves patients stranded in our hospitals or attending Emergency Departments because they have nowhere else to turn. It also leads to higher rates of bed occupancy in secondary care and impedes patient flow from the Emergency Department.

In short, unless, the NHS and Social Care Sector takes effective action to address these additional systemic problems, recruitment and retention in Emergency Medicine is likely to remain challenging and shortages are likely to persist.

Question: Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

Yes, they are. The full list of jobs detailed under Medical practitioners code 2211 in the United Kingdom Shortage Occupation List is:[145]

Consultants in the following specialities:

clinical radiology
emergency medicine
old age psychiatry
CT3 trainee and ST4 to ST7 trainee in emergency medicine
Core trainee in psychiatry

Non-consultant, non-training, medical staff posts in the following specialities:
emergency medicine (including specialist doctors working in accident and emergency)

[142] BMJ Dynamics of bed use in accommodating emergency admissions
[143] NHS England Bed Availability and Occupancy Data – Overnight & NHS Reference Costs Based on Q4 2017-18
[144] New analysis shows number of older people with unmet care needs soars to record high
[145] https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-k-shortage-occupation-list

old age psychiatry
paediatrics

Question: If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles?

The Royal College of Emergency Medicine does not have this information available. However, the Home Office's own estimates indicate that around 40% of Tier 2 places go to the NHS.[146]

Question: If you have any other information that might be useful for our call for evidence please use the space below to explain.

Since the European referendum a number of NHS bodies, medical Royal Colleges and thinktanks have expressed concern about the effect that Brexit is likely to have on the recruitment and retention of medical staff within the NHS.[147]

The Royal College of Emergency Medicine shares these concerns and has done further work that makes it possible to estimate some of the likely impact of Brexit on recruitment and retention within the specialty. Based on figures from NHS Digital, the House of Commons Library Service has estimated that around 12% of NHS staff are recorded as of non-British nationality.[148] Moreover, 5.5% of the NHS workforce are from other EU countries.[149] These figures are broadly representative of the makeup of the Emergency Medicine workforce in the UK.[150]

In February 2017, the GMC conducted a survey of EEA nationals working in the UK.[151] This survey showed that 60.8% of those that responded to the survey were considering leaving the UK in light of the Brexit vote, and many cited feeling unwanted or demoralised.

If a similar proportion of EEA Emergency Medicine clinicians decided to leave this would mean the loss of around 235 (FTE) EM physicians in England alone. To complement the evidence of the GMC survey RCEM conducted a voluntary online survey open to all our Fellows and Members.

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[146] 23rd May 2018 Doctors: Migrant Workers: Written question - 147426
[147] House of Lords Library Note Leaving the European Union: NHS and Social Care Workforce LLN 2016/061 17 November 2016
[148] House of Commons Library Note NHS Staff from Overseas Briefing Paper 7783 10 April 2017
[149] House of Commons Library Note NHS Staff from Overseas Briefing Paper 7783 10 April 2017
[150] Royal College of Emergency Medicine estimate.
[151] Briefing: GMC survey of EEA doctors

348 Fellows and Members responded[152] to this survey of which 20.67% or 72 respondents are from the EEA. Of the remainder, 68.68% or 239 respondents were UK nationals and 10.63% or 37 were from the rest of the world.
In our view all of these responses are important because the impact of changes to staffing levels, service provision and associated levels of workforce pressure are likely to have an impact of the decisions of existing members of staff to stay within the NHS.

When asked about the likely impact of Brexit on Emergency Medicine 84.2% (293) responded that this would make the situation in EDs worse, while 86.75% (301) responded that this would result in levels of staffing becoming more adverse.

On this basis it is perhaps surprising that 39.08% (136) of respondents are considering leaving Emergency Medicine in the UK at some point and 46.53% (161) of respondents agreed that the vote to leave the European Union had played a part in that decision.

Taken together, these two surveys indicate several this. Firstly, the vote to leave the European Union has already had an adverse impact on recruitment and retention within Emergency Medicine.
Secondly, the College takes the view that urgent steps are needed to clarify the status of EEA nationals within the NHS, and to ensure that the NHS remains an attractive place to work.

Finally, the vote to leave the European Union has made NHS Emergency Physicians, whatever their country of origin, feel less secure. In this context it is all the more vital to retain a supportive Tier 2 visa regime for Emergency Physicians. This is because the evidence suggests that if anything, the need for EM professionals from around the world within our NHS is likely to increase rather than diminish.

[152] This represent 4.82% of the College's total membership of 7211.

Royal College of General Practitioners

Appendix: Evidence for shortages in General Practice

Autumn 2018 GP tracking survey results: Vacancy rates and departures from the workforce

• In the next five years, a significant proportion of general practitioners intend to leave the workforce:
o 26% GPs in Scotland
o 23% GPs in Wales
o 24% GPs in Northern Ireland
o 31% GPs in England

• Retirement and stress are highlighted across all four nations as a reason that influences these decisions.

• Recruiting for GP vacancies is difficult with more than half of GPs across the four nations saying it is difficult to recruit GPs and a number of GPs reporting that there has been more than one GP vacancy open for longer than 3 months:
o 10% GPs in Scotland
o 13% GPs in Wales
o 10% GPs in Northern Ireland
o 21% GPs in England.

• GPs are also reporting at least once or twice a week they feel they cannot cope with the workload pressures:
o 22% GPs in Scotland
o 31% GPs in Wales
o 24% GPs in Northern Ireland
o 37% GPs in England.

A link to the results of the latest wave of this survey is available here.

GP Supply pipeline: GP training places

• • Increases in GP places in England that are matched by high fill rates are encouraging for future workforce figures, but this will take a long time to have an impact on the workforce.

• • Scotland has increased the number of places but have not managed to fill these places. Changes to other polices such as the GP contract may incentivise more people to take up GP training.

• • Wales and Northern Ireland are both increasing the number of GP training places. Northern Ireland’s fill rate is low and there is a lag between the increase in the number of places with the number of people who fill them.

GP training places (Scotland)[i]

	Places	Filled places	Fill rate
2009	393	356	90.6%
2010	350	349	99.7%
2011	296	268	90.5%
2012	302	290	96.0%
2013	305	280	91.8%
2014	301	269	89.4%
2015	302	239	79.1%
2016	425	287	67.5%
2017	430	318	74.0%
2018	347	292	84.2%

GP training places (Wales)[ii]

	Places	Filled places	Fill rate
2009	127	124	97.6%
2010	136	125	91.9%
2011	116	115	99.1%
2012	128	105	82.0%
2013	130	125	96.2%
2014	126	113	89.7%
2015	125	109	87.2%
2016	136	130	95.6%
2017	136	147	108.1%
2018	136	134	98.5%

GP training places (NI)[iii]

	Places	Filled places	Fill rate
2009	65	65	100.0%
2010	65	65	100.0%
2011	65	65	100.0%
2012	65	64	98.5%
2013	65	65	100.0%
2014	65	63	96.9%
2015	65	65	100.0%
2016	85	84	98.8%
2017	97	89	91.8%
2018	111	87	78.4%

GP training places (England)[iv]

	Places	Filled places	Fill rate
2009	2,759	2,668	96.7%
2010	2,768	2,833	102.3%
2011	2,710	2,696	99.5%
2012	2,711	2,693	99.3%
2013	2,791	2,767	99.1%
2014	3,067	2,671	87.1%
2015	3,117	2,769	88.8%
2016	3,250	3,019	92.9%
2017	3,250	3,157	97.1%
2018	3,250	3,415	105.1%

Supply: GP workforce
Overall, Scotland, Wales and NI all show an increase in the number of GPs over the past ten years. However, although NI has made steady progress, in Scotland and Wales, numbers

have stalled more recently. The increases in the workforce have not been enough to match the changes in the volume and complexity of demand that are identified below.

	England	Scotland	Wales	NI
	Headcount	Headcount	Headcount	Headcount
2009	-	4,902	-	1,156
2010	-	4,902	-	1,160
2011	-	4,886	-	1,163
2012	-	4,862	-	1,170
2013	-	4,875	-	1,173
2014	-	4,911	2,858	1,212
2015	41,877	4,920	2,887	1,274
2016	41,865	4,877	2,944	1,297
2017	42,145	4,919	2,936	1,328
2018	42,431p	4,994	*	*
Change in the past three years	1.3%	1.5%	2.7%	9.5%

p = provisional figure
* = data not released for 2018 yet
Accounting for the past three years, in England, the workforce has expanded by 1.3 percent while the number of patients has increased by more than double that (3.9 percent). This is a trend across the four nations and does not account for the likely increases in the complexity of the work that GPs have to deal with. In Scotland, the workforce has increased commensurately while Wales and Northern Ireland have shown more than commensurate increases.
However, a better metric for changes in the workforce is the FTE measure which is decreasing as GPs choose to reduce hours in the response to growing workload pressures. Note that Scotland data is from the National Primary Care Survey and differs from the above headcount figures as does not includes registrars, retainers or locums. Wales and NI do not have equivalent data.

	England	Scotland
	FTE	FTE
2013	-	3,735
2014	-	-
2015	34,592	3,645
2016	34,495	-
2017	34,091	3,575
2018	34.132p	-
Change in the past three years	-1.3%	-1.9%

Demand: Patient population size
The number of registered patients is steadily increasing across the UK. The UK population is growing and ageing. By 2036, 23% of the UK population will be 65 or over.
Long-term conditions are more prevalent in older people (58 per cent of people over 60 compared to 14 per cent under 40) and in more deprived groups (people in the poorest

social class have a 60 per cent higher prevalence than those in the richest social class and 30 per cent more severity of disease).
Therefore, the growing proportion of people over 65 will likely increase the burden on the healthcare system for treatment and care of long-term conditions and the need for GPs to provide that care.

Number of registered patients (in millions)

	Scotland[v]	Wales[vi]	NI[vii]	England[viii]
2007/08	5.424	3.094	1.833	53.588
2008/09	5.474	3.115	1.849	53.945
2009/10	5.497	3.135	1.867	54.609
2010/11	5.519	3.153	1.883	55.019
2011/12	5.527	3.163	1.897	55.308
2012/13	5.549	3.173	1.908	55.737
2013/14	5.568	3.178	1.919	56.007
2014/15	5.599	3.173	1.937	56.470
2015/16	5.627	3.187	1.948	57.170
2016/17	5.663	3.198	1.961	57.847
2017/18	5.699	3.206	1.970	58.675
Change in the past three years	**1.7%**	**1.0%**	**1.7%**	**3.9%**

i Health Education England (2017), 'ST1 Recruitment Figures'. Available at: https://gprecruitment.hee.nhs.uk/Resource-Bank/Recruitment-Figures
ii Health Education England (2017)
iii Health Education England (2017)
iv Health Education England (2017)
v ISD Scotland (2017b)
vi StatsWales (2018b), *General practitioners, registrars, retainers and average list size by local health board and year.* Available at: https://statswales.gov.wales/Catalogue/Health-and-Social-Care/General-Medical- Services/gppractitionersregistrarsretainersandaveragelistsize-by-localhealthboard-year
vii HSC Business Services Organisation (2018b)
viii NHS Digital (2018)

Royal College of Nursing

Royal College of Nursing's response to the Migration Advisory Committee's (MAC) call for evidence on the Shortage Occupations List

With a membership of around 435,000 registered nurses, midwives, health visitors, nursing students, health care assistants and nurse cadets, the Royal College of Nursing (RCN) is the voice of nursing across the UK and the largest professional union of nursing staff in the world. RCN members work in a variety of hospital and community settings in the NHS and the independent sector. The RCN promotes patient and nursing interests on a wide range of issues by working closely with the Government, the UK parliaments and other national and European political institutions, trade unions, professional bodies and voluntary organisations.

Introduction to the MAC and this call for evidence

The MAC advises the Home Office on immigration policy. It also administers the UK Shortage Occupations List (SOL) as well as the separate Scottish SOL. The SOL is an official list of occupations for which there are not enough resident workers to fill vacancies. Being on the SOL makes it easier for employers to recruit workers from outside the European Economic Area (EEA) to fill workforce shortages. The MAC reviews this list regularly and issues calls for evidence on which occupations should be included or removed. This specific call for evidence applies to the UK SOL only.

Summary of our position

This call for evidence has come at an important time. As the UK prepares to exit the European Union (EU) in March 2019, the UK Government has said that it will review its entire immigration policy through a White Paper to be released before the end of 2018. Leaving the EU provides the UK with an opportunity to re-set and review its approach to labour migration and the systems which underpin it, including the SOL.

Nursing (all specialties) has been on the SOL since it was last reviewed in 2016. Our position is that since then nursing across the UK continues to be in shortage. As a result we call for nursing to remain on the SOL for the present time. However, for the long-term we believe that the UK cannot continue to rely so heavily on recruiting nurses from outside the UK to meet workforce shortages.

We are therefore calling for a credible health and care workforce strategy in each country of the UK to address systemic workforce shortages in terms of education, recruitment and retention, and for this to be underpinned by legislation for staffing for safe and effective care. This must be based on a whole-system approach, that sets out what is required by way of workforce based on population needs, what levers will be used, and how implementation of a strategy will be supported.

Given the limited word count for each of the MAC's questions we have not provided all the available evidence we have on the state of the nursing workforce. Instead we have provided what we think are the most relevant points covering the UK and devolved context. We would be happy to provide subsequently any additional information and data which the MAC may need.

The NMC has provided us with registered nurse-only data which we have used consistently in this submission unless otherwise stated. Midwifery is not currently on the SOL and so we present the most accurate nursing data possible. The NMC's published data which includes midwives is available on the NMC's website here: https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/

Our response to the MAC's questions

1. What do you think are the main reasons for job shortages, and or wider shortages in the sector(s)?

1.1 As of the 30th September 2018 there were 649,619 Registered Nurses (RNs) on the UK regulatory register.[1] This represents an increase of 3,376 RNs since 2017.

1 NMC, 'Registration statistics', provided to the RCN on request in November 2018 (2018)
2 NHS Digital, 'England NHS workforce', available at: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/august-2018 (2018)
3 StatsWales, 'Wales NHS workforce', available at: https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Staff (2018)
4 ISD Scotland, 'Scotland NHS workforce', available at: http://www.isdscotland.org/Health-Topics/Workforce/Publications/index.asp (2018)
5 Northern Ireland Department of Health, 'Northern Ireland NHS workforce', available at: https://www.health-ni.gov.uk/topics/dhssps-statistics-and-research/workforce-statistics (2018)
6 Skills for Care, 'The state of the adult social care sector and workforce in England', available at: https://www.skillsforcare.org.uk/NMDS-SC-intelligence/Workforce-intelligence/documents/State-of-the-adult-social-care-sector/The-state-of-the-adult-social-care-sector-and-workforce-2018.pdf (2018)

1.2 However, when measured by full-time equivalent filled posts in the UK-wide NHS, the latest available data shows a much smaller increase of only 1,783 RNs across all specialties over the last twelve months.[2,3,4,5]

1.3 In social care the number of RNs continues to drop. In England there has been an 18% decline since 2012 - equivalent to 9,500 positions.[6]

1.4 Based on our evidence, nursing in the UK remains a shortage occupation and should not be taken off the SOL at this time. The main reasons are:

1.5 **Growing patient demand**: Across the UK patient demand is far outpacing available supply. Between 2017 and 2018 the number of A&E patients being seen within four hours fell in England from 90.3% to 89.7%[7], in Scotland from 95% to 92%[8], in Northern Ireland from 89% to 84%[9] and in Wales from 85% to 80%.[10]

7 NHS England, 'Monthly A&E Time series', available at: https://www.england.nhs.uk/statistics/statistical-work-areas/ae-waiting-times-and-activity/ae-attendances-and-emergency-admissions-2018-19/ (2018)
8 ISD Scotland, 'A&E Activity and Waiting Times, September 2018', available at: http://www.isdscotland.org/Health-Topics/Emergency-Care/Publications/2018-11 06/Summary/index.asp?91416567565 (2018)
9 Northern Ireland Statistics and Research Agency, 'Emergency Care Waiting Times', available here: https://www.ninis2.nisra.gov.uk/InteractiveMaps/Health%20and%20Social%20Care/Health%20Care%20System/Waiting%20Times%20for%20Emergency%20Care/ecwt_combined.html#all-types (2018)
10 StatsWales, 'Performance against 4 hour waiting times target, all emergency care facilities by local health board', available at: https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Hospital-Waiting-Times/Accident-and-Emergency/performanceagainst4hourtargetallemergencycarefacilities-by-localhealthboard (2018)
11 NHS Improvement, 'Performance of the NHS provider sector for the quarter ended 30 September 2018', November 2018, available at: https://improvement.nhs.uk/documents/3520/Performance_of_the_NHS_provider_sector_for_the_month_ended_30_Sept_18_FINAL.pdf (2018)
12 Information Services Division Scotland, 'NHS Scotland Workforce Information', available at: http://www.isdscotland.org/Publications/index.asp (2018)
13 Department of Health Northern Ireland, 'Evidence to the Pay Review Body 2018-19', December 2017
14 RCN Wales, 'Nursing Numbers in Wales 2018' (2018)

15 National Institute of Economic and Social Research, 'Brexit and the Health & Social Care Workforce', available at: https://www.niesr.ac.uk/publications/brexit-and-health-social-care-workforce-uk#.W_fnAIdLGUk (2018)
16 RCN, 'Safe and effective staffing: Nursing against the odds', available at: https://www.rcn.org.uk/professional-development/publications/pub-006415 (2017)

1.6 Rising vacancy rates across the UK further evidence that nursing is in shortage. In the English NHS there were approximately 41,000 RN vacancies in quarter two of 2018/19, up by 4.4% since quarter two of 2017/18.[11] Vacancy rates in Scotland are currently 4.8%, up from 4.5% in 2017[12]. In Northern Ireland there is an estimated NHS vacancy rate of 8.2%[13] and while vacancy rates are not published in Wales, the 2017/18 NHS Wales agency spend for nursing & midwifery was £51m which implies significant shortages.[14]

1.7 Independently commissioned workforce projections suggest the UK may face an additional shortage of around 5,000-10,000 RNs by 2021 in addition to current vacancies.15

1.8 UK-wide nursing shortages are especially severe in non-acute settings, especially community and district nursing services. Data collected by the RCN from over 2,200 community nursing shifts showed that 68% had a shortfall of one or more RNs – one of the highest shortfalls across all settings.[16] We have attached this evidence as an annex in question five.

1.9 **Falling student numbers**: The UK is not educating enough RNs to meet current and future population demand. Across the UK, student nursing numbers fell by 0.28% in 2018 compared to 2017, although this is not consistent across all four UK countries.[17] Since the abolition of the bursary for nursing students in England in 2016, the number of student nurses enrolling into English universities has fallen by 3.9%.[18] In addition, the number of nursing students over 25 years old across the UK has fallen by 7.4% since 2016.[19]

17 UCAS, 'Statistical releases – daily Clearing analysis 2018', available at: https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/statistical-releases-daily-clearing-analysis-2018 (2018)
18 UCAS, ' End of cycle report 2018', available at: https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/ucas-undergraduate-end-cycle-reports/2018-end-cycle-report (2018)
19 UCAS, 'Statistical releases – daily Clearing analysis 2018', available at: https://www.ucas.com/data-and-analysis/undergraduate-statistics-and-reports/statistical-releases-daily-clearing-analysis-2018 (2018)
20 NMC, 'Registration statistics', provided to the RCN on request in November 2018 (2018)
21 Ibid.
22 Ibid.

1.10 **Collapse of the European nursing supply**: In the last twelve months the number of new RNs joining the UK workforce from within the European Economic Area (EEA) has fallen by 20%, affirming the collapse of this supply pipeline. Since 2016 new EEA joiners have fallen by 91%.[20]

1.11 In addition, the number of established EEA RNs who have left the regulatory register has risen by 47% since 2016.21

2. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research

2.1 **UK-wide measures:** As the EEA supply has collapsed, recruitment from outside the EEA has grown. The number of non-EEA RNs joining the register increased from 2,474 in 2017 to 4,193 in 2018.[22]

2.2 In June 2018, the UK Government announced its settled status scheme to allow EU nationals to continue to reside in the UK after Brexit. Settled status could allow over 30,000 EU RNs already in the UK to remain after Brexit.

2.3 **England-only measures:** Following the decision by the UK Government to remove the student nursing bursary, two new routes have been developed aimed at increasing supply. These are Nursing Degree Apprenticeships (NDAs) and Nursing Associates (NAs). NDAs were introduced in September 2017. In the 2017/18 academic year, there have been only 260 apprenticeships recorded for RN positions.[23] Most nursing degree apprenticeships will take four years.[24] There are significant implementation issues, including backfill salaries not being funded.

23 RCN, 'PQ to the House of Commons' (2018)
24 DHSC, 'Nursing degree apprenticeships: factsheet', available at: https://www.gov.uk/government/publications/nursing-degree-apprenticeships-factsheet/nursing-degree-apprenticeship-factsheet (2018)
25 NMC, 'Introducing Nursing Associates', available at: https://www.nmc.org.uk/standards/nursing-associates/what-is-a-nursing-associate/ (2018)
26 HEE, 'Global Engagement', available at: https://www.hee.nhs.uk/our-work/global-engagement (2018)
27 RCNi, 'Scottish Government increases NHS bursary for student nurses', available at: https://www.nursinginpractice.com/article/scottish-government-increases-nhs-bursary-student-nurses (2018)

2.4 NAs are regulated nursing support roles. Approximately 2,000 pilot positions are currently active with a further 5,000 starting in 2018 and 7,500 in 2019.[25] This role is intended to address skills gap between healthcare assistants and RNs. They are a level 5 profession, equivalent to a diploma of higher education, and most will be trained through apprenticeships taking two years to complete. Once established, NAs will be able to undertake a further two years of training to become an RN. However, the conversion rate of NAs to RNs is untested. As a result potential future numbers are unclear.

2.5 Both the NDA and NA positions will take longer to increase the RN workforce supply than the established three-year degree route.

2.6 We are also aware that Health Education England (HEE) has developed a scheme aimed at increasing recruitment of nurses from other countries called 'Earn, Learn, Return'.[26] There are currently two projects running but it is unclear what impact they will have on source countries and nurses and a lack of consultation and agreement with relevant professional groups.

2.7 **Scotland-only measures:** In 2018 the Scottish Government announced plans to increase the bursary for nursing students entering undergraduate courses from £6,578 in 2018 to £8,100 in 2019 and to £10,000 in 2020.[27] We understand that the Scottish Government is also looking at a targeted recruitment campaign for nursing. We welcome the overall tone of the Scottish Government on emphasising the importance of EU nursing staff.

2.8 **Wales-only measures:** The Welsh Government has committed to maintaining the bursary for nursing students for 2019/2020. In 2017 the Welsh Government also launched the 'Train, Work, Live' recruitment campaign for RNs in Wales, a national and international marketing campaign aimed at increasing the number of RNs coming to train and work in Wales.

2.9 **Northern Ireland-only measures:** The number of commissioned pre-registration nursing education places has increased by 40% since 2015/16.[28] However, given the three year duration of these programmes, it is too early to evaluate the full impact of these increases upon the size and composition of the nursing workforce in Northern Ireland.

28 BBC, 'Department of Health allocates £15m for workforce challenges', available at: https://www.bbc.co.uk/news/uk-northern-ireland-44102699 (2018)
29 NMC, 'Registration statistics', provided to the RCN on request in November 2018 (2018)
30 NHS Digital, 'NHS Hospital & Community Health Service (HCHS) July workforce statistics, October 2018', available at: https://digital.nhs.uk/data-and-information/publications/statistical/nhs-workforce-statistics/july-2018 (2018)
31 Information Services Division Scotland, 'NHS Scotland Workforce Information at March 2018', available at: http://www.isdscotland.org/Health-Topics/Workforce/Publications/index.asp (2018)
32 Department of Health Northern Ireland, 'Northern Ireland health and social care workforce census March 2018', available at: https://www.health-ni.gov.uk/publications/northern-ireland-health-and-social-care-workforce-census-march-2018 (2018)
33 Stats Wales, 'Non-medical staff by grade and staff group, September 2017, March 2018,' available at: https://statswales.gov.wales/Catalogue/Health-and-Social-Care/NHS-Staff/Non-Medical-Staff/nonmedicalnhsstaff-bystaffgroup-grade-year (2018)

3. Have these measures worked, if not why?

3.1 **UK-wide measures:** Since September 2016 non-EEA joiners have risen from 2,388 to 4,193.[29] But the UK cannot continue to rely on recruiting RNs from outside the UK to meet workforce shortages and vacancies outlined in 1.6. We are calling for a credible health and care workforce strategy in each country of the UK to tackle systemic workforce shortages, in terms of education, recruitment and retention to be underpinned by legislation for staffing for safe and effective care. This must be founded on a whole-system approach, based on population needs, describing levers to be used, and how implementation of a strategy will be supported.
3.2 Without this, nursing numbers will continue to drop. Since 2010 learning disability nursing has seen a decline of 40.4% in England[30], 11.7% in Scotland[31], 16% in Northern Ireland[32] and 13% in Wales.[33] This same data also shows a steady decline in the number of mental health RNs since 2010, by 12.9% in England, 6.6% in Scotland, 1.8% in Northern Ireland and 10.8% in Wales. This reduction could be exacerbated by the decline in nursing students over 25 years old since removal of the bursary, given their preference for these fields of practice.
3.3 It is difficult to assess how effective settled status will be until fully rolled out. However, we believe that considerable damage has already been done to the retention of our EEA workforce given its late announcement. Since 2016 there have been more EEA RNs leaving the NMC register than joining. In 2016/17
there was a net loss of 2,814 EEA RNs followed by a further loss of 2,543 in 2017/18.[34]

34 NMC, 'Registration statistics', provided to the RCN on request in November 2018 (2018). Figure calculated by subtracting the number of leavers from the number of new joiners to the register.
35 Nursing in Practice, 'Scottish Government increases NHS bursary for student nurses', available at: https://www.nursinginpractice.com/article/scottish-government-increases-nhs-bursary-student-nurses (2018)

3.4 **England measures:** The established three-year degree education route offers the safest outcomes for patients and is the fastest and most effective in terms of length of training, but as evidenced in 1.9 student numbers are falling. Additional new routes - nursing degree apprenticeships and nursing associate role will not solve the workforce shortage, not least due to the length of training involved, modest uptake, and implementation issues.

3.5 To begin addressing this we are calling on the Department of Health and Social Care to invest £1.2bn annually back into nursing education in England with a preference for the established three-year degree route. Underpinned by a cohesive costed workforce strategy.

3.6 **Scotland measures:** We applaud the recent announcement by the Scottish Government to increase its bursary for nursing students entering undergraduate courses to £8,100 per year in 2019 and £10,000 in 2020.[35]

3.7 **Wales measures:** A long-term commitment has not yet been made by Welsh Government regarding the future of the nursing student bursary in Wales, and so the future of nurse education in Wales is uncertain. Furthermore, the number of student nursing places for 2019/2020 have remained static and this is a cause for concern.

3.8 **Northern Ireland measures:** The pre-registration nursing student bursary remains intact in Northern Ireland which is welcomed.

4. If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.

We have submitted an FOI to Home Office consisting of the following questions:
How many nurses (ONS job title: Nurses and ONS occupation code: 2231) from outside the UK:
1 - Made a Tier 2 points-based visa application for every month between 30th October 2017 and 30th October 2018
2 - How many of these Tier 2 applications were successful for every month between 30th October 2017 and 30th October 2018
3 - How many of these Tier 2 applications were unsuccessful for every month between 30th October 2017 and 30th October 2018?
Our position is that the overall cap on Tier 2 visas should be removed because it bears no relation to labour market need.

5. If you have supporting evidence please attach here.

5.1 We have submitted the following publications for the MAC's consideration. Below each we include a brief summary of its focus and relevance to this call for evidence.

5.2 **UK Nursing Labour Market Review 2018 (forthcoming)**

This report by the RCN, analyses the shape, size and state of the nursing labour market, analysing trends in the employment and training of nursing staff across the UK economy, including by age and fields of practice. It is due to be published in January 2019.
5.3 **Safe and effective staffing: Nursing against the odds**. Available online at: https://www.rcn.org.uk/professional-development/publications/pub-006415

This report includes the results and analysis of a survey of nursing and midwifery staff in the UK. The survey asked people about their last shift or day worked in health or social care. Over 30,000 responses were received in two weeks, providing insight into staff experiences and staffing levels across the UK. The findings provide a strong voice from nursing staff, clearly describing the impact that poor staffing has on both patient safety and their own wellbeing. Some of the experiences and stories shared via the survey have been included throughout the report.

5.4 **Staffing for safe and effective care**. Available online at: https://www.rcn.org.uk/professional-development/publications/pdf-007025

5.5 At Congress 2017, the membership of the RCN raised the alarm on the growing nursing workforce shortages across the UK, and their concern at the implications on patient safety. We have undertaken extensive engagement with members, RCN Boards, and nursing workforce experts, which we set out in this report. The outcome of this engagement is a set of RCN principles which provide high-level objectives which most meaningfully represent what we need to achieve on staffing for safe and effective care, though legislation, statutory instruments and guidance, and sufficient funding, in every country in the UK.

5.6 **Fund our future nurses (England only)**. Available online at: https://www.rcn.org.uk/professional-development/publications/pub-007348

5.7 In this report we present costed policy options to support the Department of Health and Social Care (DHSC) to assume permanent, explicit and overarching strategic responsibility for the supply of future nursing and wider healthcare workforce leading to targeted demand and supply side interventions wherever these are required to ensure supply. We believe that the Government should be aiming for an increase of at least 50% more students starting each year in England after five years of investment while also supporting international recruitment to address urgent need.

5.8 **Nursing Numbers in Wales, RCN Wales, September 2018** (not yet available online)

5.9 This report is designed to provide a statistical overview of the strengths and vulnerabilities of the nursing workforce in in Wales. The main sources of information on the nursing workforce in Wales used to inform the report are Statistics Wales, Welsh Government and the Royal College of Nursing, with other sources listed throughout the report.

5.10 **International workforce in the UK after Brexit**. Available online at: https://www.rcn.org.uk/professional-development/publications/pub-007181

5.11 In this briefing we present the most up-to-date analysis of the continuing global nursing shortage and the rising demand for health and care services in the UK. We argue that the as the UK approaches Brexit, it needs to be able to attract nursing staff with the right skills to work and remain in the sector. We include the principles which we believe should underpin any future immigration system to ensure that the UK is able to remain competitive in terms of recruiting global nursing talent, while investing more in the education, recruitment and detainment of domestically educated RNs.

5.12 **RCN Evidence to the 2018-19 UK NHS Pay Review Body.** Available online at: https://www.rcn.org.uk/professional-development/publications/pdf-006821

5.13 This document contains the RCN's evidence to the NHS Pay Review Body for the 2018-19 pay round. This submission also includes the 2017 RCN Labour Market Review of the nursing workforce and the UK-wide 2017 RCN Employment Survey. From this evidence we have concluded that failures in workforce planning, combined with pay restraint have led to a ‘perfect storm’ of a crisis in recruitment and retention and what action we feel needs to be taken in order to help address this.

5.14 **Stage 1 report on the Health and Care (Staffing) (Scotland) Bill.** Available online at: https://digitalpublications.parliament.scot/Committees/Report/HS/2018/11/26/Stage-1-report-on-the-Health-and-Care--Staffing---Scotland--Bill It should be noted that the Scottish Parliament agreed, without division, the general principles of the Health and care (Staffing) (Scotland) Bill on 6 December 2018.

5.15 This report includes summary of stakeholder engagement activity undertaken by the Health and Sport Committee of the Scottish Parliament on the broad principles of the Health and Care (Staffing) (Scotland) Bill. The majority of witnesses raised concerns that the Bill was being introduced into a workforce context under pressure from general recruitment and retention problems nationally. These factors together with Brexit uncertainties mean that it is challenging to meet the existing requirements and staffing establishments currently set by health boards and social care providers.

5.16 **Nursing & Midwifery Council (NMC) nurse-only figures (attached to submission form)**

5.17 This spreadsheet was provided to us by the NMC at our request. It contains the latest workforce data relevant to registered nursing and excludes midwives. We have included this because midwifery is not currently on the SOL and we wanted to present the most accurate data possible. The same data which includes midwives is available on the NMC's website here: https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/

6. If you have any other information that might be useful for our call for evidence please use the space below to explain

6.1 **Our main recommendation for the UK:** Based on the evidence we have provided in this submission we recommend that RNs be kept on the SOL for future recruitment of international nurses and to support the retention of existing international nurses through indefinite leave to remain. This also means ensuring that the minimum salary threshold for highly skilled visas does not prevent international nurse recruitment. Otherwise we risk patient safety resulting from a stretched nursing workforce, tackling greater and more complex patient demand. The absence of a clear workforce plan underpinned by sufficient investment, has caused health and social care employers to shift their focus to non-EEA recruitment as the EEA supply has collapsed.

6.2 We call on the UK and devolved governments to work together to address systemic workforce shortages and develop a credible health and care workforce strategy in each country of the UK as outlined in 3.1

6.3 **Our main recommendation for England**: To begin this process in England we are calling on the Department of Health and Social Care to invest £1.2bn annually back into nursing education in England for the three-year nursing degree route. The NHS, and the wider health and care system, will not succeed in any ambitious aims without tackling the problems with supply head on.

6.4 **Our main recommendation for Scotland**: We applaud the recent announcement by the Scottish Government to increase its bursary for nursing students entering undergraduate courses.[36] The Scottish Government and the UK Government need to work constructively to ensure that Scotland is listened to about the impact that any erosion of EU nursing staff supply could have on service provision and that the MAC takes particular note of recommendations on the Scottish SOL.[37] Beyond this we recognise that the Scottish Government must continue to make policy decisions which make nursing an attractive career and challenge some of the historic issues in the sector – such as low pay.

36 Nursing in Practice, 'Scottish Government increases NHS bursary for student nurses', available at: https://www.nursinginpractice.com/article/scottish-government-increases-nhs-bursary-student-nurses (2018)

37 Audit Scotland, 'The NHS in Scotland in 2018', available at: http://www.audit-scotland.gov.uk/uploads/docs/report/2018/nr_181025_nhs_overview.pdf (2018)

6.5 **Our main recommendation for Wales**: The Welsh Government should retain the bursary for undergraduate nursing students, and the number of commission pre-registration nursing education places should continue to increase. The UK Government should also find a formal mechanism for involving the Welsh Government and relevant Welsh stakeholders in the discussions around how future immigration policy can identify and respond to regional skills shortages and economic need. Specifically, given Scotland has its own SOL, there is a rationale for Wales to have a similar process in place.

6.6 **Our main recommendation for Northern Ireland**: There is a need to tackle the high levels of nursing vacancies and escalating levels of nursing agency expenditure in Northern Ireland through effective workforce planning and closing the growing pay gaps between Northern Ireland and the other UK countries. A key obstacle to achieving this is the continued absence of devolved government in Northern Ireland which needs to be resolved as a matter of the urgency.

Royal College of Nursing
Policy and Public Affairs (UK & International)
December 2018

Renfrewshire Council

Renfrewshire Council response:

Q25. Please indicate from which of these industries are you providing evidence? (Please select all that apply).

Technical Craft Trades

Education – Primary and Secondary Teachers, Pre School (Early Years)

Home Care

Q26. If you wish, you can provide details of individual jobs titles you/your members have found hard to fill in the boxes below (maximum of 10). Please help us by matching the job titles you have provided with the closest standardised ONS job title and associated 4-digit occupation (SOC) code using the Office for National Statistics (ONS) Occupation Tool. There is also space to list the sector(s) where shortages of candidates to fill these job titles has been most acute. If providing this information, please refer to the list in question 24.

Technical Craft Trades Shortages:

Approve Electrician / Electrician (5241)

Gas Engineer (5314).

Teacher Shortages by subject area:

Primary (2315) – generally difficult to fill but denominational posts in particular are extremely difficult to recruit to

Secondary (2314) – difficult in recruiting to the following subjects:

Mathematics

English

Science (all) (Physics, Chemistry Biology)

Home Economics

Languages

Computing

Drama

Pre School):

Early Learning Child Care Officer (6121)

Home Care:

Home Carer (6145)

Q27. What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)? (Not to exceed 500 words).

Technical Craft Trades:

Competition with other organisations, incomparable pay rates with the private sector, but particularly, neighbouring Local Authorities competing for the same skills..

Teachers:

Teaching no longer attracting applicants to university, every year the intake through university reduces.

Newly qualified teachers undertaking probationary year - dropout rate this year of newly qualified teachers has been 22% in Renfrewshire (Scottish government assumption is 12.5%). In primary we have had a 18% drop out of newly qualified teachers, with secondary seeing a 23% drop out rate. The drop our rate of NQTs brings significant risk and workload for late stage recruitment despite our best efforts

Pre School):

Increase to 1140 hours free child care for 3 & 4 year olds by 2020

Home Care:

National shortage of care workers and competition from other Local Authorities, third sector and private sector providers. The service also cites real challenges in recruiting from a pool that often attracts females looking for part-time / flexible hours. For example, supermarkets offering similar flexible shifts often pay more with none of the responsibilities that the care profession demands.

Q28. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research. (Not to exceed 500 words).

Technical Craft Trades:

- Apprenticeships and adopting apprentices from other organisations.
- Consideration of requests from employees to train as adult apprentices, this would be a large investment for the service and would require some form of guarantee that employees would remain with us post qualification.
- A bank staff approach is also being explored to access skills on demand where required for all trades.

Teachers:

- Advertising as many posts on a permanent basis as possible
- Recruitment process for each new session is brought forward every year earlier than the previous year, with adverts going live as soon as the end of February (following internal processes with our own temporary staff)
- We have created a “supply pool” to cover temporary vacancies. However, we are unable to retain enough staff in this group to ensure adequate short-term cover.
- Covering classes for short term absence puts significant pressure on HTs and DHTs. We are very concerned about the long-term impact this is having on our senior leaders.
- We have engaged fully with universities and new pilot programmes for alternative routes. This has yielded very small numbers of new recruits.

Early Learning Child Care Officer (Pre School):

- Recruitment events – Early Learning Child Care Officer circa. 300 post required.
- Invest in Renfrewshire – various employability routes
- Corporate parent – looked after children
- Support worker roles – SVQ2 (supported through SVQ3)

- SVQ3 – 4 modern apprentices, further 5 in March – 9 this year. 6 next year.
- Expressions of interest from other Council employees to work in Early Years and be supported to qualify
- Seniors / Depute Head of Centres – support to gain Early Years Degree Qualification
- Term time moving to 52 weeks
- Additional Support Needs Early Years – harder to recruit, all levels.

Home Care:

- Advertising campaigns including radio campaigns, media and recurring adverts.
- Bank staff approaches.
- Flexible hours, working patterns and weekend working contracts.
- Working with local colleges to offer placements and interviews upon qualification.

Q29. Have these measures worked, if not why? (Not to exceed 500 words).

Craft Trades:

The current measures have worked, but with a limited effect on overall shortages. We continue to explore ways to attract the right skills and growing our own skills as a part of workforce planning.

Teachers:

Measures have worked, but still shortages in the areas detailed above.

Early Learning Child Care Officer (Pre School):

Measures are on going to meet 2020 live date.

Home Care:

Measures have worked, but with limited impact on shortage quantity.

Q30. Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

Craft Trades:

No

Teachers:

Yes - It is our understanding that teachers, (e.g. Maths, Science subjects) are on the shortage occupation list and eligible for Tier 2 points-based visa system.

https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-k-shortage-occupation-list

Early Learning Child Care Officer (Pre School):

No

Home Care:

No

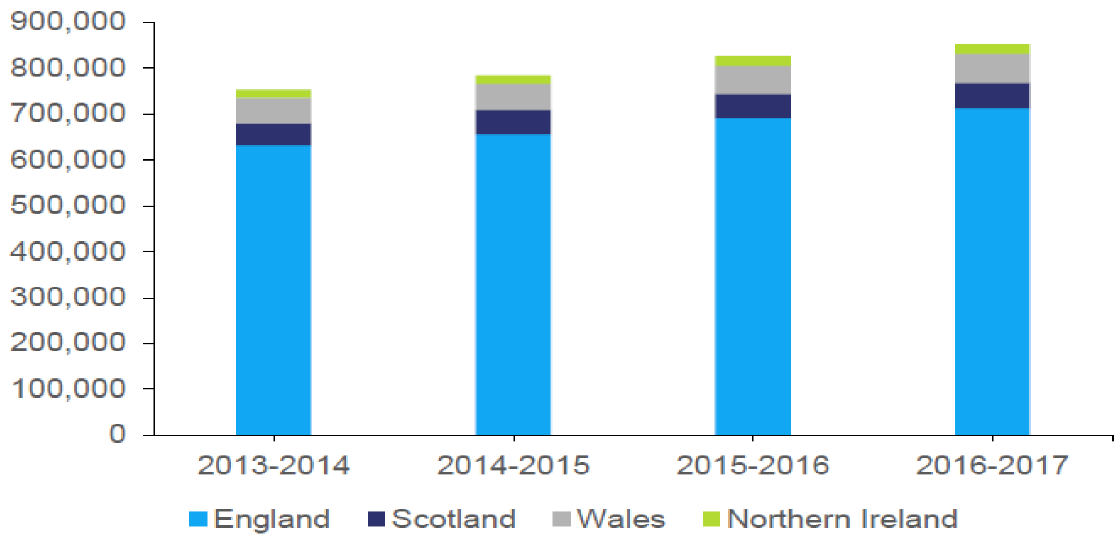
Royal College of Paediatrics and Child Health

RCPCH – supporting evidence for paediatric doctors to be included on the Shortage Occupation List

1. Workload pressures – increasing workloads

a. Paediatric emergency admissions

Between 2013/14 and 2016/17, paediatric emergency admissions[153] in England rose 12.7%, from 631500 to 711805. In Scotland, over the same period, emergency admissions rose 13.1%, from 49370 to 55862. In Wales, emergency admissions rose 17.2%, from 54627 to 64002. And in Northern Ireland, emergency admissions rose 17.8% from 17762 to 20922.



Paediatric Emergency Admissions UK. 2013/14 to 2016/17

b. Births and neonatal workload

Increased maternal age and morbidity is leading to more premature births and more urgent deliveries, leading to more neonatal admissions.

- Number of births

Using 2016 ONS projections, the number of births is expected to remain at around 660,000 births in 2020[154]

- Women are giving birth later in life:

[153] An emergency admission in hospital episode statistics (HES) is defined as an admission which is unpredictable and at short notice because of clinical need.
[154] ONS (2017b); ONS (2017c).

- the average age of mothers in England and Wales increased from 27 in 1984 to 30 in 2014;
- the number of births of mothers over 35 increased from just over 139,000 in 2011 to just under 149,000 in 2016;[155]

- **The number of birth complications is increasing** – from just over 237,000 in 2012-13, to just over 336,000 in 2016-17[156] ;

c. Safety

General and neonatal paediatrics is more and more an urgent care service requiring 24/7 medical rotas. Because of the nature of this work and the need to ensure safe care, busy night shifts should be served by experienced doctors. With shortages this is not always possible and sometimes using GP trainees and trust grade doctors to support training rotas increases the potential risk to patients, although of course many in these groups are highly skilled and competent professionals.

Further, because of shortages of specialty trainees, many paediatric and neonatal rotas are supported by Foundation Year doctors, many of whom will have relatively little experience in paediatrics. From the RCPCH Census responses, Foundation doctors represent approximately 17.5% of all occupied posts on tier 1 (junior rotas).

d. Community Child Health

Demand has increased in most aspects of CCH over the last 10 years. Increased recognition and treatment of key conditions e.g. ADHD, Autism Spectrum Disorder (ASD) and increasing numbers of children and young people (CYP) entering local authority care and being referred for child protection assessments has put pressure on services and affected access to timely care[157].

- A BACCH/RCPCH survey in 2016[158] showed:

  - In 42.5% of services CYP wait over 18 weeks for a first appointment for ASD. Referral to treatment (RTT) times of 35.5 weeks on average, breach the 18-week RTT rule.
  - The average RTT time for ADHD is 29.9 weeks also breaching the 18-week RTT rule.
  - Only 11.4% of services can always see ADHD patients for follow up appointments when they are due. 60% can do so no more than half the time, raising issues of medication safety.

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[155] ONS (2017a).
[156] 4 NHS Digital (2013); NHS Digital (2017a)
[157] Royal College of Paediatrics and Child Health. State of child health short report series: community paediatrics workforce. London: Royal College of Paediatrics and Child Health; 2017 Available at: https://www.rcpch.ac.uk/resources/state-child-health-short-report-series-community-paediatric-workforce
[158] 6 British Association for Community Child Health & Royal College of Paediatrics and Child Health. Covering All Bases UK survey of community child health services 2016: Results. London: Royal College of Paediatrics and Child Health; 2017. Available at: https://www.rcpch.ac.uk/resources/covering-all-bases-community-child-health-paediatric-workforce-guide

- Fewer than half (43%) of services can see 90% or more of newly looked after children (children in care) within the required 4 weeks, risking children failing to receive the care they need swiftly at an intensely traumatic time in their lives and breaching statutory requirements.

• NHS Digital figures show that children and young people with neurodevelopmental disorders (mostly ADHD and ASD) have the longest waits for assessments compared with others with mental health issues[159].

2. Recruitment – fall in applications for specialty training and declining fill rates.

a. Applications for paediatric specialty training

In round 1 of specialty recruitment for 2018, Paediatrics has the lowest competition ratio amongst the medical specialties. There were 585 applications for 451 ST1 posts; a ratio of 1.3:1[160]. This is close to the figures for 2017 places i.e. 580 applications for 440 posts[161]. In 2015 there were 743 applications and 800 in 2015. The number of available posts in these years was similar, so there has been a substantial decline in applications.

The number of applicants who are European Economic Area graduates declined from 97 in 2015, 43 in 2016 to 41 in 2017 (a 58% fall in 2 years.).

Looking further back in RCPCH records we find that for England only there were 679 applications for ST1 posts in 2012 when there were 357 posts available – a ratio of 1.9:1

b. Recruitment fill rates, geographical differences

The fill rate for paediatric ST1 places in the UK has been close to 80% after each of the recruitment rounds in 2017 and 2018. The fill rate is the number of posts accepted by applicants as a percentage of the number of places available. These fill rates represent a decline from 97.5% in 2015 and 94% in 2016.

There is also concern about the geographical distribution of accepted places. In 2018 for example there were particularly low fill rates in the East of England (42.1%), East Midlands (59.4%) and West Midlands (60%)

c. Falling numbers of foundation doctors moving into specialty training

[159] NHS Digital. Mental Health of Children and Young People in England 2017.   Summary of key findings. 2018. https://files.digital.nhs.uk/F6/A5706C/MHCYP%202017%20Summary.pdf
[160] 8 Health Education England. Quick Guide to Specialty Recruitment 2019. http://www.foundationprogramme.nhs.uk/sites/default/files/2018-11/Quick%20Guide%20to%20Specialty%20Recruitment%202019_0.pdf
[161] 9 https://www.rcpch.ac.uk/resources/800#past-application-numbers-and-competition-ratio

Looking at recruitment problems more generally, an analysis of foundation training by the BMA in 2017[162] found that fewer people are applying to the UK Foundation Programme – a 1.8% decline between 2013 and 2016. It also found that fewer people are applying to specialty training a 5.46% decline between 2013 and 2016.

The BMA report also shows that in 2016, just 50.4% of F2 doctors reported that they would progress directly into specialty training following completion of their Foundation Programme training. This number has fallen steadily since 2011. Although we know that many enter specialty training after their "F3" year and this data is not specialty specific, delays entering training will inevitably have an impact on the number of applications made in total.

3. Rota gaps and vacancies and their impact

a. Vacancy rates

The RCPCH Census[163] and Rota Vacancies Surveys continue to provide evidence of service gaps and their impact on the workforce. All data in this section relates to UK unless otherwise stated.

In 2017, these data show a 11.1% vacancy rate on tier 1, 14.6% on tier 2 and 7.5% on tier 3 (consultant) rotas. Vacancy rates are highest for combined general/neonatal training rotas – 14.1% on tier 1 and 17.1% on tier 2. Vacancy rates have increased since the RCPCH 2015 census which showed 6.3% vacancy rate on tier 1, 13.7% on tier 2 and 7.1% on tier 3 rotas.

The 2017 Census vacancy rates were not as high as those recorded in the RCPCH rota gaps and vacancies report of early 2017[164], when we estimated there were 23.7% gaps on tier 2. The difference in findings may be due to different samples of units responding to each survey, the timing of the surveys (the Census data relates to autumn, whereas the rota gaps survey is undertaken in winter). Comments made in the Census returns also indicate that respondents may have been unsure whether to include gaps due to out of programme activity (particularly maternity leave). Thus, vacancies may be underestimated if they were not included in some organisation's returns.

The RCPCH area officer for Wales reported that in 2018 around 30 vacancies were identified in Paediatrics & Neonatology at junior doctor level. This is from the number of posts that were put out to be filled with International Fellows as local doctors were not available.

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[162] 10 BMA. The state of pre- and post-graduate medical recruitment in England, September 2017. 2017. https://www.bma.org.uk/collective-voice/policy-and-research/education-training-and-workforce/state-of-medical-recruitment

[163] RCPCH Workforce Census 2017 https://www.rcpch.ac.uk/resources/workforce-briefing-winter-2018

[164] RCPCH. Rota Gaps and Vacancies Survey. 2017. 12 https://www.rcpch.ac.uk/sites/default/files/2018-02/paediatric_rota_gaps_and_vacancies_survey_wingsan_final.pdf

When asking for evidence from paediatric clinical directors about current shortages we received several comments, some of the more typical replies are set out here:

"At Chesterfield we have been having increasing problems with middle grade rota as in rest of the country. Ours is an integrated paediatric service with Trust providing community and acute paediatrics. At present we have 3.4 registrars down out of 9 - vacancies - 2 speciality doctors and 1 maternity and 0.4 because of LTFT"

"I cannot remember for the last 5 years at least if having a full house for junior doctors at Doncaster."

Exeter also has staffing issues within the paediatric department. We have 3 separate rotas in Exeter for junior medical staff. Neonatal Unit Tier 1: a 7-person rota staffed by a combination of ST1-2 Dr's, Trust grade SHO and ANNP's. We are currently 1.0 wte short on this rota. General Paediatrics Tier 1: Staffed by a combination of GP trainees ST-2; Paediatric Trainees ST1-2; Trust grade SHO's. We are currently short 0.6 wte short on this rota and one person unable to work nights, weekends or evenings."

In the Yorkshire deanery, the paediatric Head of School has supplied rota vacancy rates for the 3 areas of the region below which illustrate increases year to year and considerable geographic diversity.

NHS
Health Education England

Rotations – gaps without maternity and sick leave for August 18 (2017 numbers in brackets)

	West		East		South	
	Gaps		Gaps		Gaps	
Tier 1	6.5	10.3% (6.2%)	11	41% (21%)	0	0% (5.9%)
Registrar	9.5	10.3% (4.4%)	10	28.6% (10.5%)	1.5	2% (3.5%)

b. Impact

Despite these reservations, the vacancy rates found are still cause for considerable concern. The GMC National Training Survey for 2018 shows that paediatric is one of the specialties with greatest pressures e.g. approximately 48% of paediatric trainees consider intensity of work heavy or very heavy, this is only exceeded by emergency medicine and medicine and approximately 65% of paediatric trainees feel somewhat, to a high degree or a very high degree burnt out by their work, placing it 4th of 11 specialties[165].

There has also been a decline in the number of vacant posts on rotas filled by locums compared to the 2015 census. For middle grade rotas the percentage of vacancies filled by locums has decreased from 58.2% in 2015 to 42.8% in 2015 and on tier 1 the proportion fell from 56.5% to 55.6% indicating that organisations are less able to find locum cover.

Vacancy rates have been calculated for District General Hospitals (DGHs) only, i.e. excluding tertiary/training hospitals. As might be expected, this results higher vacancy rates, highlighting where shortages are most keenly felt.

[165] General Medical Council, Training environments 2018: Key findings from the national training surveys. 2018: https://www.gmc-uk.org/-/media/documents/training-environments-2018_pdf-76667101.pdf.

Estimated WTE of vacancies, vacancy rate and locum fill by rota tier and service[166]

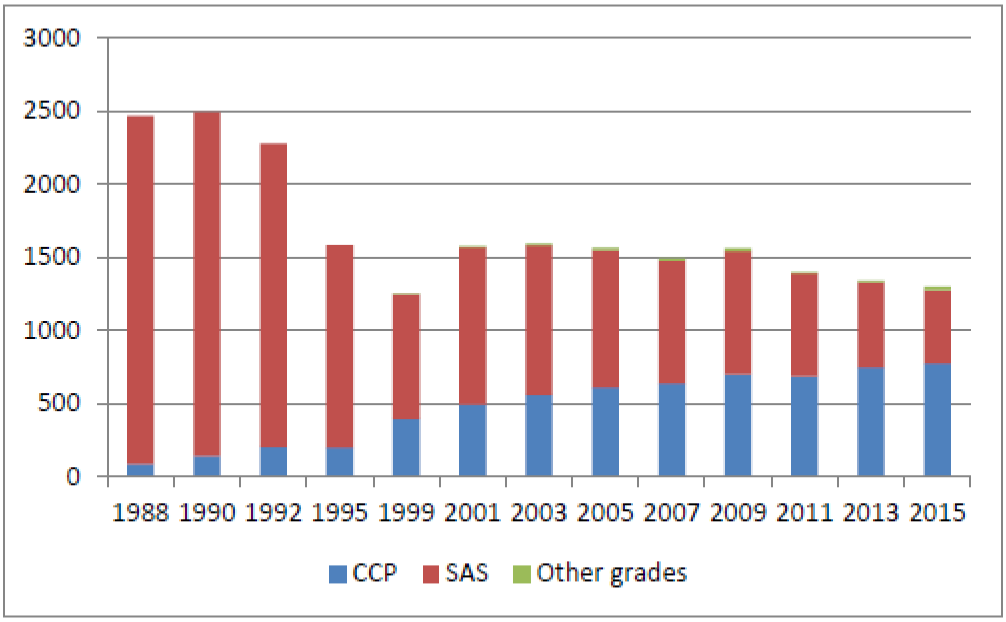
	Est. WTE of vacancies	Est. vacancy rate	Est. vacancy rate for DGHs only	% filled by locum (all)
Tier 3				
General paediatrics	33.8	8.3%	10.0%	79.6%
General/neonatal	63.8	7.7%	7.7%	58.0%
Neonatal medicine	18.1	9.9%	4.9%	66.3%
Total	**115.7**	**7.5%**	**7.8%**	**65.6%**
Tier 2				
General paediatrics	35.7	10.1%	12.1%	42.3%
General/neonatal	121.2	17.1%	17.1%	48.6%
Neonatal medicine	39.9	13.7%	14.5%	25.8%
Total	**196.8**	**14.5%**	**15.6%**	**42.8%**
Tier 1				
General paediatrics	40.0	7.7%	8.5%	59.3%
General/neonatal	101.4	14.1%	14.3%	57.7%
Neonatal medicine	40.2	10.1%	10.7%	46.7%
Total	**181.6**	**11.1%**	**11.9%**	**55.6%**

4. Community child health shortfalls

Alongside increased demand for community child health services and conditions, the number of community paediatricians in the UK has declined significantly. In 2015 (the most recent RCPCH census figs), there were 1299 WTE doctors working in community paediatrics, 265 (17%) fewer than in 10 years previously in 2005 (Fig 1).

Early analysis of RCPCH Census 2017 shows that the proportion of paediatric consultants in community child health posts in 2017 was 17.4%, a reduction from 18.5% in 2015.

[166] 14 WTE of vacancies is weighted to account for missing responses.



RCPCH census figs for career grade community paediatricians.

The RCPCH estimates that 'an increase in the order of 25% in the size of career grade (community) paediatric workforce is required to meet … demand'[167], an increase of about 77 new consultants per year for the next 5 years.

The RCPCH has also reported that only 9.6% of paediatric trainees are awarded a CCT in CCH, whereas 18.5% of existing consultants work in CCH (Table 1)[168].

Number of CCTs and consultants in general paediatrics, CCH and other subspecialties.

CCT survey 2016	**In post (%)**	**CCTs awarded (%)**
CCH	18.5	9.6
Other subspecialties	37.4	34.2
General paediatrics	42.5	56

In 2018, the number of advertisements for consultant community paediatricians was estimated to be about 150 (C Ni Bhrolchain audit 2018). Only 25 or so CCTs being awarded each year. These figures all point to a serious shortfall in the staff needed to meet demand.

5. Attrition, less than full time working and other workforce groups

a. Increases in less than full time working in the paediatric workforce

[167] Royal College of Paediatrics and Child Health. CCT and CESR Class of 2016: Where are they now? London: Royal College of Paediatrics and Child Health; 2018. Available at: https://www.rcpch.ac.uk/sites/default/files/2018-07/CCT%20class%20of%202016%20-%20full%20report.pdf
[168] Royal College of Paediatrics and Child Health. CCT and CESR Class of 2016: Where are they now? London: Royal College of Paediatrics and Child Health; 2018. Available at: https://www.rcpch.ac.uk/sites/default/files/2018-07/CCT%20class%20of%202016%20-%20full%20report.pdf

Paediatrics is one of the specialties where less than full time working is most common for doctors which has as considerable impact on the time available for both training and service.

According to GMC data[169] the headcount number of doctors in training in paediatrics and child health increased by only 2.7% between 2012 and 2018. As 37.7% of paediatric trainees are now working LTFT this represents a whole time equivalent fall of 2.5%.

The RCPCH LTFT Advisor for Wales reports

"It is very clear that there is a work force problem in Paediatrics. There are also increased numbers of LTFT trainees across all specialities in Wales. Paediatric LTFT trainees present about 10% of all LTFT trainees in Wales at present (381 in total, 36 paediatric) However, the number of new applications to train LTFT have been constantly rising since 2014. We have also more male LTFT trainees and more applications on grounds of mental health issues some of which are associated with high workload and work pressures. This is obviously very challenging to manage rotas and training needs. I am concerned that an increased LTFT workforce in Paediatrics needs to be factored in future modelling."

b. Attrition from training

It is difficult to establish accurate data about the number and percentages of leavers from the paediatric training scheme. Anecdotally, members of the College report that it is worryingly frequent.

Between 2009 and 2015, the RCPCH undertook a cohort study[170] of the first group of trainees to take part in run through training. From the response we received in 4 separate surveys, we estimated that attrition was 5% in each of the 3 years ST1-3, 4% ST4-5 and 3% ST6-8.

Further, there were 457 trainee recruits into paediatrics in 2009, and 8 years later (2017) the number of completed CCTs and CESRs was 265. This indicates that around 40% of paediatric doctors do not finish their training (equivalent to 5% per annum).

c. Other workforce groups

There has been little development of other staff groups over recent years to support rotas.

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[169] General Medical Council, The state of medical education and practice in the UK 2018. 2018: https://www.gmc-uk.org/-/media/somep-2018/version-one---0412pm/somep-book-20186.pdf?la=en&hash=624AE93A17BDC777C4EAE231020957F8E4C02F51.

[170] 18 Royal College of Paediatrics and Child Health. Modernising medical careers (MMC) cohort study. 2018-2016. https://www.rcpch.ac.uk/resources/modernising-medical-careers-mmc-cohort-study

Staff, Associate Specialist and Specialty (SAS) doctors continued to decline in every RCPCH census since 2001, with only 778, or 646 WTE reported in 2017. This represents a 3.7% decline in headcount and 3.6% in WTE since 2015. This is a smaller magnitude of decline than in previous censuses, but SAS doctor numbers are now only 51.9% of the total number of SAS doctors reported in the RCPCH Census of 2001. This partly negates much of the benefit of increases in the consultant workforce.

RCPCH is supportive of an increased skill mix where other types of appropriately trained and competent non-medical and other medical groups can support paediatric services. However, our census shows that only (60.6%) of organisations employed Advanced Nurse Practitioners (ANPs) in 2017, unchanged from 60.3% in 2015.

Only 5 of the 160 responding organisations to the RCPCH census (3.1%), all in England, employ Physician Associates; the same number as in 2015. There was a total of 7.6 WTE Physician Associates recorded in 2017, down from 9 WTE in 2015.

The proportion of GP trainees recorded as working on junior paediatric rotas has remained virtually identical between 2015-2017 at approximately 28%.

6. Failure to meet staffing standards

a. Posts on general paediatric and neonatal rotas

Facing the Future[171] states that there should be 10 whole time equivalent posts on training rotas, **Error! Reference source not found.** shows that although tier 1 rotas (equivalent to ST1-3) are on average close to meeting this standard, tier 2 rotas only have an average of 9 staff, and there are shortfalls on the neonatal only rotas. Caution must be taken with this data, as the averages are slightly skewed upward by double rotas at hospitals with large workloads (i.e. 2 trainees in service at one time).

60% of all paediatric rotas have fewer than 10 WTE; 68% on tier 2. Having fewer doctors and other staff on the rota inevitably means there is less time for trainees for teaching, research and carrying out audit and other quality improvement work. The RCPCH standard of 10 WTE is used because of analysis undertaken by the Academy of Medical Royal Colleges for how many doctors are required to protect adequate training time and comply with the Working Time Regulations.

[171] https://www.rcpch.ac.uk/resources/facing-future-standards-paediatric-care

Average WTE and proportion of rotas with less than 10 staff, by rota tier and service.

	General paediatrics	General / neonatal	Neonatal medicine	Total
Average WTE				
Other (non-standard)	-	10	7.1	8.6
Tier 1 (Junior)	10.3	10.2	8.5	9.8
Tier 2 (middle grade)	9.5	8.9	9.1	9.0
Tier 3 (consultant)	10.2	9.7	7.2	9.3
Total	**10.0**	**9.6**	**8.2**	**9.4**
Proportion of rotas with less than 10 staff				
Other (non-standard)	-	-	100.0%	50.0%
Tier 1 (Junior)	48.7%	50.7%	72.7%	55.3%
Tier 2 (middle grade)	72.0%	65.8%	71.4%	68.0%
Tier 3 (consultant)	58.1%	48.8%	90.0%	59.3%
Total	**57.9%**	**54.9%**	**78.8%**	**60.5%**

b. Other workforce groups in paediatrics and child health: Advanced Nurse Practitioners, Physician Associates and GP Trainees.

RCPCH is supportive of an increased skill mix where other types of appropriately trained and competent non-medical and other medical groups can support paediatric services. Our census shows that only (60.6%) of organisations employed Advanced Nurse Practitioners (ANPs) in 2017, unchanged from 60.3% in 2015. The RCPCH support ANPs so that they can use e-portfolio for their training at reduced membership rates. See table 6

Only 5 of the 160 responding organisations (3.1%), all in England, employ Physician Associates; the same number as in 2015. There was a total of 7.6 WTE Physician Associates recorded in 2017, down from 9 WTE in 2015.

The proportion of GP trainees recorded as working on junior paediatric rotas has remained virtually identical between 2015-2017 at approximately 28%.

As there are no comprehensive national policies to increase numbers in these non-paediatric groups, there remains and imperative to increase the medical workforce.

Units employing ANPs by country

	Count of units with ANPs	% of units with ANPs	Estimated total WTE[20]	Average WTE ANPs per unit
England	81	58.7%	378.3	3.8
Northern Ireland	5	100.0%	22.0	4.4
Scotland	9	81.8%	72.8	8.1
Wales	2	33.3%	7.0	3.0
Total	**97**	**60.6%**	**491.3**	**4.2**

As RCPCH have found in previous censuses, not all neonatal intensive care units meet the British Association of Paediatric Medicine (BAPM) standard stating that NICUs should have separate rotas. In 2017, 89.9% of NICUs had a separate tier 3 (consultant) rota, compared to 92.6% in 2015[172].

7. Lack of time for training/education/CPD/research

The GMC Training Environments Survey[173] considers trainees' perception of their training arrangements in all medical specialties.

In response to the statement "In my current post education/training opportunities are rarely lost due to gaps in the rota", only 38.8% of paediatric trainees agreed or strongly agreed. This is the second lowest of all the specialties behind Obstetrics and Gynaecology (30.8%).

The RCPCH trainees committee conducted its own survey in 2016/2017 (over 1000 responses) and found -

- Only 43.1% of trainees surveyed were hopeful about the future of paediatric training (either "strongly agreed" or "agreed").
- Only 58.6% of trainees surveyed felt that staffing levels where they worked were safe (either "strongly agreed" or "agreed").
- Approximately 25% felt they did not have acceptable access to study leave ("strongly disagreed" or "disagreed").

8. Consultant demand and supply

a. Demand

RCPCH currently estimates that the demand for paediatric consultants in the UK outstrips 2017 workforce levels by around 21%. That is, an increase of approximately 850 WTE consultants from the 2017 workforce is required to meet demand. This is to

[172] British Association of Perinatal Medicine, Service Standards for Hospitals Providing Neonatal Care. 2010,British Association of Perinatal Medicine: https://www.bapm.org/sites/default/files/files/Service_Standards%20for%20Hospitals_Final_Aug2010.pdf.
[173] British Association of Perinatal Medicine, Service Standards for Hospitals Providing Neonatal Care. 2010,British Association of Perinatal Medicine: https://www.bapm.org/sites/default/files/files/Service_Standards%20for%20Hospitals_Final_Aug2010.pdf.

ensure service standards are met and services are provided safely, particularly when coping with the increased demand for child health services. Some of the elements driving demand are:

- The growth in paediatric emergency admissions[174]. Between 2013/14 and 2016/17, emergency admissions in England rose 12.7%, from 631500 to 711805. In Scotland, over the same period, emergency admissions rose 13.1%, from 49370 to 55862. In Wales, emergency admissions rose 17.2%, from 54627 to 64002. And in Northern Ireland, emergency admissions rose 17.8% from 17762 to 20922.
- The level of admissions seen in some units mean that double rotas are increasingly needed i.e. 2 consultants or two trainee doctors on call at the same time.
- The College's 2017 Facing the Future Audit showed that only 48% of children admitted to the paediatric department with an acute medical problem are seen by a consultant paediatrician within 14 hours of admission. Our estimate therefore calculates demand in general paediatrics based on providing consultant resident cover for 12 hours per day and 7 days a week.
- NHS England data show that Paediatrics compliance with the standard for first consultant review within 14 hours is one of the lowest among medical specialties.
- Not all Neonatal Intensive Care Units (NICUs) meet the British Association of Paediatric Medicine standard stating that NICUs should have separate rotas. In 2017, 89.9% of NICUs had a separate tier 3 (consultant) rota compared to 92.6% in 2015.
- In 2017, the College and the British Association for Community Child Health (BACCH) published Covering all Bases which found that there was a need for substantial increase in the community child health medical workforce. This is necessary to meet the current and anticipated demand due to a rising number of co-morbidities, long delays in diagnosis for autism and ADHD, and growing safeguarding concerns.

b. Trainee Supply Requirements

The GMC's report, the State of Medical Education and Practice in the UK 2018[175] recognises the workforce shortages across professions working in the NHS. For the paediatric consultant workforce to reach the RCPCH's calculated demand level, increases are needed in trainee numbers to ensure greater levels of less than full time working and attrition from training are mitigated. Importantly, we need to increase the recruitment of trainees to ensure compliance with Facing the Future Standards[176] to alleviate rota shortages.
Given the current lack of growth in other workforces to support paediatric services and little expected changes in configuration of services, we estimate that there is a need to recruit approximately 600 doctors into ST1 training posts each year for

[174] An emergency admission in hospital episode statistics (HES) is defined as an admission which is unpredictable and at short notice because of clinical need.
[175] General Medical Council, The state of medical education and practice in the UK 2018. 2018: https://www.gmc-uk.org/-/media/somep-2018/version-one---0412pm/somep-book-20186.pdf?la=en&hash=624AE93A17BDC777C4EAE231020957F8E4C02F51
[176] Royal College of Paediatrics and Child Health, Facing the Future: Standards for Acute General Paediatric Services. 2015: http://www.rcpch.ac.uk/sites/default/files/page/Facing%20the%20Future%20Standards%20web.pdf.

approximately the next 5 years. And there is no supporting evidence that we have the doctors to fill the required posts currently within the UK. This estimate accounts for the growth in less than full time working, prevailing rates of out of programme activity and reflects the high level of attrition we have seen throughout the training programme.

Royal College of Physicians of Edinburgh

Migration Advisory Committee
Call for evidence: Shortage occupation list review 2018
Response from the Royal College of Physicians of Edinburgh

The Royal College of Physicians of Edinburgh (“the College”) was founded in 1681. We support and educate doctors in the hospital sector throughout the UK and the world with over 12,000 Fellows and Members in 91 countries, covering 54 medical specialties and interests.

Our UK Fellows and Members work across the NHS in the four nations, with more than 50% in the NHS in England. The College is committed to promoting the highest clinical standards and the implementation of robust, evidence-based medical practice to ensure the highest quality of care for patients.

The College is a member of the Scottish Academy of Medical Royal Colleges and Faculties and of the Federation of Royal Colleges of Physicians, who have both submitted responses to this call for evidence and whose submissions we endorse.

Workforce context:

The medical workforce across the UK faces a number of challenges and we must ensure that we continue to recruit and retain a world class workforce to deliver the best possible patient care. In this regard, it is essential that evidence-based approaches are taken to support workforce planning along with reassessment of the size and structure of the consultant workforce taking account of such changes as the rise of part-time working, extended working, and the needs of an ageing population.

There are workforce shortages across the country with rota gaps creating additional pressures in an already difficult environment. It is vital that we retain high quality training programmes and value our junior doctors to ensure that the UK remains an attractive place to train and work. The morale of the healthcare workforce must remain a priority in the short term as well as being a central part of future workforce planning. The benefits of having a valued and motivated workforce are important, as huge pressures exist in the sector, which are exacerbated by vacancies.

Census data from the Federation of Royal Colleges of Physicians shows that between 2007 and 2017 across the UK the number of consultants increased by over 70%, from 9,092 to 15,727. However, 10 years ago, 80% of advertised consultant posts were successfully filled; by 2017 that had dropped to 55%[i]. In 2017 in Scotland, over 34% of all consultant Assessment Panels were cancelled, rising to over 70% in some specialties, with the most common reason for cancellation being no applicants. The census also shows that thirty-three per cent of the current consultant workforce are predicted to reach their intended retirement age in the next decade[ii]. Medical student places need doubling now to fill this and the gap left generally by doctors leaving the profession.

While increasing the number of medical school places will assist with future workforce planning, it will not address the more immediate – and significant - challenges faced by the NHS and all those working within it. Medical training from student to consultant takes a minimum of thirteen years: in the short to medium term, international recruitment will have a vital role to play in addressing the considerable workforce shortages that exist. The College is an active participant in the Medical Training Initiative (MTI), the national scheme designed to allow a small number of doctors to enter the UK from overseas for a maximum of 24 months, so that they can benefit from training and development in NHS services before returning to their home countries. This assists the NHS in the UK in the short term, and the College strongly urges that the MTI should operate in conjunction with adding all physician posts to the Shortage Occupation List (SOL) for a defined period of time.

The College would specifically ask the MAC to consider the following recommendations:

- As proposed in the joint response of the Federation of Royal Colleges of Physicians, the MAC should consider the case for adding all physician posts to the SOL for a defined period of time, which would provide a period of stability for the NHS during a potentially turbulent time for international and EU recruitment into the NHS. We also suggest that all medical specialties should be included on the SOL due to the introduction of Shape of Training which will need time to become systemically embedded. This could then be subject to a review moving forward.
- The MAC should recognise the case that Acute Medicine and Geriatric Medicine physician posts should be added to the SOL in their own right based on the significant evidence (included in appendices and evidenced in the data from English and Welsh appointment advisory committees (AAC's) which is featured in the joint response of the Federation of Royal Colleges of Physicians) that these specialties are in national UK wide shortage.
- The MAC should consider the role it could play in making a recommendation that Junior doctor foundation year 1 and year 2 posts are added to the SOL.
- The MAC should consider the skilled roles undertaken across the health and social care professions that currently are not included on the SOL are are unlikely to meet the MACs recommendation for experienced workers salary threshold of £30,000. If these roles remain in shortage the workload for physicians increases which further exacerbates workforce shortages.

Appendix 1:

Tables 1-3 are drawn from Assessment Panel dataiii as set out in The National Health Service (Appointment of Consultants) (Scotland) Regulations 2009 (panels for the purpose of candidate assessment and selection). The full dataset is available on request.

Table 1: Specialties with the highest % of assessment panels cancelled in 2017 in Scotland

Specialty	Completed	Total Panels	Appts	% Panels cancelled	Cancelled
Acute Medicine	4	15	4	73.33%	11
Endocrinology & Diabetes Mellitus	2	6	3	66.67%	4
Geriatric Medicine	9	23	12	60.87%	14
Gastroenterology	8	16	10	50.00%	8
Palliative Medicine	1	2	2	50.00%	1
Rheumatology	6	12	7	50.00%	6
Totals	**30**	**74**	**38**	**59.46%**	**44**

Table 2: Reasons given for the cancellation of assessment panels in Scotland

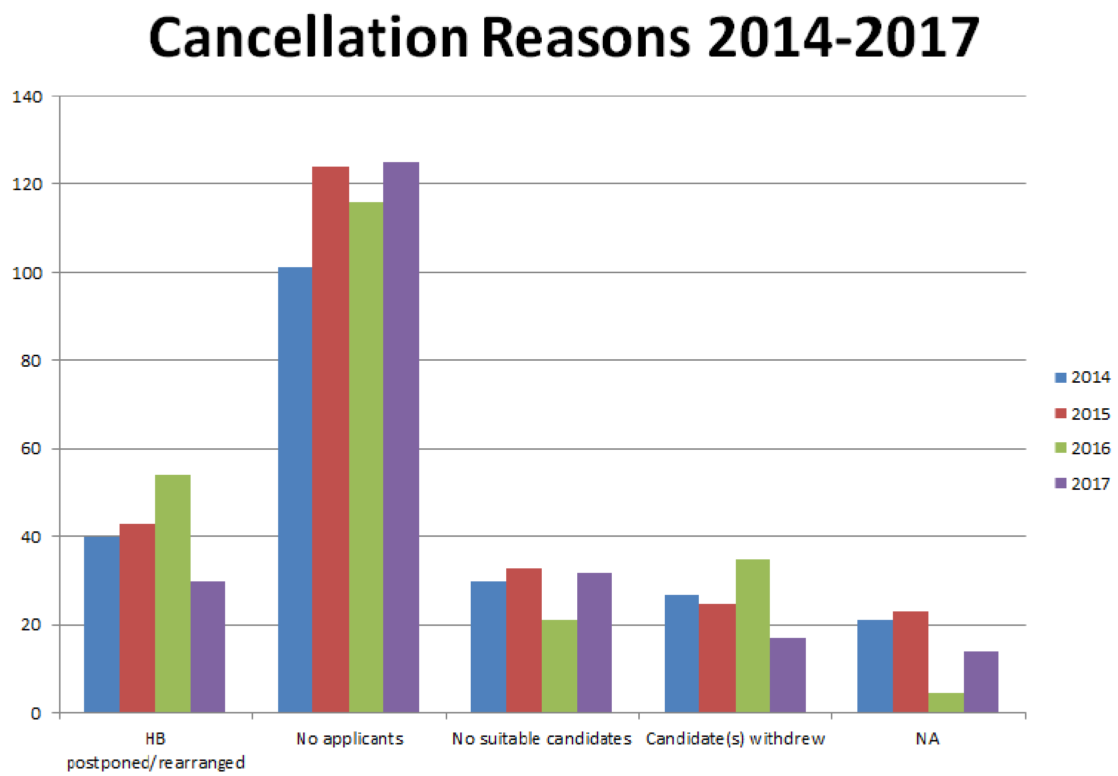


Table 3: Reasons given for the cancellation of assessment panels in Scotland by Health Board

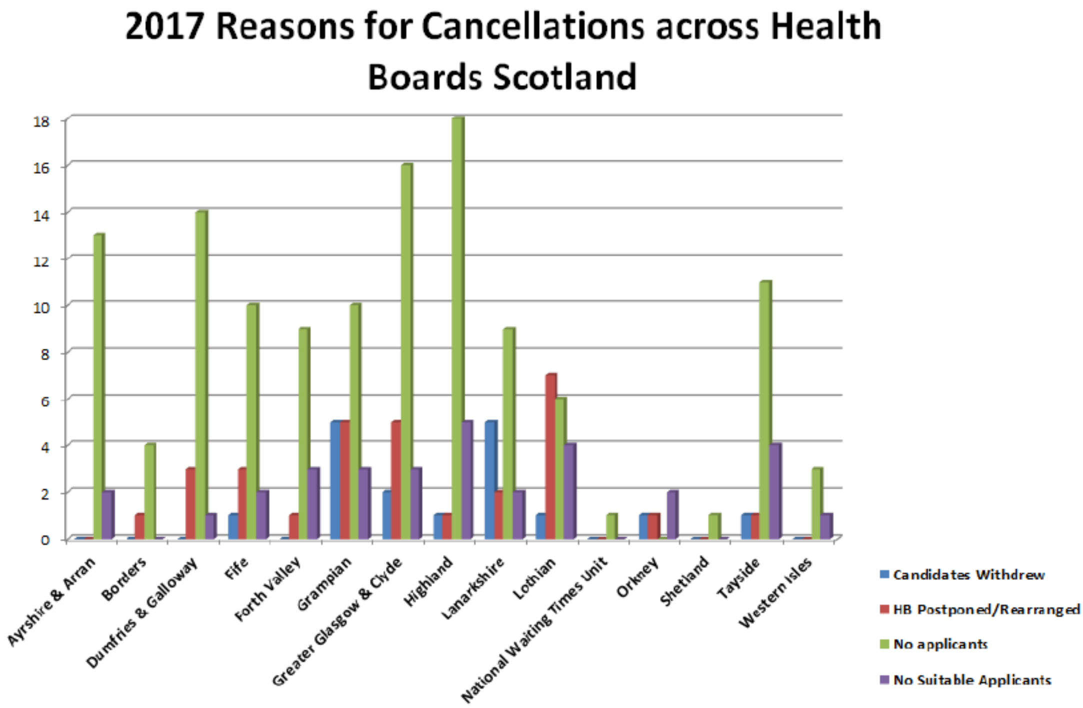


Table 4 is drawn from appointment advisory committee data (AAC's), which are legally constituted interview panels established by an employing body when appointing consultants data as set out in The National Health Service (Appointment of Consultants) Regulations. This data is sourced from the Royal College of Physicians of London.

Specialty	Total advertised posts	% of new posts	% vacant posts	Successful posts	% unsuccessful
Immunology	3	33%	0%	1	66%
Metabolic medicine	5	40%	60%	2	60%
Geriatric medicine	**1,192**	**40%**	**19%**	**480**	**60%**
Stroke medicine	**302**	**31%**	**18%**	**132**	**56%**
General internal medicine	**50**	**38%**	**8%**	**23**	**54%**
Acute internal medicine	**1,107**	**43%**	**11%**	**520**	**53%**

Appendix 2: Geriatric medicine and acute internal medicine

Tables 1-2 are drawn from Assessment Panel dataiv as set out in The National Health Service (Appointment of Consultants) (Scotland) Regulations 2009 (panels for the purpose of candidate assessment and selection). The full dataset is available on request.

Table 1: % of assessment panels cancelled in Scotland in acute medicine 2014 -2017

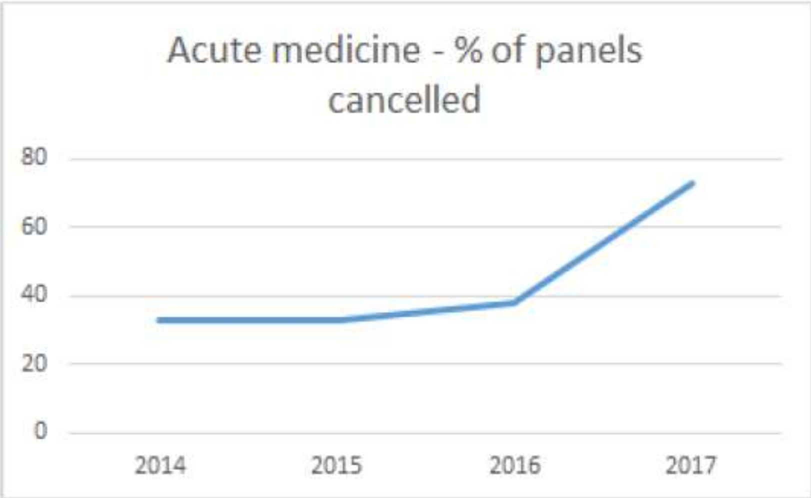
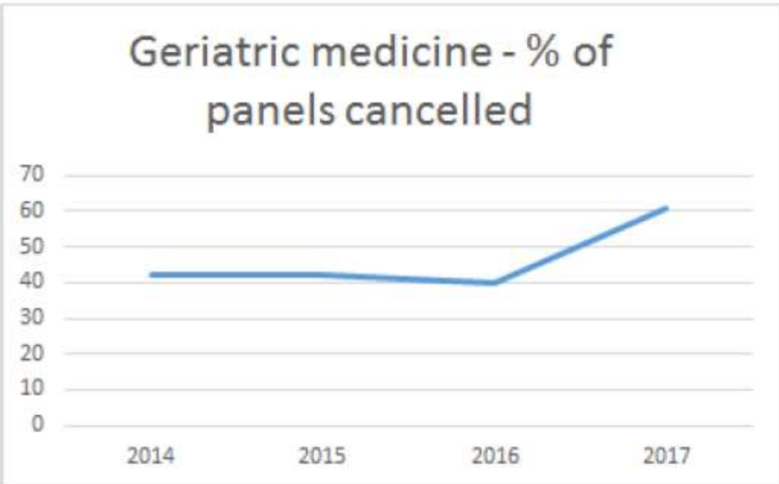


Table 2: % of assessment panels cancelled in Scotland in geriatric medicine 2014 -2017



Tables 3 -4 are drawn from appointment advisory committee data (AAC's), which are legally constituted interview panels established by an employing body when appointing consultants data as set out in The National Health Service (Appointment of Consultants) Regulations. This data is sourced from the Royal College of Physicians of London.

Table 3: Success of appointments in acute internal medicine in England, Wales and Northern Ireland 2012-2017

Table 4 Success of appointments in geriatric medicine in England, Wales and Northern Ireland 2012-2017

i. College reveals results of annual physician's survey (June 2018) https://www.rcpe.ac.uk/college/college-reveals-results-annual-physicians-survey
ii. College reveals results of annual physician's survey (June 2018) https://www.rcpe.ac.uk/college/college-reveals-results-annual-physicians-survey
iii. Assessment Panel data is sourced from the Academy of Medical Royal Colleges and Faculties in Scotland
iv. Assessment Panel data is sourced from the Academy of Medical Royal Colleges and Faculties in Scotland

Royal College of Psychiatrists

Royal College of Psychiatrists Shortage Occupation List submission 2018

Summary

The Royal College of Psychiatrists is seeking inclusion on the Shortage Occupation List (SOL) for the following medical specialists:

- Core psychiatric trainees (CT1- CT3)
- General adult psychiatrists (higher trainees, specialty doctors and consultants)
- Child and adolescent psychiatrists (higher trainees, specialty doctors and consultants)
- Old age psychiatrists (higher trainees, specialty doctors and consultants)
- Forensic psychiatrists (higher trainees, specialty doctors and consultants)
- Learning (Intellectual) Disability psychiatrists (higher trainees, specialty doctors and consultants)
- Medical psychotherapy (consultants)

Background to psychiatry recruitment in the UK

Psychiatrists from abroad are vital to the mental health workforce. Psychiatry has long been recognised as a shortage speciality, with one of the highest proportion of doctors from outside the UK of any training programme.1 Psychiatry has the highest proportion of doctors from outside the UK of any training programme. Of the 41% of psychiatrists who come from abroad to train in the UK, more than a quarter (27.7%) are from within the European Economic Area (EEA). The remainder (72.3%) are international medical graduates who qualified outside the UK in non-EU countries.

1 https://www.gmc-uk.org/-/media/about/somep-2018/version-one
2https://www.nwpgmd.nhs.uk/sites/default/files/CT1%20Fill%20Rate%20Competition%20Ratio%202015.pdf
3 Education Policy Institute, http://epi.org.uk/wp-content/uploads/2016/08/progress-and-challenges.pdf

There are ongoing challenges to fill psychiatric trainee posts. In 2015, NHS trusts were unable to fill one third of their trainee posts in the first attempt.2 Eighty-three per cent of trusts who responded said they had experienced recruitment difficulties and were forced to advertise posts multiple times to fill roles.3 In Child and Adolescent Mental Health Services (CAMHS), around half of vacancies are unfilled – a big concern when in some parts of England up to three quarters of children and young people are denied access to treatment. Overall, the final (round one re-advert) fill rates for the August intake for core psychiatric training places has decreased from 82% in August 2015 to 69% in August 2017. Of all the medical specialties in the UK, psychiatry has been and remains the hardest to fill at trainee level, and this compounds the difficulties of recruitment at senior doctor levels.

There are also geographical imbalances in the psychiatric workforce. Some areas are unable to recruit any psychiatrists in particular fields, leaving vulnerable people without support. For example, in 2015 Wessex and the East of England were unable to fill any Old Age psychiatry posts. In the North of England, the fill rate for General Adult Psychiatrists was just 38%. In 2015, there was no growth in the number of psychiatrists in the UK at all, but the number of non-UK graduates increased by 6%.

Key messages from NHS Digital data (August 2018)

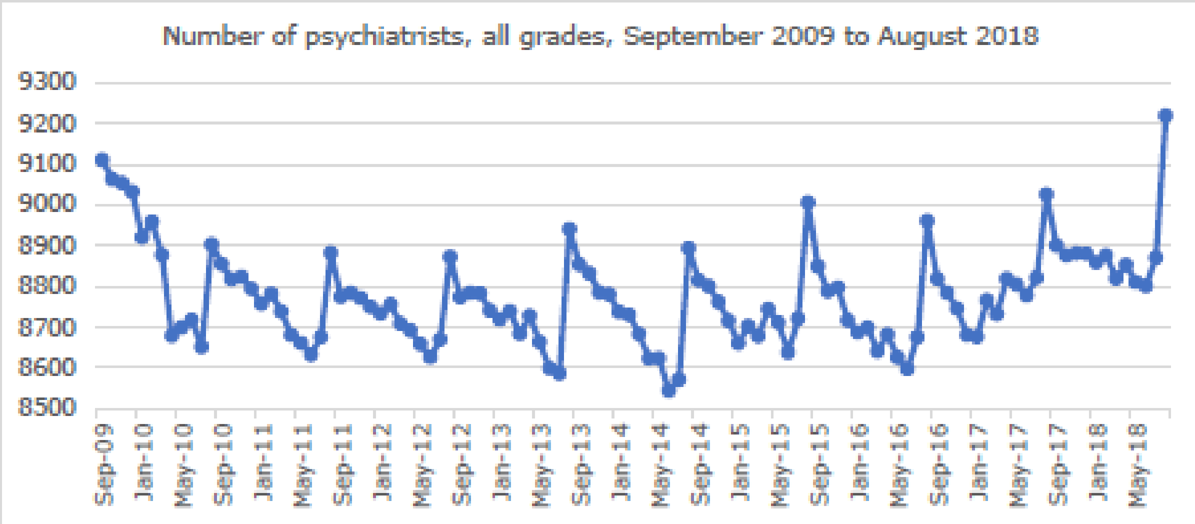
Between August 2011 and August 2018, the number of full-time equivalent (FTE) psychiatrists at all grades working for NHS organisations increased by 3.8%, whereas over the same period the number of all other doctors across Hospital and Community Health Services (HCHS) rose by 15.0%.

- The increase in the number of FTE psychiatrists at all grades compared to the same month last year is 2.14%, the best year-on-year increase since December 2017 (2.30%).
- Among FTE consultants between August 2011 and August 2018, the increases were 4.5% for psychiatry and 27.9% for all others combined. Over the past year, 57.6 FTE consultant psychiatrists have been added to the workforce, equivalent to year-on-year growth of 1.3%. The pattern is different to previous months in that there have been increases over the past year in general (2.7%), forensic (1.5%) and old age (0.5%) tempered by declines for child & adolescent (-1.6%), learning disability (-0.02%) and psychotherapy (-13.0%).
- The number of FTE child & adolescent psychiatrists has recovered to almost the same level as this time last year (a mere 0.14 posts lower) but remains 3.5% below the number for August 2014.
- More encouragingly, the number of FTE old age psychiatrists (1,114.2) has reached its highest point since February 2016 (1,124.2).
- The number of general psychiatrists is 3.1% higher than the same month in 2017 (best year-on-year rise since December), although consultant year-on-year growth for general (2.7%) was the lowest since April 2017 (2.4%).

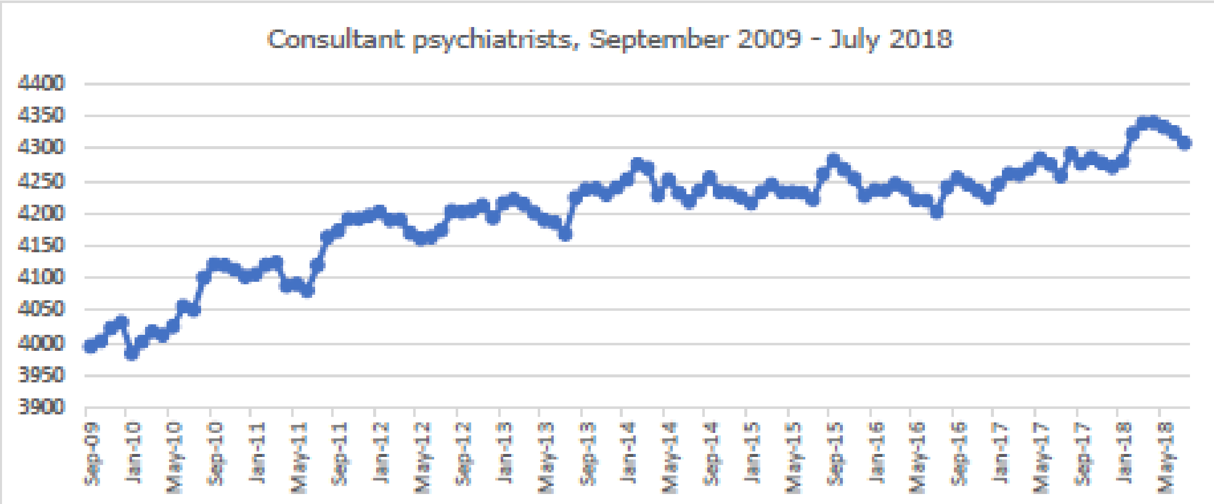
Number of psychiatrists in NHS posts (England)

	Aug-14	Aug-15	Aug-16	Aug-18	11-18 change	14-18 change	15-18 change	16-18 change
Consultant	4,235.22	4,260.89	4,240.53	4,349.84	4.47%	2.71%	2.09%	2.58%
Ass Specialist	342.73	306.79	271.92	233.58	-50.20%	-31.85%	-23.86%	-14.10%
Spec Doctor	937.7	905.99	904.1	938.92	7.72%	0.13%	3.63%	3.85%
Staff Grade	58.8	49.05	37.07	26.81	-80.80%	-54.40%	-45.34%	-27.68%
Spec Registrar	1,453.80	1,524.97	1,531.03	1,567.79	-9.45%	7.84%	2.81%	2.40%
Core Training	1,320.29	1,292.15	1,268.83	1,336.56	12.92%	1.23%	3.44%	5.34%
FY2	263.1	311.6	335.38	372.8	88.31%	41.70%	19.64%	11.16%
FY1	256.41	329.2	350.71	368.7	378.83%	43.79%	12.00%	5.13%
Hospital Prac	19.57	16.26	12.13	10.54	-72.10%	-46.18%	-35.19%	-13.15%
Other	5.61	8.79	8.78	13.17	25.91%	134.62%	49.81%	49.87%
CAMHS	1,012.90	1,007.32	969.38	977.03	-5.02%	-3.54%	-3.01%	0.79%
Forensic	572.6	587.83	567.29	580.59	-3.29%	1.39%	-1.23%	2.34%
General	5,616.25	5,731.82	5,807.33	6,026.34	9.52%	7.30%	5.14%	3.77%
Old Age	1,175.14	1,151.04	1,100.32	1,114.16	-7.17%	-5.19%	-3.20%	1.26%
Learning Dis	431.03	445.42	430.67	434.31	-3.02%	0.76%	-2.50%	0.84%
Med Psych	85.31	82.26	85.5	86.28	-15.91%	1.14%	4.88%	0.92%
Total psych workforce	8,893.23	9,005.68	8,960.48	9,218.70	**3.79%**	**3.66%**	**2.37%**	**2.88%**
All other HCHS doctors	94,638.86	96,339.22	97,719.27	103,723.25	**15.01%**	**9.60%**	**7.66%**	**6.14%**
Total psych cons	4,235.22	4,260.89	4,240.53	4,349.84	**4.47%**	**2.71%**	**2.09%**	**2.58%**
Total cons (other specs)	36,665.03	38,310.50	39,728.26	42,557.65	**27.87%**	**16.07%**	**11.09%**	**7.12%**

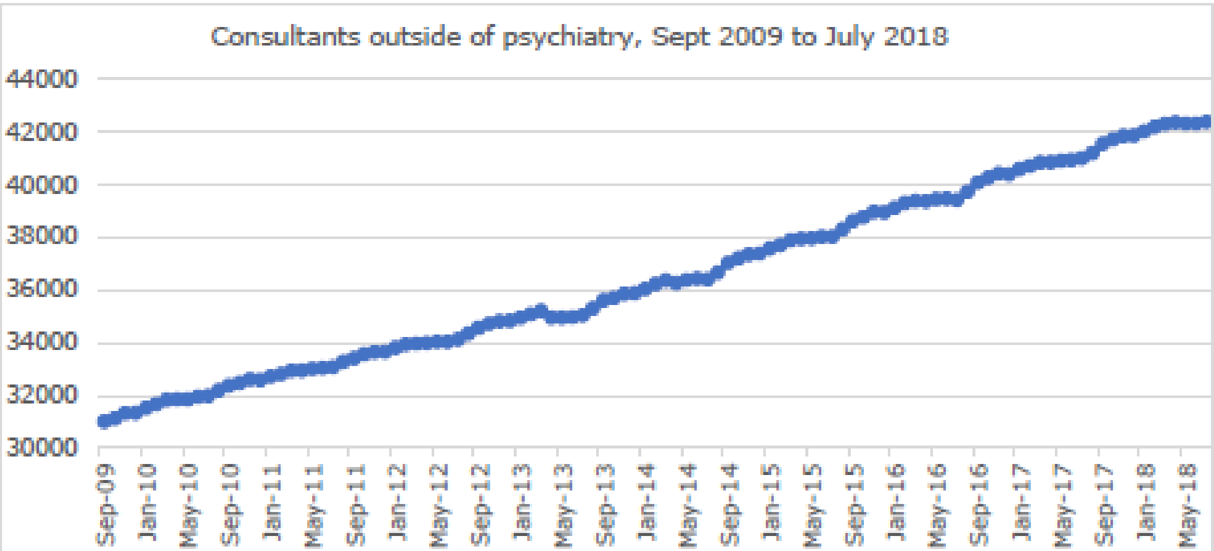
Source: NHS Digital workforce statistics, August 2018



Source: NHS Digital workforce statistics, August 2018



Source: NHS Digital workforce statistics, July 2018



Source: NHS Digital workforce statistics, July 2018

RCPsych workforce census

The Royal College of Psychiatrists conducts a workforce census every two years to look in detail at the psychiatric workforce at a senior level (excluding trainees). The College contacts the medical / human resources department of each NHS mental health trust and all the independent and private providers employing psychiatrists. The next workforce census is due to be published in October 2019 October 2019.

The last workforce census was published in November 2017 and confirms the data from NHS Digital, i.e. a plateauing of consultant and specialty doctor posts being filled. It also shows a significant increase in the number of vacant and unfilled posts across the NHS. The full census report is available on the workforce pages of the College website.

Vacancies in consultant and specialty doctors posts

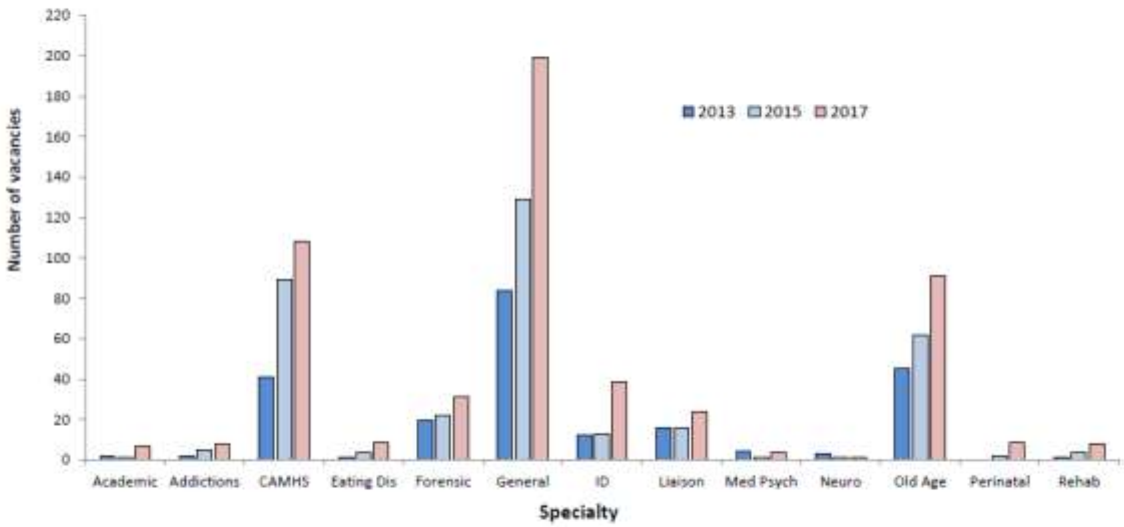
A crucial part of the RCPsych census is the gathering and tracking of data on vacancies in the psychiatric workforce The most recent census report, with information collated from NHS trusts and independent providers between April and September 2017 (with a return rate of 79%), shows a reported 776 vacancies across all the psychiatric specialties in England, Scotland, Northern Ireland and Wales.

Current psychiatry consultant and specialty doctor vacancy levels across UK	Consultant		Specialty Doctor	
	FT	PT	FT	PT
Academic	3	4	1	5
Addictions	4	4	5	1
Child & Adolescent (CAMHS)	69	39	22	16
Eating Disorders	4	5	2	2
Forensic	28	4	19	5
General	183	16	84	11
Intellectual Disability	33	6	6	5
Liaison	19	5	3	0
Medical Psychotherapy	3	1	0	0
Neuro-psychiatry	1	0	3	0
Old Age	74	17	34	12
Perinatal	8	1	0	0
Rehabilitation	5	3	0	1
TOTAL VACANCIES	**434**	**105**	**179**	**58**

Source: RCPsych workforce census, 2017

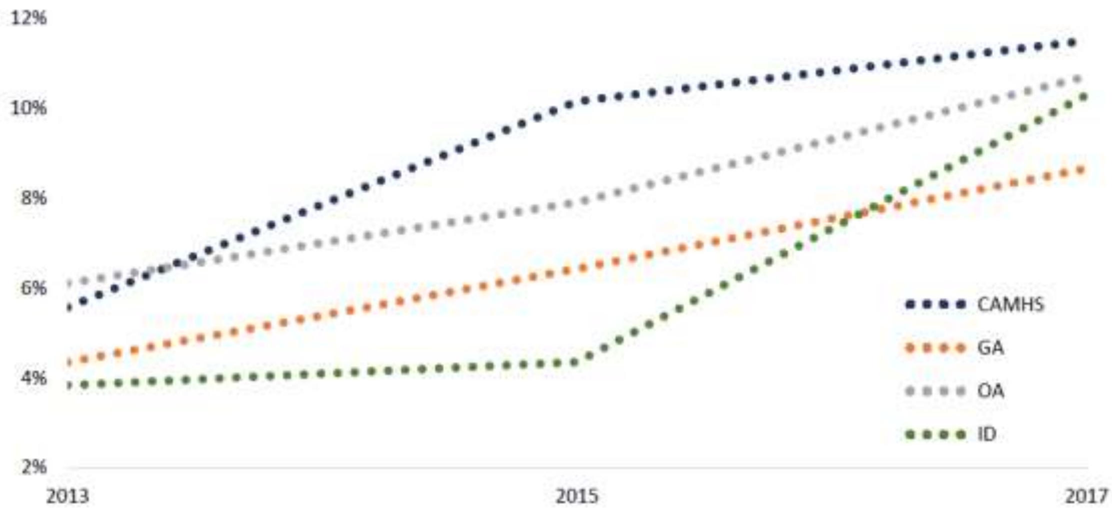
Consultant vacancies

The number of total consultant vacancies can be shown as a progression from the last three census reports in 2013 and 2017:



Source: RCPsych workforce census, 2017

The census also identifies the proportion of vacant consultant posts reported by responding trusts as a percentage of their consultant workforce over a period of time:



Source: RCPsych workforce census, 2017

Key messages on overseas staffing (data from NHS Digital)

- Only 53.9% of all NHS psychiatrists working in Hospital and Community Services (with known nationalities) and 50.6% of consultant psychiatrists as of June 2017 are UK nationals. This compares to 64.2% and 62.5% respectively for all other medical professionals in HCHS.
- In every English region, the proportion of UK nationals is lower among consultant psychiatrists than other medical professions in HCHS.
- Five English regions are currently dependent on a majority immigrant workforce to fill their consultant psychiatrist workforce. This is the case for four regions in relation to posts at all grades.
- At consultant level, the proportion of UK nationals ranged from 35.5% in East of England to 64.0% in the South West.
- 38.3% of consultant posts in June were filled by non-EEA nationals, with the proportions ranging from 25.5% in the South West to 52.3% in West Midlands.
- In child and adolescent psychiatry there is a very similar situation at all grades and consultant level. UK nationals comprised 57.44% of all posts (excluding unknown nationalities) and 57.35% of consultant posts. This was the specialty with the smallest gap.
- At consultant level, forensic (31.0%) and psychotherapy (27.7%) are the specialties with the smallest proportions of immigrant workforce. By contrast, general adult, old age and learning disability all have a majority of non-UK nationals in consultant roles, with non-EEA nationals all making up in excess of 40% of that group of the workforce (40.5%, 43.9% and 46.0% respectively).
- As a proportion, EEA nationals are most frequently found in general psychiatry at consultant level (12.2%) and within child and adolescent psychiatry at all grades (12.1%).

Breakdown of psychiatric workforce

Total psychiatrists, all grades, known Country of Qualification (COQ), June 2018	UK	EEA	non-EEA	Total
East Midlands	48.86%	6.93%	44.22%	660
East of England	38.09%	14.80%	47.11%	747
Yorkshire and the Humber	58.72%	6.29%	34.99%	664
Wessex	62.45%	9.36%	28.19%	347
Thames Valley	55.66%	9.96%	34.38%	324
North West London	51.32%	13.97%	34.72%	526
South London	64.77%	13.26%	21.98%	809
North, Central and East London	54.86%	15.00%	30.14%	929
Kent, Surrey and Sussex	47.35%	10.92%	41.73%	643
North East	56.45%	9.65%	33.90%	614
North West	55.14%	6.90%	37.95%	1,050
West Midlands	48.20%	6.50%	45.30%	881
South West	68.61%	10.56%	20.83%	593
ENGLAND	**53.87%**	**10.30%**	**35.84%**	**8,787**

Source: NHS Digital workforce statistics, June 2018

All consultant psychiatrists, known Country of Qualification (COQ), June 2018	UK	EEA	non-EEA	Total
East Midlands	41.85%	6.51%	51.64%	337
East of England	35.11%	16.31%	48.58%	352
Yorkshire and the Humber	54.78%	6.00%	39.22%	311
Wessex	57.70%	8.17%	34.12%	180
Thames Valley	53.49%	12.08%	34.43%	184
North West London	47.92%	17.00%	35.08%	261
South London	53.72%	19.75%	26.53%	359
North, Central and East London	52.26%	17.51%	30.23%	459
Kent, Surrey and Sussex	41.79%	14.53%	43.68%	299
North East	54.45%	8.69%	36.85%	323
North West	51.56%	5.20%	43.25%	529
West Midlands	39.22%	6.47%	54.32%	404
South West	61.09%	11.39%	27.52%	323
ENGLAND	**49.16%**	**11.40%**	**39.44%**	**4,321**

Source: NHS Digital workforce statistics, June 2018

Psychiatric specialties proposed for consideration for inclusion on the Shortage Occupation List

Core psychiatry trainees (CT1-CT3)

Psychiatry trainees meet the MAC definition of an occupation skilled to at least NQF level 6. According to NHS Employers Pay and Conditions Circular (M&D) 1/2017, specialty registrars (core trainees) earn between £36,461 and £46,208, and so can be supported by the Tier 2 route.

Evidence of a national shortage of core psychiatric trainees

Recruitment into core psychiatry training has been challenging for a number of years. Figures from Health Education North West, who manage national recruitment into psychiatry training places, show a declining fill rate in core psychiatric training from 82% in 2015 to 69% in 2017 and 74% in 2018. In 2017, psychiatry achieved the lowest fill rate of all the medical specialties. Combined with the decreasing numbers of trainees moving into specialty training after completion of Foundation Year 2 (down from 71.3% in 2011 to 50.4% in 2016)4, this presents an extremely challenging environment.

4UKFPO Career Destinations Report 2016

Specialty	Posts	Total Accepts	Fill Rate
Child and Adolescent Psychiatry ST1	17	16	94.12
Child and Adolescent Psychiatry ST4	115	55	47.83
Core Psychiatry Training CT1	660	489	74.09
Forensic Psychiatry ST4	50	37	74.00
Forensic Psychiatry and Child and Adolescent Psychiatry ST4	7	2	28.57
Forensic Psychiatry and Medical Psychotherapy ST4	1	1	100.00
General Psychiatry ST4	261	145	55.56
General Psychiatry & Forensic Psychiatry ST4	9	5	55.56
General Psychiatry and Medical Psychotherapy ST4	12	12	100.00
General Psychiatry and Old Age Psychiatry ST4	75	27	36.00
Medical Psychotherapy ST4	4	3	75.00
Old Age Psychiatry ST4	79	31	39.24
Psychiatry of Learning Disability ST4	55	12	21.82

Source: Health Education England, December 2018

Psychiatry National Recruitment

2017 CT1 Core Psychiatry Training - August 2017 Start Dates

HEE Region	Round 1					Round 1 Re-advert					Round 1 & Re-advert - Cumulative					
	Number of vacancies	Number of applications	Number of posts filled	Competition Ratio	Fill Rate (%)	Number of vacancies	Number of applications	Number of posts filled	Competition Ratio	Fill Rate (%)	Overall number of vacancies*	Readvertised posts	Overall number of applications	Overall number of posts filled	Overall fill rate %	Overall competition ratio
East Midlands	24	35	15	1.5	63	9	V	2	V	22	24	9	V	17	71	\
East of England	45	24	10	0.5	22	35	V	6	V	17	45	35	V	16	36	\
Kent, Surrey & Sussex	20	13	7	0.7	35	12	V	6	V	50	19	12	V	13	68	\
London	99	203	97	2.1	98	4	V	4	V	100	101	2	V	101	100	\
North East	28	19	6	0.7	21	22	V	1	V	5	28	22	V	7	25	\
North West	61	61	21	1.0	34	31	V	8	V	26	52	31	V	29	56	\
South West	29	36	23	1.2	79	6	V	1	V	17	29	6	V	24	83	\
Thames Valley	15	20	13	1.3	87	7	V	2	V	29	20	2	V	15	75	\
Wessex	13	24	13	1.8	100	0	V	0	V	0	13	0	V	13	100	\
West Midlands	28	39	16	1.4	57	12	V	4	V	33	28	12	V	20	71	\
Yorkshire and the Humber	57	39	18	0.7	32	39	V	7	V	18	57	39	V	25	44	\
Scotland	58	70	47	1.2	81	10	V	4	V	40	57	10	V	51	89	\
Wales	18	9	4	0.5	22	14	V	2	V	14	18	14	V	6	33	\
Totals	495	592	290	1.2	59	201	234	47	1.2	23	491	194	826	337	69	1.7

* Cumulative vacancies is a count of Round 1 Accepted plus Declared Round 1 Re-Advert Places

Psychiatry National Recruitment

2016 CT1 Outcomes - August 2016 start dates

LETB	Round 1					Round 1 Re-adverts					Rounds 1 & Re-adverts					
	Number of vacancies	Number of applications	Number of posts filled	Competition Ratio	Fill Rate (%)	Number of vacancies	Number of applications	Number of posts filled	Competition Ratio	Fill Rate (%)	Overall number of vacancies	Readvertised posts	Overall number of applications	Overall number of posts filled	Overall fill rate %	Overall competition ratio
East Midlands	23	34	11	1.5	48	13	V	4	V	31	24	12	V	15	63	V
East of England	43	41	22	1.0	51	20	V	11	V	55	43	20	V	33	77	V
Kent, Surrey & Sussex	12	25	10	2.1	83	2	V	2	V	100	12	2	V	12	100	V
London	118	220	99	1.9	84	19	V	19	V	100	118	19	V	118	100	V
North West	49	76	37	1.6	76	17	V	7	V	41	55	11	V	44	80	V
South West	30	42	24	1.4	80	6	V	2	V	33	31	6	V	26	84	V
Thames Valley	14	23	13	1.6	93	0	V	0	V	0	14	0	V	13	93	V
Wessex	15	14	7	0.9	47	8	V	4	V	50	15	8	V	11	73	V
West Midlands	39	52	19	1.3	49	10	V	10	V	100	39	10	V	29	74	V
Scotland	59	71	41	1.2	69	18	V	6	V	33	59	18	V	47	80	V
Wales	21	23	12	1.1	57	9	V	5	V	56	21	9	V	17	81	V
Yorkshire & Humber	54	44	25	0.8	46	19	V	6	V	32	54	19	V	31	57	V
North East	20	25	11	1.3	55	9	V	6	V	67	20	9	V	17	85	V
Totals	497	695	331	1.4	66.6	150	234	82	1.6	54.7	505	143	930	413	81.8	1.8

Psychiatry National Recruitment

2015 CT1 Outcomes - August 2015 start dates

Deanery	Round 1					Round 1 Re-adverts					Rounds 1 & Re-adverts					
	Number of vacancies	Number of applications	Number of posts filled	Competition Ratio	Fill Rate (%)	Number of vacancies	Number of applications	Number of posts filled	Competition Ratio	Fill Rate (%)	Overall number of vacancies	Readvertised posts	Overall number of applications	Overall number of posts filled	Overall fill rate %	Overall competition ratio
Defence	2	2	2	1.0	100	0	0	0	n/a	n/a	2	0	2	2	100	1.0
East Midland (N&S)	22	32	16	1.5	73	6	\	1	n/a	17	22	6	\	17	77	\
East of England	30	35	18	1.2	60	15	\	5	n/a	33	30	14	\	23	77	\
Kent, Surrey & Sussex	16	26	13	1.6	81	3	\	3	n/a	100	16	1	\	16	100	\
London	96	240	93	2.5	97	3	\	3	n/a	100	96	3	\	96	100	\
Mersey	8	22	8	2.8	100	1	\	1	n/a	100	8	0	\	9	113	\
North Western	29	61	20	2.1	69%	9	\	6	n/a	67	29	9	\	26	90	\
South West Peninsula	10	5	2	0.5	20	5	\	2	n/a	40	10	5	\	4	40	\
South West Severn	17	32	17	1.9	100	0	\	0	n/a	n/a	17	0	\	17	100	\
Thames Valley	19	22	11	1.2	58	6	\	5	n/a	83	19	6	\	16	84	\
Wessex	14	12	5	0.9	36	7	\	1	n/a	14	14	7	\	6	43	\
West Midlands	36	46	19	1.3	53	14	\	10	n/a	71	36	14	\	29	81	\
Scotland	54	64	42	1.2	78	11	\	8	n/a	73	54	11	\	50	93	\
Wales	21	18	9	0.9	43	13	\	5	n/a	38	21	13	\	14	67	\
Yorkshire & Humber	49	46	22	0.9	45	22	\	11	n/a	50	49	21	\	33	67	\
North East	35	18	10	0.5	29	25	\	6	n/a	24	35	25	\	16	46	\
Totals	458	681	307	1.5	65.9	140	206	67		48.9	458	135	887	374	82.0	1.9

Source: Health Education England North West, 2017

Conclusion

Given these indicators, the Royal College of Psychiatrists seeks the inclusion on the SOL of:

- Psychiatry core trainees (CT1- CT3)

General Psychiatry

Is there a shortage within your specialty and if yes, please provide evidence to support this, if available?

Recruitment to General Adult Psychiatry (GAP) training posts have been falling since 2012. The fill rate in GAP ST4 posts fell from 103% in 2012 to 57% in 2107. (Source: North West Deanery https://bit.ly/2PYpeSa)

The vacancy rate for GA Consultants has increased from just over 4% in 2013 to almost 9% in 2017 (Source: Workforce Census, RCPsych, 2013 & 2017).

This is reflective of problems in psychiatry generally:

- Psychiatry is the only one of the large specialities not to be increasing in workforce size since 2012 (Source: The State of Medical Education and Practice in the UK, GMC, 2018)
- The number of psychiatry specialists on the medical register is decreasing (Source: The State of Medical Education and Practice in the UK, GMC, 2018)
- There has been a reduction in the number of trainees opting for psychiatry of almost 12%. (Source: The State of Medical Education and Practice in the UK, GMC, 2018)

The number of applications for core training fell from 2013. CT1 fill rate declined from 91% in 2013 to 69% 2017 (Source: North West Deanery https://bit.ly/2PYpeSa)

The Royal College of Psychiatrists workforce census reports show a significant rise in the number of specialty doctor vacancies in general psychiatry, from 79 posts in 2015 to 95 posts in 2017 (a 13.6% vacancy rate), along with a high degree of dependence on the use of locum posts. This would strongly suggest that there are retention issues in general psychiatry.

General psychiatry specialty doctor vacancies by region	Vacancy numbers
Eastern	11
London	10
North West	6
Northern & Yorkshire	15
South East	14
South West	6
Trent	9
West Midlands	19
Northern Ireland	1
Scotland	1
Wales	1
Independent & private providers	2
TOTAL	**95**

RCPsych census 2017

What impacts are these shortages causing?

The State of Medical Education and Practice in the UK (GMC, 2018) reported that the pressure and heavy workloads doctors are experiencing are presenting risks to standards in patient safety and slips in the quality of care whilst opportunities to offer continuity of care have decreased. Similar concerns were expressed by General Adult psychiatrists responding to the Faculty's acute care survey in 2017 (soon to be published):

52% of respondents reported that there had been significant changes to services – including crisis, inpatient and community – in the last two years. A key theme was the restriction and reduction of services due to funding cuts. This included a reduction in posts at all levels and reduction of beds or closure of wards, and the de-commissioning of services such as street triage, rehab, and assertive outreach. Funding cuts had also led to consultant cover being stretched increasingly thinly over a number of teams or services, for example, one consultant covering both inpatient and Home Treatment Teams. In addition, services had been merged in order to achieve efficiency savings, such as the merging of Home Treatment and assessment teams, or Community Mental Health Teams and recovery teams.

The knock-on effects of such reductions in capacity included greater strain on remaining services, including more out of area placements, a lack of available beds for crisis admissions, delays in service delivery including severe delays in MHA assessments, and a greater focus on episodic care and short-term intervention, even for chronically ill patients. There was reported to be greater strain on Home Treatment Teams and Community Mental Health Teams who were left managing extremely unwell patients in need of acute care or rehabilitation services which were unavailable. Further, community services had tightened their criteria of which patients they would work with in order to attempt to combat lengthy waiting lists.

The overall result was considered to be poorer patient care, including greater use of tranquilising drugs to manage the behaviour of patients who were discharged while still ill, and higher readmission rates. The squeeze on resources was also reported to have had negative impacts on staff morale, leading to increased sickness leave, early retirements and resignations, with staff who left their posts not being replaced. This, in turn, was felt to have contributed to an overall downgrading in the experience and seniority of clinicians, which lead to poorer quality assessments and treatment, and greater inefficiency. High use of poorer-quality locums in place of permanent clinician staff was considered to have led to a lack of appropriate leadership and authority of consultant psychiatrists. Compounding the perceived depletion of resources was a reported divergence of resources from core services (acute/community) to specialist care teams, such as perinatal.

The demographic changes identified in the College document 'NHS Priorities and Reform in Developing A Long-Term Plan and Multi-Year Funding Settlement for England' suggest that these pressures will only get worse unless action is taken to address workforce issues.

What do you think are the main reasons for shortages and or wider shortages in the profession?

Overall the reasons for the shortage are that we don't train enough doctors in the UK, not enough doctors choose psychiatry, and doctors' approach to their careers has changed in recent years.

Factors which determine the shortage in general adult psychiatry:

- Recruitment in core training from foundation doctors has declined steadily over the years, both as a proportion of those entering specialist training and as an absolute number of doctors delay or divert from entering specialist training.
- Migration from outside EU into medical training was stopped in 2008 and the number of IMGs coming for clinical attachments and PLAB dried up completely a few years ago. Migration from EU doctors is very unlikely to compensate for that in training grades as there is no need to do higher training in the UK as EU specialist qualification is automatically recognised here.
- Popularity of general adult as a psychiatric specialty. This was a big problem in the early 2000s (pre-new ways of working) and there was a clear shift to core trainees choosing old age or CAMHS. This is not the case now and if there is a risk it will be the drift of general adult higher trainees to more specialist jobs like perinatal, eating disorders and liaison as these areas expand.
- Increased retirements as the final cohort of psychiatrists who have MHO status reach 55 years and are financially penalised if they don't retire (this applies to all specialties of psychiatry)

Conclusion

Given these indicators, the Royal College of Psychiatrists seeks the inclusion on the SOL of:

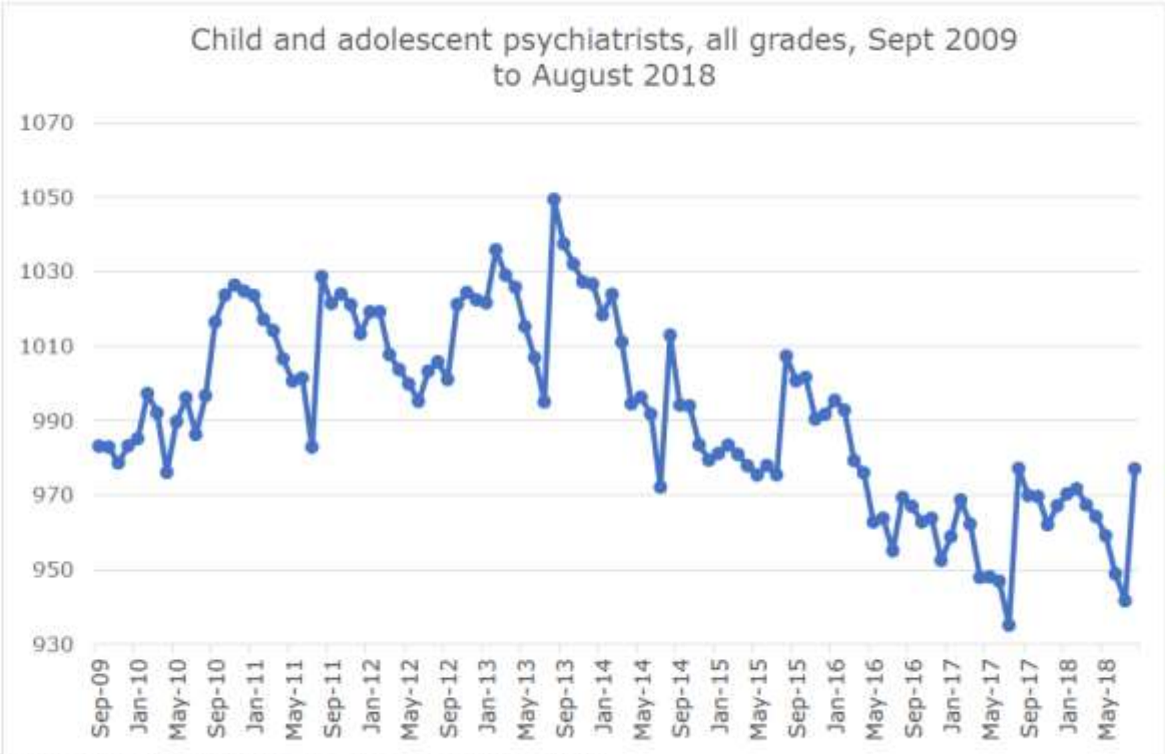
- General psychiatry Higher Trainees (ST4-ST6)
- General psychiatry Specialty Doctors
- General psychiatry Consultants

Child and Adolescent (CAMHS) Psychiatry

Is there a shortage within your specialty and if yes, please provide evidence to support this, if available?

From a Consultant perspective, there has been 942 Child Psychiatrists in post in 2018 (NHS Workforce), a decline of 3.6% from 2015. In 2017, RCPsych Census of Workforce (UK) - 108 Consultants posts are vacant and in addition a further 46 are filled by locums. Comparing this to 2013 when there were only 40 vacant Consultant posts highlighting a significant difference. This would strongly suggest that there are retention issues in CAMHS psychiatry.

RCPsych estimates that almost 500 more Child Psychiatrists are needed to meet the needs of the UK's young people. NHS Digital shows a decrease in the CAMHS psychiatric workforce across all grades from 983 in 2009, reaching a peak of 1049 however there has been a negative trend since then:



Source: NHS Digital workforce statistics, August 2018

A concern is also the number of trainees, in 2018 only 48% of Child Psychiatry trainee positions were filled in England. Also, in Wales no trainee posts were filled in August 2017.

There is ongoing increased demand that also needs to be considered. Looking at the statistics (MHCYP in England Survey (NHS Digital, Nov 2018)):

- One in eight (12.8%) 5 to 19 year olds had at least one mental disorder. One in eighteen (5.5%) 2-4 year olds had at least on mental disorder
- Prevalence of mental disorder in 5 to 15 year olds; rising from 9.7% in 1999 and 10.1% in 2004, to 11.2% in 2017

- Emotional disorders have become more common in five to 15 year-olds – going from 4.3% in 1999 and 3.9% in 2004 to 5.8% in 2017
- Nearly one in four (23.9%) 17 to 19 year old girls had a mental disorder
- 15.4% of 17 to 19 year olds reported having ever self-harmed or attempted suicide
- Rates of self-harm and attempted suicide in 17 to 19 year olds were five times higher in those with a mental disorder (46.8%) than in those without (9.0%)
- One in six (16.4%) children with a mental health condition was taking psychotropic medication (mostly prescribed by Child and Adolescent Psychiatrist)
- Young people with a mental disorder (41.5%) were more than twice as likely as those without a disorder (18.1%) to have been cyberbullied in the past year
- Between 2010/11 and 2015/16, the number of children presenting at A&E with a mental health problem rose by 136% from 9,328 in 2010/11 to 21,989 in 2015/16.

Where in the UK is the shortage?

Shortages are evident throughout the country, in the Northern & Yorkshire region, Trent and London.

CAMHS vacancies (all grades) by regions (RCPsych census 2017)	UK
Eastern	6
London	12
North West	8
Northern & Yorkshire	16
South East	9
South West	10
Trent	16
West Midlands	9
Northern Ireland	1
Scotland	8
Wales	6
Independent & private providers	7
TOTAL	**108**

Source: RCPsych workforce census, 2017

Child and adolescent psychiatrists, country of qualification, all grades	UK	EEA	non-EEA	Total
East Midlands	32.39%	11.61%	56.00%	56
East of England	43.30%	16.49%	40.22%	65
Yorkshire and the Humber	62.44%	8.50%	29.06%	54
Wessex	56.12%	14.00%	29.88%	32
Thames Valley	59.16%	11.98%	28.86%	54
North West London	51.71%	14.93%	33.36%	66
South London	62.25%	19.90%	17.85%	117
North, Central and East London	57.74%	15.94%	26.32%	138
Kent, Surrey and Sussex	61.20%	14.09%	24.70%	45
North East	61.12%	9.72%	29.16%	88
North West	63.68%	9.42%	26.90%	104
West Midlands	46.58%	4.90%	48.52%	86
South West	84.58%	1.88%	13.55%	44
ENGLAND	**57.04%**	**12.40%**	**30.56%**	**949**

Source: NHS Digital workforce statistics, June 2018

What impacts are these shortages causing?

CQC, Review of Children and young people's mental health services – Inspection report analysis, Oct 2017 and Education Policy Institute, Access and Waiting times in CAMHS, Sept 2017) highlighted there can be up to an 18-month delay in mental health treatment. Delayed access and treatment lead to poorer outcomes in mental health, educational attainment and prognosis.
Other impacts include:

- Cost to society, for example, Conduct Disorder use of Educational, Justice and Social Services (Dunedin Studies, New Zealand)
- Reduced input to areas in which early intervention leads to better long-term outcomes, for example, Preschool Autism Communication Trial (Green et al, Lancet 2016)
- Vicious circle of stress impact on the profession leading to less recruitment and retention.
- Impact on System - Reduced input to the multidisciplinary team (MDT) and trainees as an educator and supervisor
- Reduced effective impact on outcomes for children as time of existing child psychiatrists are completing tasks that are bettered completed by the MDT

What do you think are the main reasons for shortages and or wider shortages in the profession?

- Until recently, media focus on other specialist areas such as cancer, heart disease, stroke, dementia
- No Medium/Long Term planning as training a Child Psychiatrists takes a minimum of 12 years
- Lack of opportunities to experience and train
- Medical school (less exposure to CAP)
- Limited in curricula
- General deficit of doctors
- Professionally fulfilling and satisfying but emotionally demanding career
- Very few CAPs in infant mental health (see David Foreman BMJ open) despite the recent prevalence survey findings that 1 in 18 toddlers have a MH disorder
- Trust cuts in other staff leading to CAPs taking on responsibilities such as admin tasks and care-coordination which should be fulfilled by allied professionals
- High levels of risk with adolescents however in recent years reduction in services leading to unacceptable holding of high levels of risk with reduced community support (see our faculty's tier 4 report), combined with lack of crisis support, beds, and alternatives to admission – stressful, off-putting to others considering CAP, and a key driver for early retirement
- Unacceptably high rates of on call in some areas for consultants with lack of junior/MDT support
- Reduction of Supported Programme Activity (SPA) time in many trusts
- Cross-covering for colleagues/unfilled posts due to staff shortages
- Early retirement also driven to recent changes to pensions tax – financially not viable so consultants choosing either to reduce time to avoid charges or retire early
- CAP not on shortage speciality list

Please explain what measures have been taken to reduce shortages in the specialty.

Recruitment:

- Social Media Campaigns – for example ‘Choose Psychiatry
- Medical Schools
- Regional Psychsoc events
- Initiatives to curricula into ensure parity of esteem.
- 6th Form initiatives especially those interested in psychology
- Taster days available to all trainee doctors
- Open days – Local Deaneries and Trusts

Retention:

- Exploration of flexible training pathways and flexible but robust entry into the specialty at various points in the career pathway
- Development of credentials (with GMC) which allow associated specialities to work with young people

HEE and RCPsych agreements:

- ‘Run-through’ specialist programme to encourage entry to Child and Adolescent Psychiatry Training versus similar programmes such as Paediatrics
- Support development of existing Child Psychiatrists through various programs, for example, ‘Thriving at Work’ (Stevenson/Farmer Review of Metal Health and Employers)

Have these measures worked, if not why?

- Limited number people in the UK able to undertake training required
- Competing with specialities with greater media and public domain exposure
- Little being done to reduce the drivers for poor R&R listed above – principle focus has been on recruitment but nothing to date on retention; those who have completed training often moving either to private sector or agency locums with little incentive to stay in NHS

If you have any other information that might be useful, please use the space below to explain.

There has been a very welcome commitment to expand the workforce in mental health working with young people. A lack of a highly trained child and psychiatrist who have unique mix of skills and knowledge covering neuroscience, various therapy interventions, social science and system’s working will limit the help clinicians working with young people will be able to provide. The RCPsych estimates that almost 500 more Child Psychiatrists are needed to meet the needs of the UK’s young people.

Conclusion

Given these indicators, the Royal College of Psychiatrists seeks the inclusion on the SOL of:

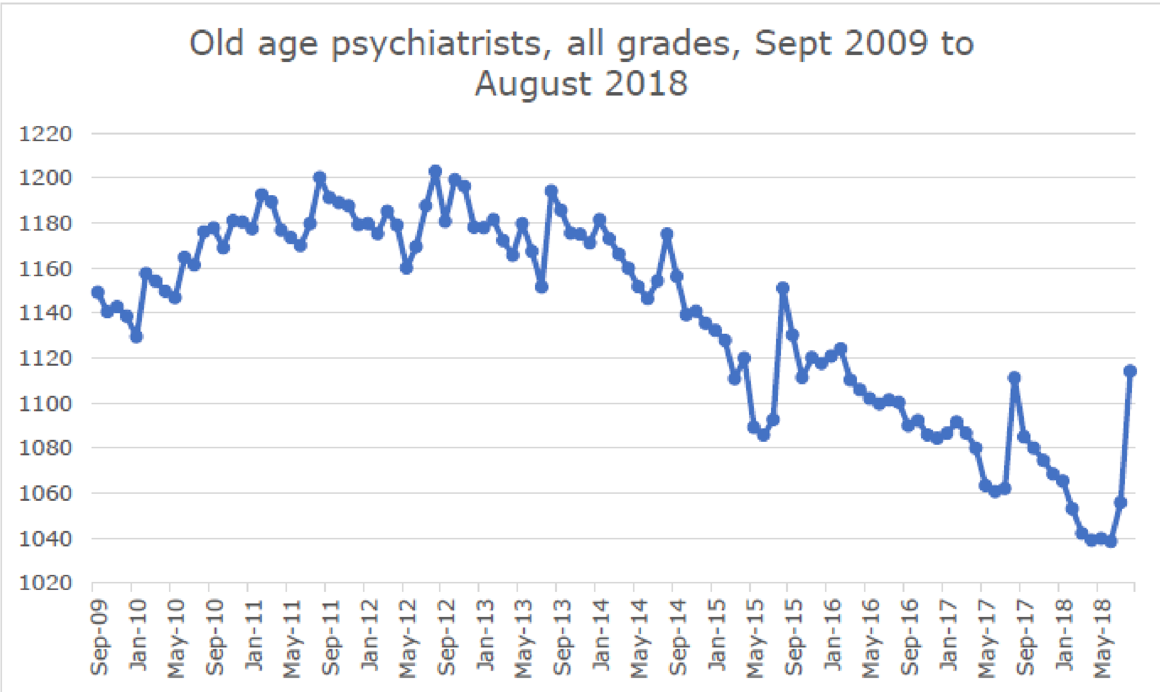
- Child and adolescent psychiatry Higher Trainees (ST4-ST6)
- Child and adolescent psychiatry Specialty Doctors
- Child and adolescent psychiatry Consultants

Old Age Psychiatry

Is there a shortage within your specialty and if yes, please provide evidence to support this, if available?

The last three Royal College of Psychiatrists workforce census reports show a significant rise in the number of consultant vacancies in old age psychiatry, from 45 posts in 2013, 62 posts in 2015 (a 7.9% vacancy rate) and 91 posts in 2017 (a 10.3% vacancy rate). This would strongly suggest that there are retention issues in old age psychiatry.

NHS digital shows a decrease across all grades in old age psychiatry from 1150 in 2009 to 1062 in 2017 slowly increasing to 1114 in May 2018:



Source: NHS Digital workforce statistics, August 2018

The following issues need to be taken into account:

- Ageing population: the number of people aged 65 and over in England increased by 17.6% between 2009 and 2016. This increase in need exacerbates the relative shortages in the specialty.
- The increase in the number of vacancies as noted above would strongly suggest that there are recruitment and retention issues in old age psychiatry.

- The change in some areas from age specific to ageless services (over 3 years ago) is universally felt to have caused a deterioration in measures of service quality. (Faculty of Old Age Psychiatry, 2017). The decrease in fill rates coincided with the emergence of ageless services. It would seem intuitive to suppose that the advent of ageless services is having an adverse effect on recruitment and retention.
- In a survey by the Royal College of Psychiatrists Faculty of Old Age Psychiatry, taken up by 91% of NHS trusts and local bodies, 41% of respondents said there had been a reduction in their funding for older adult services over the previous 3 years (Faculty of Old Age Psychiatry, 2017). Again, this can only have a negative effect on staff morale and job satisfaction and thus a negative effect on recruitment and retention.
-

What impacts are these shortages causing?

Patient care can only be negatively affected by shortages of those qualified to care for them. Shortages in old age psychiatrists post have a negative impact on those still working as it increases workloads with a negative effect on work life balance and job satisfaction. This can only have a negative effect on retention.

A recent survey showed that 21% of psychiatrists were considering leaving a career in OA Psychiatry with 16% not being sure.

What do you think are the main reasons for shortages and or wider shortages in the profession?

One of the biggest factors is an ageing population, the number of people aged 65 and over in England increased by 17.6% between 2009 and 2016. This increase in need exacerbates the relative shortages in the specialty.

The increase in the number of vacancies as noted above would strongly suggest that there are recruitment and retention issues in old age psychiatry. The change in some areas from age specific to ageless services (over three years ago) is universally felt to have caused a deterioration in measures of service quality. (Faculty of Old Age Psychiatry, 2017). The decrease in fill rates coincided with the emergence of ageless services. It would seem intuitive to suppose that the advent of ageless services is having an adverse effect on recruitment and retention.

In a survey by the Royal College of Psychiatrists Faculty of Old Age Psychiatry, taken up by 91% of NHS trusts and local bodies, 42 % of respondents said there had been a reduction in their funding for older adult services over the previous 3 years (Faculty of Old Age Psychiatry, 2017). Again, this can only have a negative effect on staff morale and job satisfaction and thus a negative effect on recruitment and retention.

Please explain what measures have been taken to reduce shortages in the specialty.

Recruitment and retention has been identified as a strategic aim for the Old Age Faculty. A recruitment lead has been appointed. Engagement with membership of the Faculty is another strategic aim.

- There has been a review of the prizes offered by the Old Age Faculty to increase engagement.
- Small project grants have been funded to support the strategic aims.
- A promotional video is being produced by the Old Age Faculty.
- Information leaflets for doctors considering a career in Old Age Psychiatry have been produced.
- As noted above vacancy rates are still increasing in Old Age Psychiatry.

Have these measures worked, if not why?

As noted above vacancy rates are still increasing in Old Age Psychiatry. It takes a minimum of eight years following qualification from medical school to train an Old Age psychiatrist. Any successful intervention will thus be subject to this timeframe before it produces results. In addition, the decreases in service funding have not reversed. The ongoing negative impact of this will therefore continue.

If you have any other information that might be useful, please use the space below to explain.

A recent survey showed that 21% of psychiatrists were considering leaving a career in OA Psychiatry with 16% not being sure.

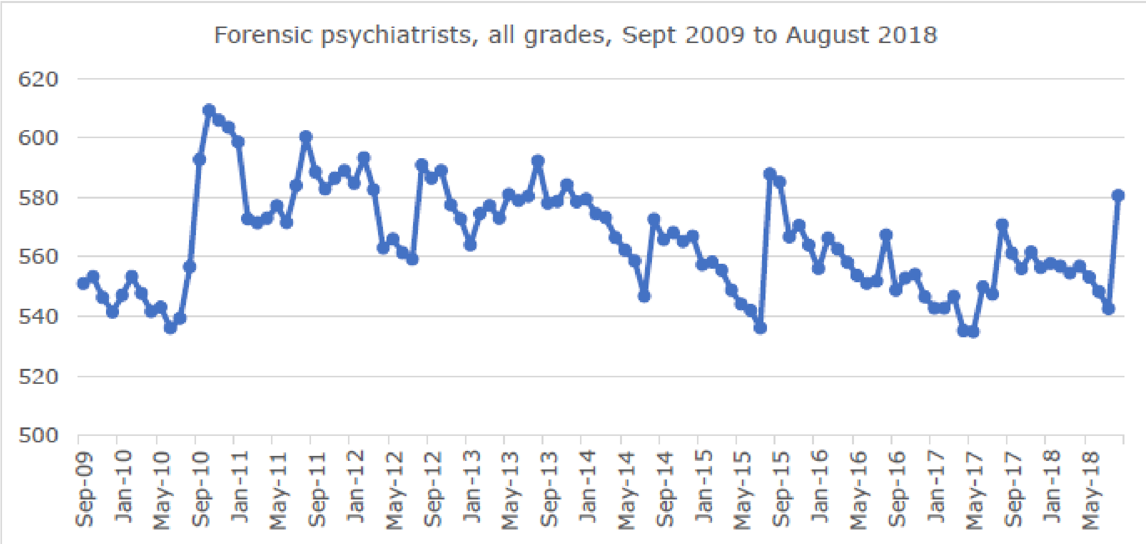
Conclusion Given these indicators, the Royal College of Psychiatrists seeks the inclusion on the SOL of:

- Old age psychiatry Higher Trainees (ST4-ST6)
- Old age psychiatry Specialty Doctors
- Old age psychiatry Consultants

Forensic Psychiatry

Is there a shortage within your specialty and if yes, please provide evidence to support this, if available?

Recruitment difficulties in core psychiatry are having a knock-on effect on Forensic psychiatry higher training. Traditionally forensic psychiatry had 100% recruitment, and this has gradually been reducing and colleagues report very few applicants for jobs. Fill rate for ST4 in Forensic Psychiatry was 67.86% and 2 areas in England and Wales as low as 50% and one area the Midlands achieving only 20% fill rate. This downward trend is of grave concern. It has been very difficult for some years to successfully advertise and appoint to specialty doctor posts in all specialities including forensic.
NHS digital shows a decrease across all grades in general psychiatry from 605 in November 2010 to 580 in August 2018:



Source: NHS Digital workforce statistics, August 2018

What impacts are these shortages causing?

- Worsening impact on recruitment
- Rota gaps
- Impact on quality of care delivered including physical health
- Impact on wider MDT who are then burdened with task that doctors would generally undertake
- Demoralised trainees
- Burn out in consultants
- Adverse patient care as patients wait longer for assessment and this is particularly worrying when patients are in prison
- Trainees deciding to leave NHS or leave UK to practice abroad

What do you think are the main reasons for shortages and or wider shortages in the profession?

- Stigma within society
- Not seen as true medical specialty
- Type of work, i.e. psychiatry, viewed as very emotionally demanding
- Medical students not having had exposure to psychiatry
- Medical student having had exposure to burnt out trainees and consultants

Please explain what measures have been taken to reduce shortages in the specialty.

- Ensure consultant psychiatrists and specialty doctors have jobs which are doable and have time for Supporting Professional activities
- Give medical students opportunity to experience forensic psychiatry

- Forensic Faculty supporting the Choose Psychiatry campaign
- Psychiatrists getting involved with psych societies
- Forensic Psychiatrists teaching medical students
- Welcome medical students into forensic teams for special study modules
- Continuing to welcome medical students to the forensic faculty and continuing with the medical student essay prize and awarding bursaries
- Giving trainees a good experience of psychiatry
- Addressing factors within service which lead to burnout of staff
- Raising concerns with trusts and HEE about any concerns for trainee safety, wellbeing and or training

Have these measures worked, if not why?

Medical students are generally very interested in Forensic psychiatry and but not always available to them as most students get placements in acute wards and in community settings where staff are under resourced and time for teaching is very limited. First impressions may not be good.

The bursaries and essay prize are received positively by medical students. It requires a whole systems approach to address the concerns set out above: consultant leaders working with trainees, trusts supporting staff and being supported by NHSI and HEE ensuring that wellbeing is high on their agenda for their trainees. They must listen to trainees.

If you have any other information that might be useful, please use the space below to explain.

- College work on wellbeing is very relevant
- Guidance of safe working within trust
- NHS Improvement work on wellbeing with trusts is important
- New curriculum due for completion in 2020 is likely to be positive for recruitment as neuroscience basis will highlight the scientific underpinning of psychiatry
- New MHA may also be positive as may make psychiatry more in line with specialties where autonomy and capacity to make decisions have primacy
- The long-term mental health plan facilitates greater integration with physical health which may reduce stigma and encourage medical students to consider psychiatry

Conclusion

Given these indicators, the Royal College of Psychiatrists seeks the inclusion on the SOL of:

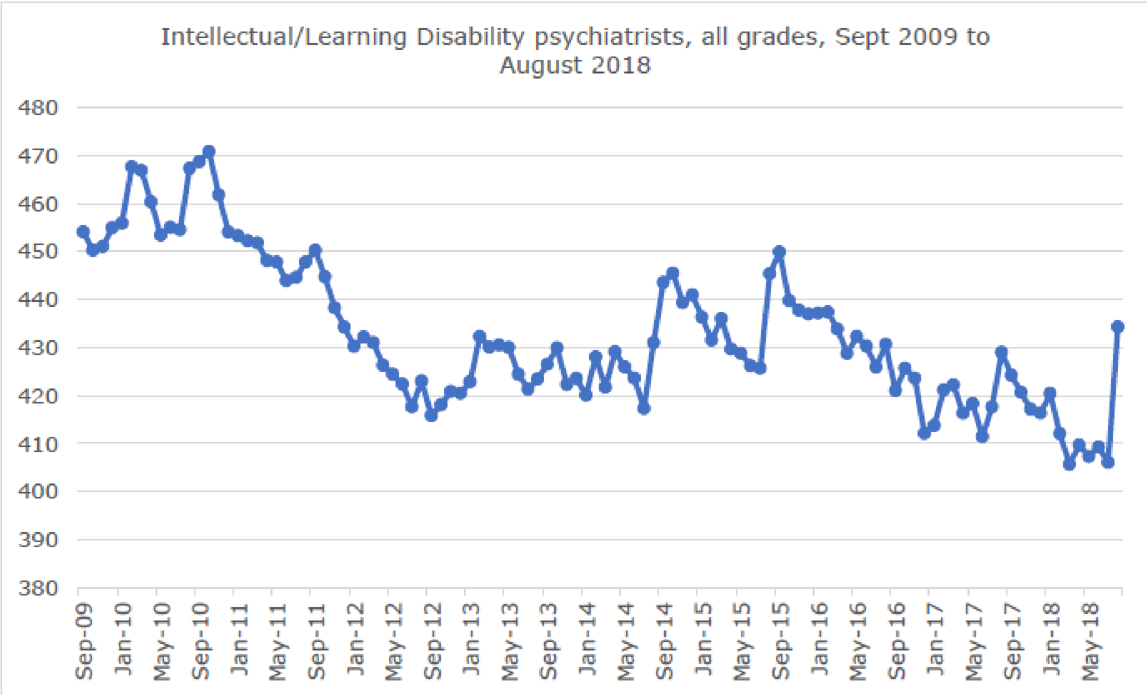
- Forensic psychiatry Higher Trainees (ST4-ST6)
- Forensic psychiatry Specialty Doctors
- Forensic psychiatry Consultants

Learning (Intellectual) Disability Psychiatry

Is there a shortage within your specialty and if yes, please provide evidence to support this, if available?

There is a shortage in Psychiatry of Intellectual/Learning Disability across the four UK nations. There are vacancies in many areas. Some NHS Trusts have stopped advertising for Consultant jobs in the specialty as they did not receive any application when they have advertised in the past.

NHS digital shows a remaining decrease across all grades in Learning (Intellectual) Disability psychiatry from 470 in October 2010 to 434 in August 2018:



Source: NHS Digital workforce statistics, August 2018

This situation has been made worse by a trend of poor recruitment at the ST4 level (there were five applicants for 30 posts available in Psychiatry of Learning Disability for the February 2019 intake, the fill rate in the previous round was 29%)

Consequences of Winterbourne View & NHSE Transforming Care Programme for people with learning disabilities and/or autism demand increased consultant numbers in Psychiatry of Learning (Intellectual) Disability for optimum service delivery. Some of the significant points are listed below:

- NHS England funding five areas with support to significantly close a number of hospital beds and develop more robust community services.
- Increasing recognition of the need to enhance capability across the NHS to manage people with autism, learning disabilities and challenging needs.
- The demand on services is exceeding supply leading to continued impact on inpatients and community services.

What impacts are these shortages causing?

Severely stretched services in many areas.
NHS and independent sector Psychiatry of Learning Disability services inadequately resourced in several areas having a serious impact on the quality of services provided to people with learning disability and the potential for the under resourcing spreading to other geographical areas due to recruitment issues.

What do you think are the main reasons for shortages and or wider shortages in the profession?

- It is often the case that medical students, doctors and trainee psychiatrists do not choose psychiatry as a specialty, or psychiatry of intellectual disabilities, as a sub-speciality, if they have not had exposure or good exposure to this field early in their career path before choices need to be made. The recently revised requirement for psychiatry of Learning (Intellectual) Disability in adults to be a mandatory component of CT training is yet to be formalised and implemented.
- Specialty posts remain hard to recruit to and more creative attempts (e.g. specialty grade rotations) have had variable success.
- The current cap on migration for trainees and internationally trained consultants enabling them to receive further training in Psychiatry of Learning Disability in the UK, is likely to have a disproportionately significant impact on this specialty.
- Many of these Psychiatrists could choose to take up unfilled Consultant positions in the specialty after a period of appropriate induction to the NHS and gaining relevant competencies mapped to the GMC approved Psychiatry of Learning Disability Curriculum with oversight of the programme and processing of applications by the RCPsych and necessary regulation by the GMC.
- The UK is the only country to provide specialist training for Psychiatrists in Learning (Intellectual) Disability and is a world leader. As an international player the UK should be in the forefront to provide training in Psychiatry of Learning Disability.

Please explain what measures have been taken to reduce shortages in the specialty.

- Recruitment drives both nationally and locally to the speciality have met with limited success.
- A fresh robust initiative is underway to promote recruitment to Psychiatry of Learning Disability. However, this would take time to deliver success. In the meantime, it would be important to recruit from overseas to unfilled consultant and training posts. Classifying Psychiatry of Learning (Intellectual) disability is likely to be of help to maintain adequate service delivery.

Have these measures worked, if not why?

- The pool to recruit trainees from is shrinking due to many factors including attrition rates (e.g. doctors leaving the profession, going abroad to work at much higher rates) at all levels beginning at post qualification, Core training and Higher specialist training.

- 1:6 consultants are working at or beyond retirement age in the speciality and there is a great danger that services could be severely affected if they do decide to leave.
- The changes in pensions resulting in significant financial disincentives
- NHS Transforming Care and Safe Services calls for a consultant delivered service with adequate senior presence to deliver quality care.
- In some areas in England, the implementation of the Autism Act has placed increased expectations on local Learning (Intellectual) Disability and other services.
- Similarly, ADHD services, acquired brain injury services have placed increasing demands on the PLD consultant workforce.

If you have any other information that might be useful, please use the space below to explain.

Psychiatry of Learning Disability has depended historically on overseas recruitment to fill training posts as well as consultant positions in the speciality. It is important that due consideration is given for it to be a shortage occupation list to prevent erosion of adequate mental health service provision to people (children and adults) with learning disability and/or autism and for managing behaviour that challenges in all settings including the community and forensic settings.

Conclusion

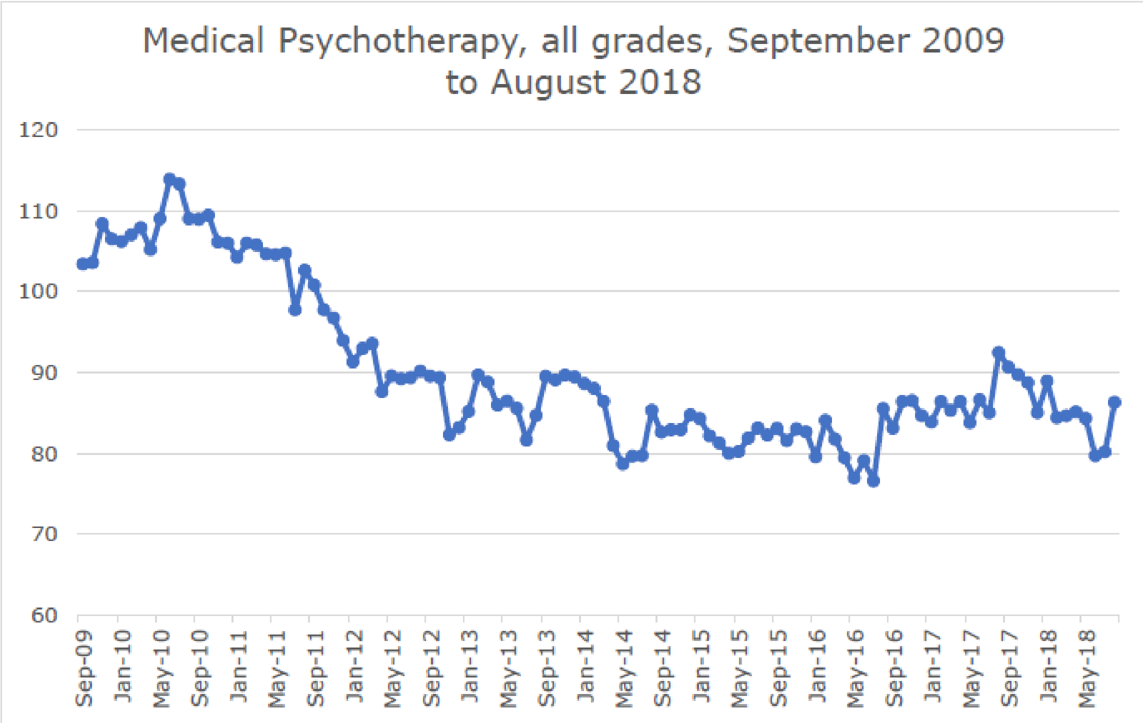
Given these indicators, the Royal College of Psychiatrists seeks the inclusion on the SOL of:

- Learning (Intellectual) Disability Psychiatry Higher Trainees (ST4-ST6)
- Learning (Intellectual) Disability Psychiatry Specialty Doctors
- Learning (Intellectual) Disability Psychiatry Consultants

Medical Psychotherapy

Is there a shortage within your specialty and if yes, please provide evidence to support this, if available?

Shortage of medical psychotherapy consultants in all areas outside London. Adverts commonly attract no applicants. NHS digital shows a remaining decrease across all grades in Medical Psychotherapy from 113 in July 2010 to 86 in August 2018:



Source: NHS Digital workforce statistics, August 2018

What impacts are these shortages causing?

Long term vacancies, which affect CT and ST training. CT training cannot be delivered according to GMC criteria without appropriately qualified consultants.

What do you think are the main reasons for shortages and or wider shortages in the profession?
Low recruitment levels into psychiatry from FY grades. Upstream this is exacerbated by insufficient doctors being trained in the UK for the number of training and consultant posts.

Please explain what measures have been taken to reduce shortages in the specialty.

Choose psychiatry campaign by RCPsych. https://www.rcpsych.ac.uk/become-a-psychiatrist/choose-psychiatry

Have these measures worked, if not why?
Recruitment into psychiatry has risen slightly but remains below replacement level to replace trainees becoming consultants, and consultants retiring.

Conclusion

Given these indicators, the Royal College of Psychiatrists seeks the inclusion on the SOL of:

- Medical Psychotherapy Consultants

Royal College of Veterinary Surgeons/British Veterinary Association

Migration Advisory Committee: Call for evidence Shortage Occupation List review 2018

1. The British Veterinary Association (BVA) is the national representative body for the veterinary profession in the UK with over 18,000 members. BVA represents, supports and champions the interests of the veterinary profession in this country and we therefore take a keen interest in all issues affecting the profession.

2. The Royal College of Veterinary Surgeons (RCVS) is the statutory regulator for veterinary surgeons, responsible for the registration of veterinary surgeons and veterinary nurses in the UK, and sets, upholds and advances their educational, ethical and clinical standards.

3. We are grateful for the opportunity submit a joint response to this call for evidence.

Introduction

4. The veterinary profession is relatively small, with around 25,500 UK-practising veterinary surgeons, but its reach and impact are significant. The UK veterinary profession is an integral part of the international scientific community using evidence and practical skills to further animal health and welfare, and public health. Almost half of the veterinary surgeons who register in the UK each year qualified elsewhere in the European Union. In some sectors, such as the meat industry, over 90% of veterinary surgeons are EU nationals.

5. Veterinary surgeons work across the economy, allowing strategically important sectors to operate successfully - this would be impossible without the contribution of EU vets. As the Government response to the House of Lords EU Energy and Environment Sub-Committee notes:

"Many vets working in the UK are EU nationals…and the Prime Minister has made clear that securing the status of the veterinary workforce is a top priority."[177]

6. We therefore jointly ask that the UK immigration system delivers on the Prime Minister's stated priority. Placing veterinary surgeons on the Shortage Occupation List is key to achieving this aim.

[177] Government Response to the House of Lords European Union Committee Report on Brexit: Farm Animal Welfare http://www.parliament.uk/documents/lords-committees/eu-energy-environmentsubcommittee/Brexit-farm-animal-welfare/Gov-Brexit-farm-anim.pdf

What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)? (Not to exceed 500 words).

7. Growth in the veterinary sector is estimated at 5% per annum, and double that figure for specialist referrals.[178] Meeting this demand requires steady continued growth in the size of the veterinary workforce.

8. Demographic and generational factors have affected the veterinary workforce in recent decades. Alongside wider shifts in working practices, these changes have led to part-time workers constituting a greater share of the total veterinary workforce (28%).[179] This is particularly acute amongst vets working in clinical practice (21% in 2014 rising to 29% in 2018). There is also growing popularity for portfolio-working; with vets working in clinical practice increasingly doing locum work (8% in 2014 rising to 14% in 2018). These trends are consistent with many professions, including human medicine.[180] Moreover, the veterinary sector faces a relatively low retention rate, with many veterinary surgeons leaving practice early in their careers. A combination of these factors has led to veterinary recruitment struggling to match demand.

9. Demand for veterinary surgeons will increase because of the UK exiting from the EU. Nigel Gibbens, then the UK Chief Veterinary Officer, estimated that the volume of products requiring veterinary export health certification could increase by up to 325% in the case of no deal being reached between the EU and UK.[181] If a deal is agreed, at the end of the implementation period "a UK exporter of an animal product to the EU will need to have an Export Health Certificate (EHC) alongside the consignment."[182] It is essential that an appropriate number of veterinary surgeons can be recruited, from the EU post-Brexit or from outside the EU, to ensure that essential veterinary work continues, and UK produce of animal origin can continue to be exported.

10. Before the EU referendum, UK veterinary practices reported difficulties recruiting. This problem has intensified following the Brexit vote, as non-UK EU vets have faced considerable uncertainty about their futures. The Major Employers Group which represents some of the largest UK veterinary businesses providing primary care directly to the public, conducted a survey of vacancy rates amongst its members in July 2017. This found an average workforce shortage of approximately 11% for veterinary surgeons and 5.6% for veterinary nursing.

11. A subsequent survey was conducted in November 2018 and showed 890 vacancies in member practices employing over 7700 veterinary surgeons, representing a veterinary workforce shortage of approximately 11.5%. A survey of veterinary nursing vacancies 475 vacancies in practices employing over 6200 veterinary nurses representing a shortage of approximately 7.6%.

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178 Pets at Home September 2018 Investor Update

179 BVA spring 2018 Voice Survey

180 The Kings Fund, Through the eyes of GP trainees: workforce of the future, 2018

181 Speaking at Official Veterinarian Conference 2017, reported https://www.vettimes.co.uk/news/non-uk-vetsessential-after-brexit-says-cvo/

182 HM Government, Explainer for the agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union November 2018

12. Therefore, we ask that the veterinary profession is restored to the Shortage Occupation List.

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research. (Not to exceed 500 words).

Education 13. The UK has taken steps in recent years to expand capacity within veterinary education. In part, additional capacity has been facilitated by new universities initiating veterinary science courses. In 2007, the University of Nottingham officially opened the first purpose-built new veterinary school in the UK in 50 years. The University of Surrey started taking vet students in October 2014.

14. There are concerns about how quickly the capacity of UK universities could be further expanded at short notice. Increasing capacity takes time, money (capital and revenue) and personnel. Additionally, capacity is required in veterinary practices for vet students to undertake Extra Mural Studies. The University of Surrey announced plans to open a vet school in October 2012;[183] the first cohort of students will graduate in 2019. The course is not yet approved for RCVS membership purposes, and this will be the case until the first students complete the 5-year course and the RCVS undertakes a successful accreditation visit. The Surrey veterinary school cost £45 million to establish.

15. The Veterinary degree is one of the most expensive degrees to deliver, and veterinary schools usually have to subsidise their graduates from other sources of income; this is a disincentive to the growth of veterinary graduate numbers. EU veterinary surgeons also make up a significant proportion of teaching staff; therefore, the expansion of veterinary schools is also reliant on immigration.

16. Veterinary schools recruit from a finite pool of potential graduates and face increasing competition as other professions also seek to increase the number of home-grown graduates.

17. UK graduates favour clinical practice over public health roles. Overseas-qualified veterinary surgeons have shown more inclination towards public health. Significant effort, money and time would be required to change this culture and reduce the reliance on EU nationals.

Retention of existing workforce

18. Erosion of the veterinary workforce has been an ongoing concern for BVA, RCVS and Government, which predates the decision of the UK to leave the EU.

19. BVA and RCVS have expended considerable time, effort and resource addressing this problem. Together, we launched the report Vet Futures – Taking charge of our

[183] University of Surrey, New Veterinary School plans to embrace links between human and animal health Thursday 25 October 2012 <https://www.surrey.ac.uk/mediacentre/press/2012/92737_new_veterinary_school_plans_to_embrace_links_between_human_and_animal_health.htm>

future[184] in November 2015. The Vet Futures project aims to improve retention of the existing veterinary workforce by ensuring veterinary professionals are confident, resilient, healthy and well supported, and benefit from exceptional leadership. In July 2016, the Vet Futures Action Plan[185], was launched with a series of actions to make this vision a reality. These actions are ongoing, including undertaking research to better understand the profession's retention problem.

Allied-professionals 20. Consideration is being given to how the veterinary team can be reformed to allow allied professionals to take on additional tasks, freeing up veterinary time to undertake roles for which they are best qualified; any such reform needs to be undertaken in a measured way that prioritises animal health, animal welfare, public health, and retains the assurance provided by a veterinary surgeon's signature which facilitates international trade.

21. This work is being undertaken as part of the RCVS Legislation Review, and by the BVA Vetled Team Working Group. Recommendations for reform will be published in 2019, some of which will require legislative reform before they could be implemented.

Have these measures worked, if not why? (Not to exceed 500 words).

22. The current veterinary shortage developed recently but predates the decision of the UK to leave the EU. Concerns about veterinary capacity led to the Vet Futures programme and a strong commitment from both RCVS as the regulator for the profession and BVA as the representative body to address these issues.

23. Through a programme of research, engagement with the profession and the public, and a consideration of strategic issues that have affected the profession overseas and other comparable sectors, BVA and RCVS developed an action plan to deliver the best for animal health and welfare, the public and the profession. The project was launched at the BVA Congress at the London Vet Show on 20 November 2014, and a report was published at the next year's event on 20 November 2015. During 2016, an Action Group developed an Action Plan based on the recommendations published in 2015. We have now set up various working groups to deliver these actions. Oversight is carried out by the Vet Futures Project Board, which includes the Presidents, Vice-Presidents, CEOs and communications directors of both RCVS and BVA.

24. The report and measures to address it, while comprehensive, remain at an early stage. We are working to develop a better understanding of the problem. As part of the Vet Futures project, BVA led on a veterinary workforce study, working with Professor of Social and Organisational Psychology Michelle Ryan and colleagues at the University of Exeter. The first joint report, Motivation, Satisfaction, and Retention: Understanding the importance of vets' day-to-day work experiences[186] and a follow-

[184] BVA, RCVS Vet Futures – Taking charge of our future, 2015 <https://www.vetfutures.org.uk/download/reports/Vet%20Futures%20report.pdf>

[185] BVA, RCVS Vet Futures Action Plan 2016-2020, 2016 <https://www.vetfutures.org.uk/download/publications/vet%20futures%20report%202016(5).pdf>

[186] Motivation, satisfaction, and retention Understanding the importance of vets' day-to-day work experiences

up study with employers, investigating the existence of gender discrimination in the profession were launched in 2018.[187]

25. The decision of the UK to leave the EU means the increase in UK domestic graduate numbers will no longer be coupled with the UK's continued ability to recruit EU-qualified veterinary surgeons. Therefore, there will no longer be sufficient workforce to keep up with demand whilst the longer-term issues are addressed systematically.

26. Whilst retention has been recognised as a pre-Brexit problem it has been exacerbated since the referendum due to uncertainty about ongoing rights to reside and work in the UK. Considering the projected demand for vets, it is impossible for this to be met in the short term domestically. There will be an ongoing need to meet the demand for veterinary professional from outside the UK.

Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

27. Yes

If known, how many workers from outside of the UK have been recruited using the Tier 2 pointsbased visa system in the past 12 months, stating the job titles. (Not to exceed 500 words).

10 Motivation, satisfaction, and retention Understanding the importance of vets' day-to-day work experiences 11 Gender discrimination in the veterinary profession A brief report of the BVA Employers' Study 2018

28. The RCVS does not hold the figures for Tier 2 visa applications for veterinary surgeons. However, in 2018 a total of 262 veterinary surgeons registered with non-EU/EEA nationality, and these registrants are in the category most likely to require a Tier 2 visa.

29. It is likely that additional registrants would have sought to come to the UK via this route had the Tier 2 cap not been exceeded.

30. The government has indicated that once the UK leaves the European Union there will no

longer be different arrangements for EU and non-EU immigrants. Given the UK's reliance on

EU-qualified vets, with approaching 1000 such vets registering each year, it is reasonable to

expect that the UK's reliance on Tier 2 visas will increase greatly in future.

If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

[187] Gender discrimination in the veterinary profession A brief report of the BVA Employers' Study 2018

 RCVS Brexit survey https://www.rcvs.org.uk/document-library/european-veterinary-surgeonsworking-in-the-uk-the-impact-of/ BVA Voice Survey data Motivation, satisfaction, and retention Understanding the importance of vets' day-to-day work experiences Gender discrimination in the veterinary profession A brief report of the BVA Employers' Study 2018

If you have any other information that might be useful for our call for evidence please use the space below to explain (Not to exceed 500 words).

Our calls

31. A future immigration system must prioritise the veterinary profession. The Government should consider the economic and social impact the profession has, beyond its relatively small size. To ensure animal health and welfare; food safety and public health and the facilitation of trade which requires veterinary certification, due regard should be given to the specific needs of the veterinary profession including:

The projected demand for veterinary surgeons following the exit from the EU; The difficulty in meeting this demand with UK citizen vets, including the time and resource needed to increase university capacity; The nature of many veterinary practices as small businesses unable to meet the demands of an onerous visa-based system.

32. In 2011, the veterinary profession was removed from the Home Office Shortage Occupation List because the Migration Advisory Committee made an assessment that there were sufficient veterinary surgeons to meet demand. However, this move did not anticipate the possible loss of non-UK EU graduates from the veterinary workforce. Therefore, we call for vets to be immediately restored to the Shortage Occupation List.

33. In addition, we recommend that veterinary employers be exempt from the Immigration Skills Charge in order to avoid any additional barriers or burdens to veterinary employment. This is particularly important due to the composition of the veterinary industry, which is still includes many small businesses which would struggle with the cost and administration related to the Charge.

34. We further recommend that there is no minimum earning cap for veterinary surgeons applying for working visas. Veterinary surgeons are skilled professionals who may choose to work in the UK for reasons other than remuneration. Further, veterinary surgeons make a significant contribution to society through their work in public health, securing animal health and welfare, and facilitating trade through the role in certification; these are national goods that cannot assessed in terms of individual contributions to the exchequer.

Scottish Enterprise

Dear Sir or Madam,

Strategic response to the MAC Shortage Occupation List (SOL) consultation – Scottish Enterprise

In support of Scottish Enterprise's online response to the SOL consultation I am setting out Scotland's distinctive issues which we believe should be considered when designing the future UK immigration policy.

Scottish Enterprise (SE) is an NDPB charged by The Scottish Government with delivering economic development for the majority of Scotland's population and businesses. We are responsible for a wide range of economic development functions that rely directly on the vital contributions of migrant workers:

- **Growing inclusive regional economies**: supporting entrepreneurs, growing businesses and sectors to innovate and invest in opportunities that benefit regional and national economies

- **Strengthening a globally-connected economy**: reinvigorating Scotland's international opportunities through trade, inward investment and dynamic international networks

- **Empowering businesses with ambition**: working with partners to deliver a joined-up business support service across Scotland that enables organisations to access the information, skills, funding and opportunities they need to grow and prosper.

I am highlighting three important drivers of economic change that are positively impacted by immigration. Significantly, these drivers are all playing out differently in Scotland compared with the UK as a whole.

1. Migration is strategically important to Scotland's economic prosperity

Scottish Government population projections show that ***all*** of Scotland's population growth for the next 25 years is set to come from migration – a different situation to that in other parts of the UK. From an economic development perspective, migration is therefore a strategic issue that underpins the dynamism of Scotland's economic prosperity.

The recommendations outlined in the immigration white paper could result in an 85% reduction in inflows of long-term workers from EU and EEA countries to Scotland – 80% to the UK as a whole. Furthermore, the Scottish Government estimates around 55% of resident EEA migrants work within occupations which do not fall within the proposed skilled workers route.

Under a scenario where EU migration is around 80% lower, the Scottish Government estimates that real GDP in Scotland will be around 6.2% lower by 2040 than it would have been otherwise. This is equivalent to a fall of almost £6.8 billion a year in GDP by 2040 and a fall of £2 bn in Government revenue over the period.

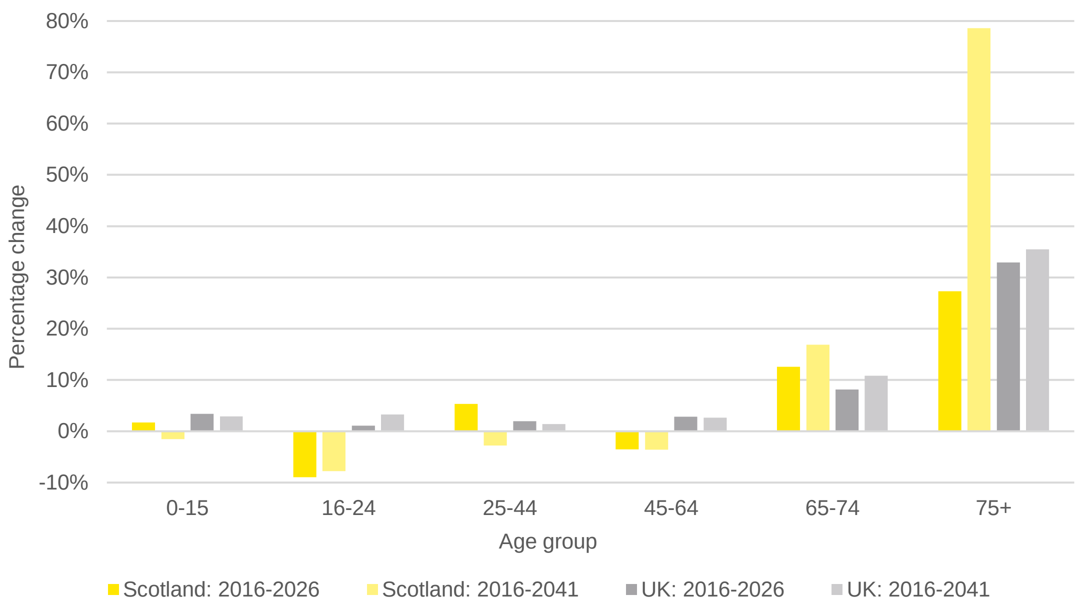
Continued high levels of migration supports business and economic growth, and help to attract foreign direct investment. Migrants fill important roles in existing sectors including tourism, food processing, advanced manufacturing and the creative industries. Non-UK workers are also essential to the continuing growth of Scotland's further and higher education sector, carrying out vital research that drives industries of the future including fintech, precision medicine and smart mobility.

While overseas workers are predominantly employed in Scotland's cities, the loss of migrant workers can have a disproportionate impact in sparsely-populated rural areas. Migrant workers often fill vital roles in delivering public services or in local businesses, and a blunt approach to immigration policy that ignores these spatial issues risks detrimental impacts.

2. Scotland is already experiencing more rapid population ageing than rUK

As shown in the chart below, Scotland's working age population is projected to only grow only marginally by 1.1% between 2016-41 while that in the UK overall is estimated to increase by 7.7%. This is placing significant pressures on job types and occupations across multiple sectors and places – and at ***all*** skill levels. This reinforces the need for Scotland's distinctive labour market issues to given specific priority in the UK's future immigration approach.

Projected change in population by age group, Scotland & UK, 2016-26 & 2016-41



Source: National Records of Scotland, ONS

3. Wider trends will exacerbate Scotland's strategic skills challenges

A combination of other drivers is likely to exacerbate Scotland's strategic skills challenges.
These include increasing economic and technological change driven by the fourth industrial revolution as well as the loss of EU workers owing to Brexit.

Around 140,000 EU nationals aged 16-64 were employed in Scotland i2017/18, equating to 6% of Scotland's total workforce. The sectors and occupations with the highest concentration of EU nationals – and therefore at highest risk of any further loss of migrants – include

- Textiles, printing and other skilled trades (17% of total workforce)
- Process, plant and machine operatives (13%)
- Elementary trades and related occupations (12%).

A decrease in the availability of EU labour would exacerbate existing skills shortages and gaps. The latest data by occupation and sector is shown in the table below:

Occupations with the highest density skills shortage vacancies in Scotland (2017)	Sectors with the highest density skills gaps in Scotland (2017)
• **Skilled trades (42%)** • **Managers (39%)** • **Professionals (35%)**	• Manufacturing (7.2%) • Hotels and restaurants (6.8%) • Wholesale and retail (6.8%)

Recognising Scotland's distinctive economic and demographic challenges, **we are convinced that a differentiated approach for Scotland is needed within the context of the future UK immigration policy**.

We offer five recommendations for consideration:

1) **Since a UK-wide migration policy may not fit Scottish economic needs propose that the new immigration policy adopts a tailored approach to Scotland**. We strongly recommend that the Scotland-only Shortage Occupation List remains, and that the Home Office work alongside The Scottish Government to ensure that the future immigration policy reflects Scotland's distinctive challenges. Previous MAC reports have not acknowledged the distinctive issues experienced by different constituent parts of the UK.

2) With growing calls from business and employers for a differentiated solution for Scotland, **we support the Scottish Government's proposal for a 'Scottish visa'** *in addition to* existing visa routes. This would be specifically designed to meet Scotland's economic and demographic needs and would be subject to strict residency and employment conditions, enforced in conjunction with UK authorities.

3) **We propose that the proposed £30,000 minimum salary threshold for new migrants to the UK is replaced by a lower threshold**. Scottish Government analysis shows that 66% of the UK working population earns below the £30,000 threshold (the median UK salary is in fact £28,677). Many existing migrants in

essential roles earn significantly less than this and unless a lower threshold is agreed, many businesses and sectors could be severely disadvantaged.

4) **We suggest that the Shortage Occupation List be reviewed annually on a more dynamic basis.** Given the pace of economic, political and technological shifts, the new UK immigration policy needs to be far more responsive to change than previously. It is essential that the SOL is responsive to changing business needs, including from overseas investors.

5) **We propose further opportunities for consultation on the Shortage Occupation List**, running in parallel with consultation on the Immigration White Paper. The proposal in the white paper to introduce a 12-month transitionary arrangement for low-skilled workers "*in sectors like constuction and social care"* poses many questions. Non-UK employees fill essential roles at all skill levels, across all geographies and across all sectors. Given this complexity we are very concerned at the limited duration of this consultation.

I trust our views will be fully considered as part of the SOL consultation and am happy to provide any further clarification if needed.

Scottish Government Core Response

INTRODUCTION

Our position

Scotland is a progressive, outward looking nation. We recognise that migration strengthens our society and our nation benefits from the skills, the experience and the expertise of those individuals who have chosen to live, work and study in Scotland. Inward migration, including from across the European Union, has made an overwhelmingly positive contribution to Scotland's economy and society. Migrants play a vital part in ensuring that we remain a diverse and outward-looking country that is open to the world. We welcome those who come to Scotland and make a positive contribution to our communities, our economy and our public services.

The UK Government has publicly committed to ending freedom of movement. Yet inward migration has helped to turn Scotland from a nation of emigration with a declining population into a culturally diverse, outward looking nation with a growing population. It has also brought benefits and opportunities for people born in Scotland. The Scottish Government is clear that maintaining free movement of persons is in the best interests of the UK as a whole and of Scotland.

The Scottish Government published detailed evidence in October 2017 [1] showing that EU migration:

is essential for ensuring sustainable population growth in Scotland, which is the single biggest driver of our economic growth;

supports Scotland's economy, ensuring the availability of a pool of labour, both now and in the future, to meet the needs of employers and businesses right across the Scottish economy and across all sectors, including those as diverse as agriculture and fisheries, tourism and culture, healthcare and education;

supports rural communities and jobs, bringing essential labour to rural industries and supporting public services including healthcare and schools.

The evidence that we set out in that report remains relevant and sets out the reliance of key sectors of our economy on EU citizens.

It is clear that current UK policy on migration does not meet Scotland's needs. In February 2018 the Scottish Government published a discussion paper *Scotland's Population Needs and Migration Policy* [2] setting out options for a future migration system tailored to Scotland's needs. This paper recommended that the UK Government should:

Abolish the net migration target, or at least migration to Scotland should not be counted in it;

Take a different approach to family migration, and improve the rights of people in Scotland to bring close family into the country with them;

Review the immigration skills charge, which is an unhelpful burden on employers;

Give Scottish Ministers a formal role in deciding on the Scotland Shortage Occupation List;

And Reintroduce the post study work visa as recommended by the Smith Commission.

Since the publication of that discussion paper the UK Government published its Immigration White Paper on 19 December 2018 [3]. The White Paper does not address any of the Scottish Government's recommendations for changes and indeed proposes a future migration system which does not reflect the needs of key sectors of the Scottish economy. Figures detailed in the White Paper itself estimate that if all of the recommendations in the White Paper were implemented (notably the retention of the £30,000 salary threshold for Tier 2) then this could result in an 85% reduction in inflows of long-term workers from EU and EEA countries to Scotland.

The Scottish Fiscal Commission published their Economic and Fiscal Forecasts in December 2018 [4]. These forecasts inform the Scottish Budget and sets their economy, tax, and social security forecasts for the next five years. In their 2018 publication, as in the 2017 publication, the Commission again judged that the 50% less future EU migration variant of the population projections was appropriate for Scottish circumstances. In that scenario the working age population would decline by almost 1%, rather than the current prediction of growing by 1.1%, and the proportion of children would decline by just over 4%.

Migration is crucial to growing Scotland's population and specifically the working age population. It is crucial to our economy and to economic growth. Changes to migration policy have a greater impact in Scotland than in the UK as a whole, as evidenced in the figures published in the UK Government White Paper given the greater significance of migration to Scotland's population growth. The economic modelling that we set out in our 2017 evidence to the MAC and in our February discussion paper showed that real GDP in Scotland will be 4.5% lower by 2040 as a result of lower migration whereas the comparative figure for the UK is 3.7% lower.

About this paper

This paper sets out the Scottish Government's response to the call for evidence launched by the UK Migration Advisory Committee on the Shortage Occupation List (SOL).

In responding to this call for evidence the Scottish Government as well as businesses across Scotland, particularly those in the tourism and hospitality sectors, have found the MAC's deadline significantly challenging. The deadline of the 6 January, although extended at the last minute, has given very limited time for the appropriate analysis of shortages. The placement of this consultation in an already busy period, with organisations focused on mitigating the challenges of Brexit, would be pushing organisations' capacity even without the time pressure of a 2 month consultation. Given the importance of this issue we would encourage the UK Government to extend the commission given to the MAC in line with their 12 month programme of engagement on immigration to ensure appropriate consideration of all shortages and a truly evidence based approach.

In compiling this evidence we have been mindful that this consultation is taking place in a shifting context. The MAC published their report on EEA migration in September 2018 [5] and the UK Government published their Immigration White Paper in December 2018 setting out their proposals for a future immigration system. It has therefore been challenging to respond to a consultation about the SOL where there is such uncertainty about the future role of the SOL itself. Two of the most significant advantages linked to the SOL are that it removes the need for a resident labour market test and gives preference if the Tier 2 cap is met. Currently the main high skilled route (Tier 2 – general) is capped at 20,700 places a year. However, the UK Government has proposed, in their White Paper, abolishing the need for a resident labour market test and the cap. These two proposals will change the nature of the SOL significantly.

Given the UK Government's stated commitment to a 12 month programme of engagement on the immigration proposals as set out in the White Paper it is regrettable that the consultation on the SOL is being viewed separately and to a different, significantly constrained timetable. A number of key sectoral interests have therefore indicated to us that they are finding it difficult to respond to the consultation within the time-frame. We would therefore call on the MAC to facilitate further engagement with stakeholders between this deadline and Spring 2019 to capture as much of this missing evidence as possible.

Some areas of the Scottish Government have produced separate analysis highlighting specific shortages faced by their sector, these will be submitted alongside this response:
Health and Social Care
Food Standards Scotland

Despite these constraints and caveats this paper provides evidence as set out below:

Section one focuses specifically on the Shortage Occupation List for Scotland and details proposals to make that List more flexible and responsive to the needs of the Scottish economy whilst also providing a specific role for the Scottish Government in commissioning and determining what occupations are in shortage in Scotland.

Section two provides evidence on the recruitment, training skills needs across the Scotland economy highlighting key sectors including tourism and hospitality, culture and creative industries, manufacturing and construction, financial services, the third sector, agriculture, diary, seafood, environment and forestry, nuclear decommissioning and public services notably education.

Section three provides detail of how a system which reflects the needs of Scotland could operate.

INCREASING SCOTLAND'S INPUT INTO UK IMMIGRATION DECISION-MAKING

Immigration is reserved to the UK government under the Scotland Act 1998 and Scotland currently has no influence over UK decision-making on migration flows. Within the current UK immigration rules, the SOL is the only element of the Points Based System (PBS) where there is any attempt to consider the different occupational needs of Scotland relative to the rest of the UK.

However, the SOL is not a devolved competence – the Scottish Government has no formal role in determining what occupations are considered in shortage in Scotland. Scottish Ministers cannot currently commission the MAC to consider changes to the Scottish SOL and the Scottish Government is only able to contribute to MAC calls for evidence as a stakeholder in the same way as any other individual or body can respond.

The White Paper reaffirms the UK Government's intention to end free movement and the unworkable commitment to cut net migration to 'tens of thousands' has exacerbated the urgency to mitigate the impact on Scotland.

As outlined in our submission to the MAC *on the contribution of EEA citizens to Scotland* [6] and our discussion paper *Scotland's Place in Europe: People, Jobs & Investment* [7], the UK Government's drastic migration reduction strategies have the potential to seriously harm Scotland's prosperity. The contribution of migration to Scotland's economy and demographic profile is crucial, and relatively more important than it is to other parts of the UK. Recent data published by the National Records of Scotland (NRS) shows that 7% of Scotland's population is made up of non-UK nationals [8], many of whom fulfil vital roles in sectors integral to Scotland's economy, including the NHS.

It is increasingly clear the UK Government's immigration policy does not address our economic, demographic and social needs and our 2018 discussion paper *Scotland's population needs and migration policy* [9] outlines how differentiation within the current framework could mitigate some of the impact. A key recommendation in that paper was to give the Scottish Ministers a formal role in deciding on the Scottish Shortage Occupation List.

The idea of regional differentiation on migration within the UK framework is not novel. In the first years of the new Scottish Parliament immigration being a reserved power did not stop a cross-party consensus emerging that, because the migration needs of Scotland were distinct from those of the rest of the UK, the policy solutions for Scotland should be distinct as well. This difference led to the Scottish Executive of the time working to introduce Fresh Talent [10], a post-study work visa scheme that allowed international students to stay in Scotland after they had completed their studies in order to seek work and make a contribution to Scotland's economy. This differentiation of migration policy for Scotland was intended to both support economic growth and mitigate demographic pressure. Fresh Talent recognised that different parts of the UK had different needs and expectations of migration.

Whilst the current Scotland SOL has also attempted to allow for differentiation, it is insufficient in its current form to fully accommodate Scotland's distinct labour-market needs. To address this failing, a collaborative assessment and restructuring of the current mechanism and scope of the list is urgently required to be more accurate and responsive to Scotland's distinct needs.

In 2008 the MAC produced a report titled 'Skilled, Shortage, Sensible: The recommended shortage occupation lists for the UK and Scotland' [11]. Chapter 11 of this report titled The Scotland List outlined the request for a Scottish specific SOL and referenced the UK Border Agency's (UKBA) consultation document on the Points Based System (2005) which set out Scotland's specific need for managed migration.

The UKBA report cited a need for Scotland to address its predicted population decline and change its demographic profile for reasons of economic growth and social development. They highlighted Scotland's ageing population and shrinking working age population as detrimental for public services as well as long term economic development.

The MAC report highlighted that, due to the smaller population in Scotland and the resultant difficulties with sample sizes, top down approaches to investigating skills shortages would not be possible, as is undertaken for the UK SOL. They therefore highlighted that bottom up evidence, meeting with stakeholders in Scotland, was necessary. The Scottish Government believes that the period of one day to one week that is spent by the MAC in Scotland during a review period is not adequate to appropriately assess the shortages present across the entire nation. We would therefore propose that a defined role for Scottish Ministers and Scottish Government in the review process would enable a more comprehensive review of need and a stronger evidence base for the SOL and Scottish SOL.

Shortly after the outcome of the EU referendum, the Scottish Parliament's Committee for Culture, Tourism, Europe and External Affairs commissioned Dr Eve Hepburn to write a paper on *the options for differentiating the UK's immigration system* [12]. Dr Hepburn's independent findings were published in April 2017 and determined that increasing Scotland's input into UK immigration decision-making would better ensure that the current PBS is taking Scottish labour-market and demographic needs into account.

Specifically the report recommended increasing Scotland's representation and influence in UK advisory and decision-making bodies. Evaluating case studies on Quebec, Prince Edward Island, South Australia and Vaud, Dr Hepburn determined three areas where Scotland could have a greater 'voice' in UK decision-making on immigration:

Sub-state representation on the MAC, in order to advise on labour shortages and skills gaps in Scotland (and other regions);

Revising and expanding the Shortage Occupation List for Scotland, in order to make it more flexible to take account of current and future labour shortages; and

Increasing bilateral relations between the Home Office and Scottish Government, for instance through a Joint Ministerial Committee (JMC) on Immigration and regular meetings of civil servants.

The Scotland-only SOL is designed to enable Scottish employers facing labour shortages to fill these jobs with skilled third-country nationals. However, this list is currently very short, containing just two additional occupation fields to the UK-list (physical scientists and medical practitioners).

There is a strong argument to nuance the SSOL, by adding more jobs to the vacancies list in consultation with Scottish industry stakeholders, to take account of Scotland's skills shortages and dynamic economy.

The recently published London First report on *a fair and managed immigration system fit for the post-Brexit economy* [13] has highlighted the issue of the List's responsiveness to shifting market requirements. It notes that skills shortages can easily get out of step with real labour market need and are often based on evidence that is one or two years out of date and, inevitably, have a public sector administrative approach rather than an employer-led one. The reports key recommendations largely align with the Scottish Government's view that:

The SOL should move away from separate occupations and align with key growth areas and sectors as especially in new sector areas, occupation titles and needs shift quickly;

It should align with the essential labour needs of the country, taking into account the distinct needs of all four nations, and include medium and lower-skilled roles with a more streamlined and responsive process for adding and removing roles from the list;

Current criteria should be reviewed with appropriate exemptions from the salary threshold, such as roles paying under £20,155. Those at RQF3 and 4 should not be subject to the RLMT. Appropriate workers should be given fast-tracked access, recognising their crucial role in the economy;

There should be efficient feedback mechanisms for Scottish stakeholders and businesses to contribute evidence on labour market needs, taking into account Scotland's unique rurality challenges.

Assessing and improving the current mechanisms of the Scotland SOL is particularly relevant give the UK Government's intention to commission MAC to compile a such a list for Northern Ireland and consider whether the composition of the SOL needs to be different for Wales. Ensuring regional lists are adequately responsive to the needs of each nation, with meaningful and jointly formalised structures for devolved administrations to guide and influence their outcome, will be imperative not only for the prosperity of each nation but for the UK economy as a whole.

In the longer term, there remains a question about whether Shortage Occupation Lists are a helpful measure, or if there is a more systemic way to fix the problems they attempt to address. A substantive review is required to ensure all elements of the immigration system meet Scotland's needs. Our 2018 discussion paper outlines how concurrent and devolved structures of decision-making on immigration could work to better serve Scotland.

The White Paper outlines the intention for an enhanced role for the MAC. This expanded role includes the potential for an annual report including reviews of the SOL, SSOL and the newly proposed SOLs for Wales and NI. It also outlines the potential for an enhanced role for the chair and a change in the MAC's composition, status and role. We welcome the UK Government's commitment towards an evidence based immigration policy but it is important that the changes to the MAC genuinely deliver that aspiration.

We would therefore welcome meaningful engagement on the development of this enhanced role. We see this commitment as a valuable opportunity to broaden the expertise represented on the MAC. By enhancing the composition and remit of the MAC, the unique demographic and rural challenges that Scotland faces can be appropriately highlighted, assessed and mitigated.

Recommendations

The UK Government should review the administrative procedures around the SOL to give a formal role to the Scottish Government in commissioning and determining what occupations are in shortage in Scotland.

The SOL should be revised and expanded in order to make it more flexible to take account of current and future labour shortages by:
moving away from separate occupations and aligning with key growth areas and sectors, as especially in new sector areas occupation titles and needs shift quickly;
aligning with the essential labour needs of the country, taking into account the distinct needs of all four nations, and including medium and lower-skilled roles with a more streamlined and responsive process for adding and removing roles from the list;
reviewing current criteria with appropriate exemptions applied;
Developing efficient feedback mechanisms to allow Scottish industry to contribute evidence on labour market needs. This mechanism should allow for comprehensive and regular review making the SOL responsive to changing and emerging markets.

The UK Government should engage meaningfully with Scotland and the other devolved administrations when considering the enhanced role of the MAC and consider how the expanded composition, status and remit can be structured to maximise their needs.

RECRUITMENT, TRAINING AND SKILLS

Introduction

EU citizens are making a vital contribution to Scotland's economy. They are driving our population growth and ensuring that we have workers to meet the needs of businesses and the public sector. There are over 140,000 EU nationals across low, medium and high skilled jobs in Scotland’s economy, making up 6% of our workforce. The vast majority of EU citizens in Scotland are of working age (77%), and over three-quarters (79.3%) are in employment [14. Many are also highly educated - more than a third (37.2%) have a degree level qualification, compared to 26.9% of UK citizens in Scotland [15].

The Employer Skills Survey 2017 found, one in five employers (19%) employed at least one member of staff from an EU (non UK) member state. The survey results suggest 7% of the Scottish workforce in establishments with two or more staff were non-UK EU nationals [16].

Ensuring ongoing access to labour from across the EU under the free movement of persons rules is of fundamental concern to many businesses across the Scottish economy, as highlighted in our paper *Brexit: What's at Stake for Businesses* [17] . Businesses have repeatedly told us how they worry that any restriction on the free movement of EU labour could negatively affect their businesses, especially if it were to involve new administrative or bureaucratic requirements that would impose financial and/or other costs. For many smaller businesses, in particular, such restrictions make the recruitment of essential staff impossible. By applying the same restrictive rules to EEA migrants the UK Government are removing another valuable source of labour from smaller businesses and adding significant cost and bureaucracy to recruitment for all businesses.

There are concerns that negative rhetoric in the UK against migration may already be having an impact both on the willingness of individuals already in Scotland to stay and on those who may be interested in moving to Scotland. The Scottish Government is committed to making it clear that we welcome those who make a positive contribution to Scotland and earlier this year ran our *We Are Scotland* campaign on social media to emphasise our positive position on migration. However, we know that some employers are already seeing a downturn in recruitment from the EU.

There are particular sectors, regions and occupations that have higher than average (> 6%) concentrations nationals EU nationals – leaving them particularly vulnerable to the impact of Brexit [18]. According to Annual Population Survey, April 2017 – March 2018, 41% of all EU citizens in employment in Scotland work in three occupations: Elementary Administration and Service Occupations (23%, 26,200); Science, Engineering and Technical Professionals (10%, 11,500); and Textiles, Printing and Other Skilled Trades (8%, 9,000). Sectors, regions, and occupations with existing skills challenges are likely to see shortages and gaps exacerbated by a decrease in the availability of EU labour [19].

National-level skills gaps, shortages and under-utilisation have either sustained or modestly increased between 2015-17. These challenges and wider recruitment difficulties are likely to be a permanent feature of the Scottish labour market.

According to the Employer Skills Survey 2017 [20], the sectors with the highest density skills gaps in 2017 were:
Manufacturing (7.2%);
Hotels + restaurants (6.8%);
Wholesale and Retail (6.8%).

The sectors with the highest density of skills under-utilisation were:

Hotels + restaurants (17%);
Information + Communications (24%);
Arts and Other (14%).

The sectors with the highest density of Skills Shortage Vacancies (SSVs) were:
Business Services (37%);
Financial Services (34%);
Construction (34%).

The Employer Skills Survey 2017 [21] also highlighted:
A steep rise in vacancy levels among employers in Scotland from 54,000 to 74,000 between 2013-2015 a modest increase to 75,000 in 2017, maintaining the relatively high demand for labour;
The proportion of establishments in Scotland with skills shortage vacancies was sustained at 6% between 2015-2017;
The proportion of establishments reporting skills gaps in Scotland has risen from 14% to 16% between 2015-2017.

The Employer Skills Survey 2017 [22] found that 89% of employers who tried to recruit non-UK nationals to ‘hard to fill’ vacancies and 93% of those trying to fill skills gaps looked to EU nationals. The proposals in the UK Government White Paper effectively remove this as a separate route for filling these skills gaps requiring all employers to go through the Tier 2 route with the clear risk that Scottish businesses will therefore struggle to recruit the necessary skills and the Scottish economy will suffer as a result.

The Employer Skills Survey 2017 [23] highlighted that regions of Scotland face different levels of shortages as well as varying levels of density:
The regions with the highest incidences of Skills Shortage Vacancies were West Lothian, Forth Valley and West (all 9%), followed by Glasgow (8%).
West Lothian, Forth Valley and Ayrshire are those areas with the highest density of Skills Shortage Vacancies, with 38%, 35% and 33% density respectively.
West Lothian saw the highest incidence of skills gaps, followed by Fife and West.
West also sees the highest density of skills gaps (6.7%), followed by West Lothian (6.2%) and the Highlands and Islands (6.1%).

It should be noted that although the number of shortages and the density of these shortages is concentrated in the urban centres, shortages in rural areas can disproportionately affect communities.

Future jobs growth in Scotland is expected to be driven by Edinburgh and Glasgow cities. These two regions are expected to account for 83% of the net additional jobs in Scotland to 2027. Prospects for the major employment centres are positive, yet a number of areas face the likelihood of very low levels of employment growth. These areas also face the possibility of further population loss, exacerbating historic demographic challenges [24].

In the evidence provided below, we have drawn out some more detailed evidence on the contribution of EU citizens to certain important sectors, but the messages that the evidence illustrates are general across the economy. Those are, that workers from other EU countries make a vital contribution to the Scottish economy and the continued availability of such workers is vital to employers in all sectors, right across Scotland. Employers value the ability to recruit the right workers, with the right skills and experience easily. They are deeply concerned by the proposals to end free movement of persons as this will limit or curtail the supply of the workers they need, make the process of recruitment too burdensome and complicated (especially for smaller businesses) and mean that EU workers no longer see the UK as a desirable destination.

The sectors highlighted below are tourism and hospitality; cultural and creative industries; financial services; manufacturing and construction; digital and technology; third sector and housebuilding. The evidence also highlights the role played by EU citizens in sectors vital to the rural economy, namely agriculture, fisheries, agricultural processing, environment and forestry, nuclear decommissioning and waste management, logistics and passenger services. The response also highlights shortages in the public sector in education and early learning and childcare. The SOL currently relates to non EU/EEA migration, however, the Government's proposals for a single work based migration route mean that in future these sectors currently reliant on EU/EEA staff will in future need to look to the Tier 2 and the SOL.

Tourism and hospitality sector

Scotland's tourism industry is a key economic sector. Tourism delivers employment and enables economic development in some of our most remote locations sustaining often fragile communities. Around 206,000 staff are employed in the tourism industry right across Scotland, in 14,000 registered enterprises (accounting for around 8.0% of employment in Scotland). It generates around £4 billion in Gross Value Added (GVA - the measure of the value of goods and services produced) and has experienced year-on-year growth in GVA and turnover in every year since 2011 [25].

Within the Sustainable Tourism growth sector, 38.3% (79,000) of jobs were in restaurants and mobile food service activities, although this decreased by 3.7% from the previous year. Hotels and similar accommodation and beverage serving activities, represented another 24.3% (50,000) and 17.5% (36,000) of jobs in this growth sector respectively [26].

In his evidence to the Culture, Tourism and External Affairs Committee [27] Professor Manning stated that "every job in the hospitality sector makes the UK a more low wage, low productivity economy" while this could be argued, in a purely academic and theoretical sense, such a position views the sector in a vacuum and ignores the multiplier effect created by the tourism and hospitality sector, through enabling tourists to visit and spend their money in the local economy. The sector directly influences Scotland's international profile and premium market image and provides major support to other key sectors such as food and drink, retail, transport and construction.

The tourism sector is characterised by small and medium-sized enterprise (SME) employers (businesses with 1 - 249 employees). In 2018, SME employers accounted for 65% of tourism sector employment - this compares to 46% across the Scottish economy as a whole [28]. The sector also has high levels of part-time working, with 57% of employees in the sector working part-time, compared to 34% in the Scottish economy as a whole. [29]

Due to the existing challenges in recruiting to the sector, combined with the sector's high reliance on an EU workforce, the British Hospitality Association and KPMG report [30] that the hospitality sector will be more heavily hit than any other sector by restrictions to the availability of EU citizens, like those proposed.

Contribution of EU workers

The tourism sector is heavily and increasingly dependent on workers from other EU countries. In 2017, according to the Annual Population Survey [31] there were approximately 24,000 EU citizens working in tourism in Scotland - representing around 13% of all those working in the sector overall, with this share rising to 15.9% for the accommodation sector specifically, and 19% for the Hotels and Restaurants sector [32]. This compares to an EU citizens' employment share of 6.0% in the Scottish economy as a whole [33].

Skill levels of EU workers

It is difficult to directly measure the skills of the workforce across the tourism sector, and so qualifications are frequently used as a proxy for skills. The tourism sector has a relatively low qualifications profile, compared to other sectors [34] . The number of jobs requiring no or low levels of qualifications are, however, projected to decline and the proportion of jobs requiring high-level qualifications are projected to increase. The share of jobs in the accommodation and food sector that require individuals qualified to at least Level 7 in the Scottish Credit and Qualifications Framework (e.g. in customer facing and junior management roles such as travel consultants, operations managers, and deputy hotel managers) is expected to increase from 29% in 2012 to 45% in 2022. At the same time, the share of jobs held by people with lower qualifications is projected to decline [35] .

However, there will continue to be job opportunities in the sector for those with low or no qualifications. The industry argues, that it is a sector based on people skills and individual drive and favours people working their way up from the traditional entry level positions [36] Workers from other countries also bring other skills that are valuable to the industry, notably language skills.

The proposals to remove the so called low-skilled migration route afforded by free movement would, therefore, have a very significant impact across the sector, reducing the pool of available labour and leading to significant shortages.

Recruitment shortages

The tourism and hospitality sector already faces a challenge in recruiting enough workers to meet its needs, even within the framework of free movement of persons. Brexit, continuing uncertainty and the lower value of the pound have already led to a decrease in the number of applications from existing EU member states, heightening the impact of staff shortages.

The industry (as reported to the Minister for Europe, Migration and International Development at a round table event in Inverness on 10 December) have noted acute shortages across the sector, with a significant fall in the number of EU applicants (one hotelier noted a 24% drop; and the biggest recruitment company had seen the level of CVs held fall from 10,000 to 2,000 a month from last year).

It is anticipated that there will be a total requirement for 149,300 jobs in the sector between 2017 and 2027 [37]. The majority of these (90%) will be as a result of replacement demand, highlighting the often short-term and transient nature of some of the employment within the sector. Without access to the EU migrant workforce pool the sector will not be able to satisfy this demand.

The Employer Skills Survey 2017 [38] continues to note that the hospitality sector has the largest demand for EU employees (33%) to meet vacancy gaps. It is evident that these challenges would significantly worsen if it was more difficult for employers to hire workers from other EU countries to work in the tourism and hospitality sector, restricting the growth of the sector and its contribution to Scotland's economy. Any restrictions on low-skilled and unskilled work will have a particularly detrimental effect, given the numbers of entry-level roles in the sector that require few or no formal qualifications.

Analysis of the Employer Skills Survey 2017 [39] has found that employers in the Scottish 'hotels and restaurants' sector are already experiencing a range of vacancies, skills shortages and gaps. These gaps and challenges would significantly worsen if the current proposals to restrict EEA migration are enacted, restricting the growth of the sector and its contribution to Scotland's economy. Any restrictions on low-skilled and unskilled work would have a particularly detrimental effect, given the numbers of entry-level roles in the sector that require few or no formal qualifications.

Roles highlighted by the sector for inclusion on the SOL:
Specialist chefs (5434) – executive chefs, head chefs, sous chefs and specialist chefs;
Waiting staff/sommeliers (9273)
Assistant chefs (9272);
Receptionists (4216);
Reservations (7219);
Porters and other hotel workers (9279).

Specialist chefs are currently included on the SOL and this shortage continues despite this intervention. Anecdotal evidence from the industry suggests that the proposed reduction in free movement will impact on all levels of staffing across the tourism sector. While we are responding from a Scottish perspective, we understand that these roles are also shortages at a UK level.

Reasons for shortages

There are many existing vacancies in the hospitality sector and these are already proving hard to fill despite existing initiatives in place to attract workers. Scotland's tourism and hospitality is spread throughout Scotland. Around a fifth of those employed in the sector work in rural areas. A British Hospitality Association (predecessor of UK Hospitality) survey [40] had found that 60% of its members cited a lack of applications from UK citizens or a lack of interest by the local population as a reason for the number of EU citizens employed in the sector. Migrant workers are already, by definition, mobile for economic purposes and many roles are currently filled by workers from EU countries and further afield.

Many jobs in the sector could be characterised as so called low-skilled, or requiring fewer qualifications, and would be particularly negatively affected by restrictions on so called low-skilled migration.

A recent survey of the sector in Argyll and Bute [41] noted ongoing recruitment difficulties affecting between 40% and 50% of all businesses. Businesses surveyed reported both a lack of applicants and a lack of good quality applicants. Some of the issues identified included suitable accommodation and challenges getting people to relocate. For this reason, sparsely populated areas like the Highlands and Islands are disproportionately reliant on EU citizens who are willing to relocate to these areas and will be significantly damaged by the proposed ending of free movement.

Action being taken

The Employer Skills Survey 2017 [42] found establishments in the Hotels and Restaurants were among the most likely to have taken steps in response, with 89% having done so. 50% of establishments had provided training towards nationally recognised qualifications.

Our national tourism strategy, *Tourism Scotland 2020* (TS2020) [43], was first published in June 2012 and a refreshed version published in March 2016. It set out a collective ambition of private and public partners for Scotland to be a destination of first choice for a high quality, value for money and memorable customer experience, delivered by skilled and passionate people. The shared ambition was to grow visitor spend by £1 billion to 2020. The Tourism Skills Investment Plan (SIP), revised in 2016, is a key component of TS2020. It highlights skills issues, and shortages in some key roles, facing the tourism sector across the board and will focus on the delivery of four strategic skills priorities: improving management, leadership and enterprise skills across the sector; supporting the development of professional and digital skills for all in the sector; ensuring staff at all levels understand and are able to respond to visitor needs and expectations; and raising the attractiveness of the sector.

Scottish Government is supporting employment opportunities in the sector, and in the Programme for Government this year, we have committed to developing a campaign to promote tourism as a career of choice. The Scottish Government's tourism team is currently consulting with key partners.

In addition around 3,000 Modern Apprenticeships are delivered annually within the Tourism and Hospitality Sector in Scotland funded by Skills Development Scotland (SDS).

The Springboard Charity continue to deliver a range of initiatives supported by industry, SDS, local authorities and Developing the Young Workforce (DYW) groups, designed to promote the sector as a career of choice and support people into work in the sector. Springboard initiatives include the Future Chef programme, Hospitality Takeover days with schools across Scotland and the development of a network of industry ambassadors trained to work with young people.

The industry (UK Hospitality) has also stated that wages within the sector have also increased, due to competition, as a means of attracting workers to the sector. However, they have also stated that the increased payroll costs are impacting on the viability of businesses. It also noted, that while productivity was increasing in some city centre businesses, the nature of the sector, with SME's the majority, seasonality and unpredictable demand, meant that staff need was harder to predict than for other sectors.

Cultural and creative industries

Scotland's creative industries are a major economic contributor and help shape our cultural identity and international reputation.

They include industries with their origin in individual creativity, skill and talent, as well as those with the potential to create wealth and jobs through the development, production or exploitation of intellectual property. The sector in Scotland is generally regarded as being made up of 16 industries - advertising, architecture, visual art, crafts & antiques, fashion & textiles, design, performing arts, music, photography, film & video, computer games, radio & TV, writing & publishing, libraries & archives, software/electronic publishing and cultural education.

It is estimated that the creative industries in Scotland contributed £4.3 billion in Gross Value Added in 2016. In 2016 77,000 people were employed across the sector. [44] . Whilst the majority of jobs are concentrated in Glasgow, Edinburgh and Aberdeen, Dundee and East Dunbartonshire also have higher than average share of sectoral jobs.

The sector is dominated by small enterprises with 12.7% of the 15,505 registered enterprises having zero employees (i.e. operating as sole traders) and 28.1% in total have fewer than five employees [45].

Workers from other countries make a significant economic contribution to the sector. Artists from overseas contribute to our unique culture and world leading festivals, allowing Scottish cultural organisations, our screen sector and our creative industries to recruit the best talent from as wide a pool as possible. At the same time free movement of persons allows Scottish artists and cultural practitioners to take their work to audiences throughout the EU, exporting our culture and supporting domestic industry through touring and working in other parts of the world, and making it easier for such work to come to Scotland.

The culture and creative sectors are highly international in their outlook. Cross-border collaboration between artists and other creative professionals is fundamental to the free flow of creative and cultural ideas and expression and, ultimately, the continued development of the sector. The international nature of the sector is demonstrated in the high proportions of non- UK nationals across many sub-sectors. An immigration system that made transnational cultural collaboration and exchange more difficult could have a significant impact on the vitality and strength of the Scottish cultural sector.

Contribution of EU workers

According to the Annual Population Survey 2017, there are 7,000 EU citizens working across Scotland's creative industries, accounting for 5.4% of employment in the sector [46] .They comprise a large number of performers within Scotland's national performing companies - as high as 38% of the performers employed permanently by Scottish Ballet and 21% of the Scottish Chamber Orchestra.

The highly specialised and expert nature of the roles and the skills required of each individual contributes significantly to each companies' high international standing. Careers in these sectors of the performing arts are highly international and artists have a significant degree of mobility.

Skills needs

The potential impact of Brexit on skills needs for the creative industries was set out in the Creative Industries Federation's Brexit Report from October 2016 [47] . There are long-standing skills shortages within the creative industries that workers from other EU countries currently help to address. The current Shortage Occupation List includes 17 creative industries occupations, demonstrating that, even with freedom of movement within the EU, there are already notably significant skills shortages [48].

Freelancers are of particular importance within the creative industries due to a range of factors including the time-limited nature of performance runs, productions and exhibitions; travel requirements for international touring and the high levels of innovation in the sector, which require people with specialist skills and the organisations who employ them to have high levels of international mobility. Yet freelancers from outside of the EU often cannot access Tier 2 visas, since, by the very nature of their employment, they lack a sponsor to support their application. Free movement of people is therefore an important route into the UK for the skills that freelancers bring - 6.2% of freelancers in the UK's creative industries are EU citizens [49] .

With respect to students studying courses related to the creative industries, EU citizens account for a particularly high proportion of student numbers. Glasgow School of Art, for example, has around 16% of its student body made up of students from other EU countries [50] .

Skills Development Scotland note that overall, while higher and further education courses related to the creative industries were popular, there has been a decrease in Scottish students studying related subjects in Scottish colleges and a smaller decrease in universities. By contrast, the numbers of those pursuing modern apprenticeships in the creative industries has increased [51].The routes for bringing more people, including more UK-born people, into the sector, and ensuring that they have the skills needed for success, is therefore mixed.

The National Performing Companies have suggested that Brexit could also have an impact on the career pathways from training into professional performance that currently exist. Students who train at the Royal Conservatoire of Scotland (RCS), for example, will often pursue a portfolio career working with both Scottish companies and companies from other countries. Similarly, international students at the RCS will develop connections in Scotland that support the rest of their careers. These international connections support the health of the Scottish cultural sector as a whole. Proposed post-Brexit changes to the immigration system will reduce the range of career pathways open to students in creative education in Scotland, potentially reducing the attractiveness of the sector as a whole.

The introduction of a £30,000, or similar level, salary requirements would have a significantly detrimental effect on this sector, creating a barrier against recruitment from other countries and potentially excluding many highly-skilled professionals from the cultural and creative industries [52], given relatively low salary levels in the sector.

Recruitment Shortages

The following table shows the most recent figures provided for numbers of performers from UK, non-UK EU and the rest of the world employed by four of Scotland's National Performing Companies.

	UK nationals	EU nationals	Other Non-UK nationals	% of EU nationals
Scottish Chamber Orchestra	22	7	5	21%
Royal Scottish National Orchestra	58	7	6	10%
Scottish Ballet	17	14	6	38%
Scottish Opera	145	6	1	4%
Total	242	34	18	12%

The current SOL includes:
Artist (3411)
Dancers and choreographers (3414)
Musicians (3415)
Arts officers, producers and directors (3416)
Graphic designers (3421)

The sector have highlighted that these job roles still require intervention to manage shortages and therefore should remain on the SOL. If they are removed from the SOL these should be included on the SSOL. In addition to the companies currently referenced under Musicians (3415), the Royal Scottish National Orchestra and the Scottish Chamber Orchestra should be incorporated.

Action Taken

There are currently efforts ongoing to address the existing skills shortages and gaps within the creative industries in Scotland. Skills Development Scotland worked with industry to publish a *Creative Industries Skills Investment Plan* in June 2015 [53] . This work sets out a number of actions to address existing skills needs. It estimates that each year between 2015 and 2025, the creative industries would need an additional 4,300 individuals entering their workforce to support growth [54]. Given existing shortages, and the current significant proportion of EU citizens filling key roles in the sector, the current proposals will have a significant negative impact on the availability of skilled workers.

The key driver of growth in the creative industries has been digital. Sub-sectors of the creative industries with a particularly strong digital focus are amongst those employing the highest proportions of workers from other EU countries and many also have the highest proportion of skills shortages and gaps, such as in the games and software industries, for example. Skills Development Scotland have developed a separate Skills Investment Plan for the digital sector [55] which sets out actions to address skills needs in support of that sector's continued development. As outlined above a separate digital response will be submitted to this call for evidence.

Manufacturing and construction

Scotland has a long and proud manufacturing heritage and manufacturing is seen as a key driver of our future prosperity. Manufacturing covers a diverse range of activities from engineering to textiles and represents over 50% of our international exports.

The sector's international exports decreased by 0.6% over the period 2015-2016, from £15.5 to £15.4 billion. Exports to the rest of the UK decreased by 6.2% over the same period, from £11.3 billion to £10.6 billion [56]. Manufacturing products accounted for 48% of business expenditure on research and development (BERD) in 2017 (£594 million) [57] .

While manufacturing has undergone a significant transformation in recent decades, with increased globalisation and greater use of digital technology, it remains a high skills and high wage sector, with earnings that are above the Scottish average. The sector employed 185,000 people in 2017, accounting for 7.2 per cent of total employment in Scotland [58] and contributed £14.2 billion in Gross Value Added to Scotland's economy in 2017 [59].

In 2017 [60], 8.0% of employment in the manufacturing sector was made up of workers from other EU countries. The industry employed 16,000 EU citizens, accounting for 12.0% of all EU citizens employed in Scotland. Many workers from other EU countries in the manufacturing sector are employed in the 'manufacture of food products' industry: 32.4% of employment in that industry is made up of workers from other EU countries, employing 8,000 EU workers, accounting for 5.7% of all EU workers in employment in Scotland.

The construction industry is a core sector of the Scottish economy, providing infrastructure to businesses across all sectors of the economy. It makes a major contribution to the economy, employing 146,000 in 2017 [61] and contributing £8.5 billion in GVA to the Scottish economy in 2017 [62]

In 2017, 3.0% of workers in the construction sector came from other EU countries. Around 6,000 EU citizens worked in the sector, accounting for around 4.1% of all EU citizens in employment in Scotland [63]. In Construction, over a third of all vacancies were reported to be hard to fill for skills-related reasons.

House Building

Evidence provided to the Short-Life Working Group on housebuilding sector skills, due to report in February, highlights that the industry has lost EU citizens over the last 18 months in the areas of bricklaying, joinery and site operatives.

Skilled Trades roles continue to have the highest density of skill-shortage vacancies (more than two in every five Skilled Trades vacancies were skill-shortage vacancies).

The sector has found the following roles hard to fill:
Bricklayers (5312)
Joiners (5315)
Electricians (5241)
Qualifications for bricklayers and joiners are usually in the form of apprenticeships.

Electricians require professional body accreditation, in Scotland this comes from Electrical Contractors' Association of Scotland. The sector has so far struggled to maintain supply to meet the growing skills demand.

The sector had previously been supplied by mostly Polish labour but changing economic conditions, a weakening pound and the environment created around Brexit has led to a significant reduction in the Polish born workforce. The roles are now more commonly filled with Romanian citizens. Therefore removing a so called low skilled route will significantly affect supply.

Financial services

Scotland is internationally recognised as the most important UK financial centre outside London and the South East, with a breadth of services including global custody, asset servicing, banking, investment management, corporate finance, general/life assurance and pensions.

The sector's international reputation is based on the skills of their workforce, boosted by access to the best international talent. For the sector to maintain its reputation it must be able to continue to attract talented individuals with the expertise to support both strong established businesses and the new opportunities emerging in fintech.

Financial services remains a vital contributor to the overall success of the economy of Scotland as a whole. This is due not only to its importance in terms of employment and direct contribution to output, but also because of the impact the financial sector has on economic growth.

Scotland's Financial Services industry contributed 6.6% of Scotland's Gross Value Added in 2017 [64] . Out of the 12 UK regions and nations, Scotland ranked second on this measure in 2017. It employed 83,000 people in 2017 [65].

In 2017 (according to APS figures), 5.9% of employment in the Banking, Finance and Insurance sector was made up of workers from other EU countries. The sector employed 24,000 EU citizens, accounting for 17.9% of all EU citizens in employment in Scotland [66].

The *Financial Services Skills Investment Plan* [67] notes that employment in the financial services sector in Scotland is expected to grow in the period to 2022. Driven partly by globalisation and technological advancements, there is a long-term trend towards higher level skills and qualifications in the industry, which is set to continue. 47,500 job opportunities are expected in the period to 2022 through a combination of expansion and replacing those who have left the sector; 62% of those roles are expected to be at managerial, professional and associate professional level.

The Skills Investment Plan notes that the financial services sector has a higher proportion of workers in managerial, professional and technical roles than the Scottish average - 52% in financial services compared to 41% in Scotland as a whole. The restructuring of the financial services sector since the financial crisis has led to a requirement for more individuals in highly skilled roles.

Digital and technology

Scotland is home to a vibrant digital technologies industry with over one thousand companies engaged in a variety of activities from software development and IT services to digital agencies, games development and telecommunications. The digital technologies sector contributes significantly to employment and economic growth in Scotland. It is estimated that the sector contributed £5.1 billion in Gross Value Added to the Scottish economy in 2015 [68] . Over half of employers (51%) recruited tech skills in 2017, with high levels of tech skills recruited by financial services sector and tech sector employers when compared to other sectors [69].

Many of Scotland's digital technologies companies employ staff from other EU countries, some businesses are owned by EU citizens and EU students studying at Scottish universities are an important source of talent for the industry. Scotland's computer programming and consultancy businesses alone employed 3,000 EU citizens in 2016, which represents 5.8% of all employees in this sub-sector [70].

In a survey carried out by ScotlandIS, the trade association for the digital technology industries including software, digital agencies, telecoms and IT services in Scotland, 75% of respondents said they expected a negative, or very negative, impact on their access to skilled staff following Brexit [71] .

The shortage of skills required to meet the demand for digital roles is restricting growth within the digital sector and the wider economy. In 2014, there were 35 vacancies per 1,000 jobs in the digital sector and creative industry compared to 24 per 1,000 jobs across the economy as a whole, according to a UK study [72].

The Digital Economy Business Survey shows that only 26% of firms in Scotland were fully equipped in terms of having the skills to meet their digital technology needs, a decrease from 37% of businesses surveyed in 2014 [73]. According to a report by Ekosgen, 37% of businesses surveyed in Scotland had recruited Digital Technologies skills internationally, with 68% of those reporting Europe to be the top origin of recruits. Over half of those recruiting internationally report doing so to address a specific specialist skill or experience requirement [74].

A more restrictive immigration system would increase the existing difficulty in recruiting skilled staff in the sector, further restricting potential for growth.

The third sector

Scotland has a strong and dynamic third sector, which plays a crucial role in the drive for social justice and inclusive economic growth, and is essential to the reform of public services and to the wellbeing of our communities.

There are over 40,000 third sector organisations in Scotland [75], from small charities run by volunteers to multi-million pound educational establishments.

The third sector plays a vital role in Scotland's communities, working with them to tackle tough social issues at source. Many of the services provided by the third sector - particularly in health and care delivery - rely on workers from other EU countries. Moreover, the corollary between inward migration and population growth and economic growth is of crucial importance to Scotland's third sector, as the strength of the economy has a direct bearing on levels of public spending, disposable income and charitable giving and, subsequently, funding for many third sector organisations.

The third sector is also highly international in their outlook. Over a third of Scottish charities are engaged in European projects, networks, collaborations or learning exchanges. In areas such as poverty and inequality, refugee assistance, climate change and social enterprise, European countries have admired Scotland's approaches to tackling big issues. An immigration system that made transnational collaboration and exchange more difficult could threaten the strength of the Scottish third sector as a whole and reduce its level of innovation.

A number of third sector bodies are also highly reliant on volunteers. In our previous evidence to the MAC we provided a case study on Camphill Scotland. Salary thresholds are clearly not relevant when considering volunteers but the impact of many of these individuals is crucial and should be recognised. Relying solely on salary as a measure of an individual’s worth to their community, business or public service ignores the contribution of people in key economic sectors, the third and public sectors.

Scotland's rural economy

Rural areas are home to one fifth of Scotland's population [76]. The importance of migration in meeting Scotland's demographic and economic needs is felt in particular in our rural communities, where although numbers may be small compared to large urban concentrations, the positive contribution made by EU workers, and their families, can be especially significant.

Approximately one third of Scotland's registered small and medium-sized enterprises are based in rural areas, with some 51,000 businesses operating in a diverse range of sectors including agriculture and forestry, tourism, the manufacture of high-tech niche products and creative services [77]. Many are reliant on straightforward access to a workforce that includes workers from other EU countries, in order to meet their current and future labour needs and would be disproportionately disadvantaged by any restrictions which meant they were unable to hire the labour that they needed.

Low unemployment in rural areas mean workers often need to be sourced from outwith the local area, driving the need for migrant workers. Scotland's unemployment rate, at

3.7%, is slightly lower than the UK average of 4.1% [78], and employment rates in rural areas are significantly higher than in urban areas, partly reflecting a long tradition of people leaving rural areas in search of employment: Orkney Islands has the highest employment rates of all Scottish local authorities, at 89.1%, while Dundee City has the lowest at 65% [79].

The impact of low unemployment is disproportionately felt on producers and industries primarily based in rural areas including agriculture, and food and drink. Data from the Federation of Small Businesses found that 1 in 4 (26%) of small businesses in Scotland employ EU citizens, rising significantly in rural areas, with 41% of small businesses in the Highlands and Islands employing EU citizens [80].

Some of the sectors in rural areas most reliant on non- UK workers include horticulture, dairy farming, fisheries and meat processing, often in casual and seasonal employment. On the 1 June 2018, there were 66,600 people working on agricultural holdings across Scotland. Worker-occupiers and their spouses made up 56% per cent of the total workforce; regular staff accounted for 31% and casual and seasonal workers 12% [81].

The section below sets out more evidence on the contribution of workers from other EU countries to primary sector rural industries, which employ more people in remote rural (17%) and accessible rural (12%) areas than in the rest of Scotland (0.4%) [82].

Many roles within these sectors are below the skill level required to obtain a Points Based System Tier 2 visa to work in the UK and are often seasonal. Research by the National Farmers' Union (NFU) conducted shortly after the referendum found that employers were already having difficulty in recruiting the necessary EU labour, anecdotally stakeholders have highlighted these issues as continuing month on month since Brexit [83].

Providing comprehensive data on the contribution of seasonal workers from other EU countries to the Scottish agriculture sector is challenging, in particular given the short-term nature of their employment which means such workers are often absent from official statistics.

Agriculture

Horticulture

One of the sectors most heavily reliant on seasonal EU labour is horticulture. Taken together, horticulture and the potato industry make a significant contribution to Scottish agriculture, accounting for £530 million of output 2017. The soft fruit sector, in particular, has been growing across the UK and in Scotland. Strawberry consumption alone in the UK as a whole has increased by 150%, up to some 168,000 tonnes between 1996 and 2015, of which some 70% was grown in the UK. Raspberry consumption was up to 123%, with around 60% grown in the UK (according to figures from the UK Department for Environment, Food and Rural Affairs) [84] .

The soft fruit and vegetable sectors are particularly reliant on seasonal migrant labour, with the vast majority of workers in the sector coming from overseas, and only a very small proportion (often only the business proprietors) who are permanent British workers. The greatest demand for workers comes during harvest in summer and autumn (roughly between May and September), although there are other roles required earlier in the year.

It is estimated that up to 22,000 non- UK seasonal workers are employed on Scottish farms every year, the majority of whom come from other EU countries [85]. 6,700 seasonal workers are needed annually in Scotland's soft fruits sector alone. The General Manager (William Houston) of Angus Growers highlighted "We need 4000 people in Angus" and their most recent study shows they employed 4112 seasonal workers and only 11 of those were British nationals [86]. When this data is considered in relation to the proposed SAWS pilot, the 2,500 visas for the whole of the UK are shown to be woefully inadequate. In 2017, there were between 2000 and 2500 vacancies in Scotland alone, these shortages occurred even with free movement enabling recruitment, with the UK Government ignoring the need for labour in roles below £30,000 a year these shortages will grow exponentially. Action is needed urgently to address this need.

Many growers in the soft fruit industry in Scotland have expressed serious concerns about the proposed limitations on easy access to seasonal labour will have on their businesses. The tight timeframes associated with the harvesting of fresh food have led some to highlight the possibility of fruit going unpicked and 'rotting in the field'.

"Access to labour is vital for Scottish agriculture, with sectors such as soft fruit and field vegetables being completely dependent on non- UK harvest workers" (James Porter, Angus soft fruits/ Growers and Chairman of the National Farmers' Union Scotland's (NFUS) Specialist Crops Committee [87]).

Research conducted immediately after the Brexit vote in 2016 found some evidence suggesting a labour shortage in the agricultural sector. The NFU found that the number of available labourers on British horticultural and potato farms declined throughout 2016 [88]. The research found labour providers increasingly unable to meet recruitment targets and that returnee workers were more likely to leave early or not return altogether, all of which contributed to the shortfall.

In July 2017 a survey conducted by the Association of Labour Providers found that 30% of respondents did not expect to be able to source and supply sufficient workers for summer 2017 peak season, with 45% reporting the same expectations for the 2017 Christmas peak [89]. Further, half of respondents felt that the quality of workers is "worse" than 12 months ago. Some soft fruit growers say they are even willing to move their business to countries such as Poland where they can access labour pools, should migration to the UK continue to dwindle and prices continue rising [90].

The evidence suggests that the need for labour could not be addressed by recruitment of local people alone, not least given the low unemployment that characterises rural areas.

The proposal for no so called lower-skilled migration route will prevent access to reliable, seasonal labour and will have a very significant and detrimental effect on the sector, reducing the size of the industry and reducing domestic production in favour of imports. Given the demand across Europe for seasonal agricultural workers, there is a risk that the UK Government's approach is seen as unwelcoming.

Dairy farming

The picture is similar in the Scottish dairy sector. According to the Royal Association of British Dairy Farmers (RABDF):

"If the Central and Eastern Europeans went back to their native countries then dairy farming would be in dire straits as so many farmers are now dependent on this migrant labour force" [91].

RABDF's migrant survey, carried out in 2016, found that 51% of respondents had experienced difficulty recruiting staff within the last 5 years, and 56% had recruited staff from outside the UK. The overwhelming majority of farmers (93%) said that overall, the use of EU labour had been a successful option for their farm. This was an increase in the number of respondents recruiting overseas workers compared to the 2014 survey, when 32% of respondents had recruited from outside the UK. The 2014 survey drilled down further to find out why farmers used migrant as opposed to UK labour:

"62% of cases said there was insufficient UK labour available, however there were also question marks about value for money whilst some had special attributes - it's a fact that many Central and Eastern Europe citizens are highly qualified and therefore provide excellent head herdsmen [92] ."

Half of the overseas workers employed by respondents in 2016 were highly skilled or mainly highly skilled in dairy.

Respondents expressed concern about the impact of Brexit on their ability to recruit and retain workers: 62% of respondents were concerned that Brexit would affect their ability to employ EU labour; 42% anticipated that retaining existing migrant labour would be an issue; 58% were concerned about their unit's financial viability due to labour shortage.

The domestic supply of workers in the sector is limited. Evidence suggests that dairy is an ageing and increasingly expensive industry to enter; an Agriculture and Horticulture Development Board (AHDB) study, which conducted a representative survey of 1230 UK dairy farmers, found that the majority of respondents were between the age of 50 and 59 with only 2% of those surveyed under 30 and 10% under 39. The majority (72%) owned and occupied their farms [93] .

Meat processing

The red meat supply chain in Scotland generates an annual output of some £2.4 billion Gross Value Added, creating employment of in excess of 33,000 people, with migrant labour playing a key role in the sector [94] . Scottish abattoirs produce around 170,000 tonnes of beef, 26,500 tonnes of sheep meat and 25,000 tonnes of pig meat annually. Typically, around 23% of Scottish abattoir annual turnover is derived from meat sales to customers within Scotland, two-thirds of the turnover comes from sales to customers in the rest of the UK and 10% of turnover, some £75 million per annum, comes from international sales, according to data from the industry body Quality Meat Scotland [95].

The role of non- UK labour is of fundamental importance in the slaughter and processing sector, including in veterinary inspection. According to Food Standards Scotland, across the UK 75% of abattoir vets are from other EU countries [96] , and the proportion is similar in Scotland. Abattoirs are unable to operate without a vet, so although numbers are small overall the contribution made by those roles to the meat processing industry in Scotland cannot be overstated.

In a survey carried out amongst members of the Scottish Association of Meat Wholesalers, 52% of the unskilled workforce, 44% of the skilled workforce and 16% of supervisory and management staff were non- UK nationals.

As with many sectors in the rural economy, recruiting the necessary labour from the local area is challenging, with industry citing both a lack of suitably skilled local labour, particularly in butchery, and many roles perceived as undesirable by potential workers (due, for example, to shift-working and unsocial hours, the work being physically demanding and a work environment that includes working in chills or areas kept cool for food safety reasons, and a need to wear specialist personal safety equipment) [97]. Low unemployment in rural areas associated with meat processing as again another factor limited the local labour supply.

Seafood

Around 15,000 people were employed in sea fisheries, aquaculture and seafood processing in Scotland in 2014, generating £952 million Gross Value Added in the same year.

There are around 230 fish processors in Scotland, employing approximately 7,000 people, the majority in shellfish processing. The processing industry is concentrated in the Grampian region, which makes up 51% of all of the processing units and provides 62% of Scottish processing employment [98].

Dependency on non-UK nationals is higher in Scotland than the rest of the UK with case study analysis of Scotland's large processors estimating 58% of their workforce are EEA nationals [99] . This is in comparison to estimates of 46% of the UK seafood processing workforce coming from other EEA countries [100] . In some regions in Scotland this dependency is even higher, for example it is estimated that 70% of all staff in seafood processing in Grampian are non- UK nationals. Mixed species processing factories had the highest dependence on EEA workers, who represented 64% of those employed in the businesses. This survey focused on large processors only [101].

The sea fisheries industry is also highly dependent on overseas labour. In 2015 the Scottish Government carried out the second *Sea Fisheries Employment survey*, based on face-to-face interviews with skippers on the quay side of all major ports and the majority of small harbours in Scotland, collecting data from 222 vessels, representing 15% of the Scottish fleet. At the time of survey, 71.9% of the crews came from the UK, 8.1% from EEA countries, and 19.3% from non- EEA countries. Of those reporting EEA nationality, most came from six countries - Ireland, Latvia, Lithuania, Poland, Romania and Spain. Crews from non- EEA countries came from four countries - Philippines, Ghana, Sri-Lanka and Belarus [102].

Most of the surveyed EEA and non- EEA crews worked on Scottish vessels as engineers (charged with the running of the vessel and its equipment) and deckhands (working on the deck with the fishing gear and clearing and sorting catch) [103].

Both seafood processors and sea fishing businesses have told us about the challenges of recruiting UK nationals to work in the sector, given the widespread perception that roles represent the so-called '3Ds' of jobs (dirty, dangerous and dull). The low unemployment in many of the rural areas where seafood processing and sea fishing posts are based also contributes to the limited pool of available labour. Many business owners in both sectors have cited potential business failure if overseas labour could not be accessed. This was especially the case in sea fisheries. A few processors have suggested that there is some potential to shift to more technical solutions (more automation and use of robots) but this would require considerable lead in time and investment [104].

Recruitment Shortages

We commissioned *research into the Seasonal Agricultural Workforce in Scotland*, [105] March 2018 which showed that 9,255 international seasonal workers were employed on Scottish Farms in 2017, and highlighted that around 15% further vacancies were unfilled.

Shortages for inclusion on the SOL have been highlighted in the following roles:
Managers and proprietors in agriculture and horticulture (1211)
- Veterinarians (2216)
- Farmer, crofter, herd manager (5111)
- Veterinary Nurses (6131)
- Farm workers (9111)

Skills needed

Veterinarians are highly qualified and must be registered with Royal College of Veterinary Surgeons. Vets are required to maintain animal population health, to certify all meat produced and exported (abattoir vets) and to deal with communicable animal diseases (govt. vets). These are vital roles that are extremely reliant on EU citizens.

The work of Veterinarians in maintaining the animal health system is supported by Veterinary Nurses, these are essential roles that often fall below the £30,000 threshold. Entrants require GCSEs/S grades or an equivalent qualification. Entrants must obtain employment at an approved veterinary practice to gain practical experience and tuition with an employer for a minimum duration of two years. Candidates must also pass professional examinations before qualifying as a veterinary nurse.

There are not formal qualifications for the agriculture and horticulture sector, however many managers have BTEC/SCOTVEC or SQA level qualifications. European migrants in agriculture management play a key role in managing the diverse seasonal workforce in particular research evidence has shown that they often work managing other migrant workers drawing on common language skills, making their presence as important as the staff they manage.

Prior practical farming experience is normally needed for any managerial role and often preferred in all farming roles. Training is typically received on-the-job and via a variety of vocational qualifications in agriculture, including a variety of NVQs/SVQs in Agriculture are available at Levels 1 to 4, together with BTEC/SCOTVEC diplomas and apprenticeships in some areas.

Without skilled managers capable of communicating with seasonal staff the most profitable parts of the agricultural sector – fruit and horticulture cannot function. There is an especial dependency in the horticulture and fruit sectors on seasonal agricultural labour for the harvest as there is not a technological solution to soft fruit picking.

Reasons for Shortages

The rural economy has a long history of skills shortages with many vacancies proving hard to fill. The attractiveness of entry level jobs in the sector to the domestic working population has declined, whether due to pay, working patterns, perceived lack of job progress or seasonality of businesses. As a result applications for the sector have declined especially among the domestic population. The growth in the sector has therefore been aided by free movement of workers from other member states in the EU.

The inherent rurality of employment in the sector and challenges around getting staff to relocate add to the recruitment challenges faced by the sector. EU citizens coming to the UK for employment are often much more willing to move to rural areas for work.

As with tourism and hospitality, as competition for labour increases, businesses may look to increase salaries and/or benefits, the additional costs associated may force others to pass these costs on to customers (impacting on competitiveness) and there is a risk that many will go out of business.

Veterinarians are highly sought after internationally and therefore the UK must remain competitive in attracting veterinary staff. The proposed non-preferential system for EU migration will damage the UK's competitive advantage and result in significant shortages of qualified vets, it is therefore vital that these roles are included on the SOL to ensure the UK is recruiting sufficient levels of skilled staff to sustain business need.

Action Taken

The agricultural wages legislation governs the setting of a separate and higher wage structure for wages for agricultural workers at all levels in Scotland. As a result research has shown that wages in the sector are higher than in England where there is not an agricultural minimum wage.

Environment and Forestry

Shortages have been highlighted by the forestry sector for roles that are currently difficult to fill with the current domestic workforce and are likely to be affected by the proposed changes to the immigration system:
Tree planters (5112);

Tree nursery labour – planting and lifting young trees and packing ready for distribution (9112);
Forest machine operators - the personnel who harvest and stack the trees before being hauled to the processors (9112);

Tree planters and tree nursery labour are seasonal jobs, but the tree planting ‘season’ can last 9 months over winter and through spring/early summer. Estimates are that this may impact on less than 200 people, but without them there would be insufficient labour to grow and plant the trees we need to meet national targets. All businesses report that they try to recruit domestic labour but they rarely take up the work, applicants are of low quality and often have high turnover.

Royal Botanical Gardens Edinburgh has highlighted workforce risk arising from no freedom of movement of EU (non UK) nationals, currently the greatest risk is around its ability to recruit specialist scientific posts and lower paid ancillary posts given EEA profile of workforce which may impact on their ability to undertake future research work.

Nuclear Decommissioning and Radioactive Waste Management

Scottish Government is aware of shortages in nuclear decommissioning and radioactive waste management. Skills gaps in Scotland and the rest of the UK include: scientists, nuclear specialists including engineers, radiation protection specialists, radioactive contaminated land specialists, environmental professionals and welders.

Scotland has a complex nuclear landscape with challenging, long-term decommissioning and decontamination projects likely to continue within the next 20 – 30 years. Scotland could lose the ability to respond quickly and effectively to nuclear emergencies, should specialist skills shortages in radiation protection continue to rise.

We understand that complex nuclear sites like Dounreay have acquired specialists services of non-EEA workers (eg workers from Japan and Canada), making use of Euratom’s Common Market which allows the free movement of nuclear workers and professionals.

There risks associated with shortages in this sector which is likely to require further analysis in conjunction with industry and skills bodies such as Skills Development Scotland and the National Skills Academy for Nuclear.The Committee of Radioactive Waste Management (CoRWM) recently shared a report with Scottish Ministers suggesting further skills shortage analysis in relation to Scotland. It is therefore vital that the MAC engages with the sector to fully understand the extent of the shortages and which roles must be incorporated into the SOL.

Logistics and Passenger Services

Logistics Sector

The logistics sector employs approximately 2.5 million people across the UK. It is estimated that 11% of these are filled by EU nationals including 60,000 HGV drivers and 120,000 warehouse operatives [106].

There are already issues identified by stakeholders around the availability of skilled labour in the logistics sector, with a particular concern around recruiting qualified HGV Drivers where industry estimates that there will be a UK-wide shortage of between 35,000 to 60,000 drivers by 2020.

While the industry continues to work towards a long-term solutions, there is a huge risk that existing skilled labour shortages will be exacerbated if access to EU workers were to further reduce because of a No Deal Brexit, or through the proposals in the UK's Future Immigration White Paper. For example, the logistics sector typically has a higher age demographic with the majority of UK HGV drivers aged 45 or over (approximately 99% of UK drivers are aged over 25). In comparison, the percentage of EU nationals working within the industry aged over 45 is significantly lower, and so a reduction in this part of the workforce could disproportionately increase labour shortages [107].

There are also concerns regarding other essential occupations across the wider logistics chain such as fork lift drivers, warehouse staff, mechanics, as they also currently have a high proportion of EU nationals working in these roles. Detailed in the matrix below as an approximate breakdown of EU nationals working within a number of areas across the wider logistics sector.

Position	Total Number of EU Nationals	Percentage of Total Workforce
LGV Drivers (8211)	42,000	12%
Van Drivers (8212)	29,000	7%
Fork-lift Truck Driver (8222)	23,000	26%
Warehouse workers (non-managerial) (9260)	91,000	19%

Source: Repgraph analysis of ONS Labout Force Survey for Q2 2018

It would therefore be important to immediately review the current UK Shortage Occupation List to include HGV drivers and the other vital occupations in the logistics sector identified.

A number of other concerns have been raised by the Freight Transport Association, these include [108]:

90% of logistics jobs are so called low skill occupations and therefore would not be applicable under the Tier 2 immigration system.

88% of logistics jobs have a salary lower than the £30,000 threshold under the proposals by the UK Government e.g. the average salary for a warehouse operative and forklift driver is £21,000 and HGV Driver is £28,000; and

Concerns regarding frontier workers within the industry; for example many touring hauliers employ EU nationals that don’t live in the EU, they work under a UK contract and come to the UK to collect the HGV then travel around Europe for several months. There is a question mark over whether this practice can continue. Although the Future Immigration White Paper talks about existing contracts there is no mention for post-2020/21 regarding new contracts and therefore further clarification is required.

Passenger Services

Similar issues to the logistics sector were raised in regards to the bus passenger services. Specific occupations which were thought to be noticeably absent from the Shortage Occupation List yet vital to the continued operation of these services included:

Bus Drivers (8213)

Bus Mechanics (5231)

It was also noted by the Confederation of Passenger Transport that there was significant regional variation in the labour market needs for different bus operators. Therefore, any Future Immigration policy should be flexible enough to make sure these variances are addressed.

Scotland's public services

Public services and those who work in them are vital to the success of our economy and our society. Across the public sector EU citizens and migrants from outside the EU make a vital contribution, frequently filling skilled vacancies in hard-to-recruit specialisms and geographical areas. There are 16,000 EU nationals in employment in the public sector, which is just over 1 in 10 (12.1 per cent) of all EU nationals in employment [109]. The Employer Skills Survey 2017 highlighted that 3% of the public sector workforce are EU nationals and 15% of establishments employ at least one EU national. Although measures are being taken in many areas to increase domestic routes into these sectors, EU citizens continue to play an important role [110].

Education

Primary and secondary education

In October 2016 the Scottish Government and the Convention of Scottish Local Authorities (COSLA) submitted evidence to the Migration Advisory Committee (MAC), in response to the UK Government's partial review of the Shortage Occupation List (UK and Scotland only) Joint response to the MAC Call for Evidence on the partial review of the shortage of occupation list: teachers [111]. That submission highlighted the challenges in recruiting teachers in Scotland and requested further subjects be included in the SOL; these included Maths, Physics, Computer Science, Mandarin and the Sciences.

The recruitment and deployment of teachers is the responsibility of local authorities in Scotland, who have the statutory duty for education expenditure. A workforce planning exercise is carried out annually by the Scottish Government, in partnership with other stakeholders, including COSLA, the Association of Directors of Education in Scotland, the General Teaching Council for Scotland, teacher unions and representatives of universities to project the minimum requirements for the number of newly trained teachers. This draws on projections on pupil numbers, the relationship between teacher/pupil ratio and school size to produce an overall assessment of the demand for teachers, and an assessment of supply including those joining and returning to the profession, and those expected to come from overseas.

Providing accurate data on the numbers of teachers from other EU countries working in Scotland is difficult. There are over 1000 teachers (523 EU) registered to teach in Scotland from EU or non-EU countries (although we cannot identify how many of them are actually in post in Scotland)

Furthermore, current EU rules make it easier from teachers from other EU countries to work here - EU Directive 2005/36/ EC on the Mutual Recognition of Professional Qualifications allows for the straightforward registration of teachers qualified and registered in another European country. This Directive will no longer apply on its withdrawal from the EU. However, we will ensure that EU qualified teachers can continue to practice in Scotland post-exit from the EU.

We have introduced Curriculum for Excellence (CfE) which is designed to provide a coherent, more flexible and enriched curriculum from 3 to 18. The curriculum includes the totality of experiences which are planned for children and young people throughout their education, wherever they are being educated. Long term vacancies may affect a school's ability to provide a full curriculum.

We are taking measures to increase the numbers of teachers from within Scotland, continuing to increase student teacher intake targets and setting targets to train teachers in the subjects where they are needed most. Our recruitment campaign continues to help drive a 12% increase in post-graduate teaching applications to Scottish universities in 2018. *We are committed to supporting Education Scotland's lead role in national support for professional learning and leadership development for teachers and head teachers which includes fully funding the existing Into Headship, In Headship and Excellence in Headship programmes. Through Education Scotland we are developing an enhanced leadership support package with an investment of up to £4m over the next 3 years so that head teachers can access a programme of relevant and high quality professional learning.* Since 2013 we have invested approximately £3.2 million to support the universities to develop new routes into teaching to help address recruitment difficulties in the hard to fill subjects. This is additional to tuition fees and student support for these new routes. However, as with healthcare, increased recruitment in one sector merely increases pressure in other sectors, again highlighting the need for a whole workforce solution.

Nevertheless, there continue to be gaps, and universities are continuing to have difficulty meeting the student intake targets for teacher education. Early indications from university student intake figures for 2018/19 suggest that around 400 secondary places may be unfilled at this stage out of a target of 1750. Any restrictions on the ability to recruit from EU and international countries would further impact on student intakes.

Higher education

Scotland's higher education sector is home to 4 of the world's top 200 universities and a total of 12 in the world's top 5% of universities [112]. The sector generates £7 billion GVA to the Scottish economy every year. [113] Scotland's 18 higher education institutions employ 38,400 full time equivalent (FTE) staff directly. [114] 144,500 (FTE) jobs are supported when estimated wider impacts [115] are added, accounting for around 7% of all jobs in the Scottish economy. [116]

Universities also have a significant positive impact on their regional - as well as national - economy. Universities Scotland report that Dundee University's role in the life sciences cluster, for example, supports around 16% of jobs on Tayside.

EU citizens account for 12% of all staff (headcount) in Scottish higher education institutions (5,500 staff members), rising to 19% (3,900) of academic staff and 27% (1,700) of research-only contracted staff. [117] There are 14,700 EU domiciled undergraduates at Scottish Higher Education Institutions. EU domiciled students accounted for 16% of the postgraduate research students in Scotland.[118] The number of students in Scotland benefitting from the Erasmus programme for study and/or work was 2,400 in 2015/2016 [119].

Staff from the across the EU and beyond add to the quality and diversity of the research base and are crucial to the research undertaken in laboratories. Access to the widest pool of talent from across Europe attracted by quality research has helped to strengthen the quality and impact of our research and international reputation.

Recruitment Shortages

The outcome of the MAC review was that Maths and Physics were retained on the SOL and Computer Science, Mandarin and Science were added. Unfortunately, the MAC withdrew Chemistry from the SOL which has not eased the challenge in Scotland.

We included detailed information on teachers in our evidence to the MAC for their EEA report. While there has been some positive movement; the 2018 pupil teacher ratio (PTR) for all publicly funded schools is 13.6, the same as in 2017; the total number of teachers increased to 51,959 – up 447 from 2017 and permanent vacancies have fallen from 816 in 2017 to 606 in 2018, there is still much room for improvement [120].

The latest statistics for student intakes into Initial Teacher Education and teacher vacancies shown below are evidence of the continuing pressures on local authority employers to recruit sufficient teachers for their schools. Recruitment of teachers remains a key challenge in both primary and secondary: the latter particularly in STEM, English, Home Economics and Modern Languages and we would request that special consideration be given to the addition of Gaelic onto the Scottish SOL.

In Scotland, teachers are split into two categories Primary Teacher (ONS role 2315) and Secondary Teacher (ONS role 2314). We also have special needs education teachers (identified in ONS as 2316), however in Scotland teachers are required to be registered with the General Teaching Council for Teacher in Scotland (GTCS) and there are only two categories, Primary and Secondary.

In relation to the existing subjects found on the SOL – maths, physics, computer science, Mandarin and general science – we would ask that chemistry be readmitted to the SOL. In addition we would require English, Home Economics, and Modern Languages be added in secondary and would seek to include all primary teachers onto the SOL and highlight a special request for teachers of Gaelic or Gaelic medium be admitted to the SOL.

Priorities

The 2016 MAC call for evidence specifically focussed on teacher shortages throughout the UK. We would therefore propose that teaching remains in the wider UK SOL. However, if these were not to be included in the UK SOL we would wish them to be included in the SSOL, such is the range of pressures on teacher recruitment.

The ideal scenario would see the following roles incorporated onto the SOL or SSOL:
Head Teacher, Primary (2317)
Head Teacher, Secondary (2317)
Teacher, Needs, Special (2316)
Teacher, Primary (2315)
Teacher, Secondary (2314)

Whilst we would wish to see all teaching post included in the SOL, our specific priorities in primary would be all primary including primary with Gaelic to ensure sufficient cover for remote and rural locations. For secondary, our priority would be the range of hard to fill subjects as evidenced by the vacancy and student intakes figures above.

The priority subjects identified by the Teacher Workforce Planning Process are:
Art
Business Education
Chemistry
Computing
English
Gaelic
Home Economics
Maths
Modern Languages
Physics
Technological Education

Gaelic

The Scottish Government is committed to supporting our indigenous languages, including Gaelic. Our principal aim is to increase the number of users of language and education is key in delivering this aim.

We are seeing increased demand across Scotland for Gaelic education and to meet this demand we need to increase the number of teachers. Despite efforts to grow our own within Scotland there is a need to maximise the opportunities that exist to recruit Gaelic teachers from such areas as Canada or Ireland. At the moment, there remain difficulties in successful candidates from these areas being granted visas despite having a paid position. For the continued success of Gaelic education, it is essential that we are able to maximise the opportunities to recruit and therefore having Gaelic on the SOL list is a must.

Skills needed

In Scotland teaching is an all-graduate profession. All teachers in Scotland are legally required to register with the General Teaching Council for Scotland (GTCS) whilst teaching in a Scottish school. To be eligible for registration with the GTCS in Scotland you must have a relevant degree and a recognised teaching qualification at SCQF level 9 or above.

Reasons for Shortages

The hardest to fill posts in Scotland are in both Primary and Secondary Teacher roles. As we expand below, the Primary shortages are related predominantly to location issues and Gaelic whilst shortages in the Secondary Teacher role are centred around specialist subjects, namely Science, Technology, Engineering and Mathematics (STEM), English, Home Economics and Modern Languages.

Each year the Scottish Government undertakes a teacher workforce planning exercise to project the minimum requirements for the number of newly trained teachers and agrees the student intakes targets with each individual university. Whilst primary student intakes remain stable, our vacancy surveys indicate that there remain specific primary shortages in certain geographical locations, especially the North East of Scotland and more remote and rural areas. Universities continue to struggle to fill all of their secondary allocations.

Whilst universities continue to meet the targets for training primary teachers as we say above, the deployment of teachers at primary role encounters difficulties around specific locations, particularly in the North East of Scotland. In line with other public sector employment in Scotland, staff recruitment in this area is affected by the unique circumstances of the North East. Despite the decline in the oil industry, the strong private sector market means that there are challenges in housing public sector workers, including teachers, and there are higher than average costs of living – even before additional factors of cost associated with rurality and extreme rurality (such as transport) are addressed. The demographics and aging population in other areas of Scotland, e.g. Dumfries and Galloway can also present a challenge in attracting younger teachers. Employers also find it extremely challenging to recruit Gaelic primary teachers.

The universities historically find it challenging to meet student teacher target intakes for key individual secondary subjects. STEM, English, Home Economics, Modern Languages and Gaelic. Intakes to university level training courses, which are a prerequisite for access to the teaching profession continue to be below the targets set (for individual universities) by the Scottish Government via the Teacher Workforce Planning Advisory Group.

The GTCS also highlighted 6 main reasons for shortages as:
Perceptions on the increased challenges of being a teacher.
Increased bureaucracy and workload across the teaching profession.

Wider range of other opportunities available, particularly for women as a result of the equalities agenda opening up more career pathways for women.
Working conditions, including pay levels
Attractiveness of appointments in teaching overseas.
Increased reluctance of "millennials" to commit to a lifelong, vocational career path.

Action Taken

Increased wages

The Scottish Government was the first to lift the public sector pay cap for teachers in the 2017/18 pay agreement. This awarded teachers 1% pay increase from 1 April 2017 with a further 1% uplift from 1 January 2018. Teachers in Scotland received the highest public sector pay award for public sector workers in Scotland for 2017/18.

Although shortages are recognised as a national issue, many Scottish local authorities highlight clear challenges in particular geographical areas such as the North East of Scotland - the island authorities, Argyll and Bute and Dumfries and Galloway, despite the existence of additional pay allowances for teachers working in remote schools or Distant Islands.

Investment in recruitment

The Scottish Government introduced the *Teaching Makes People* campaign in February 2017 [121]. It aims to increase the numbers of students undertaking PGDE secondary courses and attract career changer for hard to fill secondary key STEM subjects and English. To date the cost of the campaign has exceeded £1m. The *Teaching Makes People* campaign has been widely advertised digitally through social media plus radio and cinema.

In addition, a campaign will be extended to outwith Scotland from March 2019 using the wider Scotland marketing vehicle of *Scotland is Now* [122] at a cost of £250,000. Scottish Government has also invested over £2m in offering bursaries for key STEM subjects and English to further attract interest in undertaking PGDE courses to boost university intake figures. The first tranche of the STEM bursary scheme has awarded 107 bursaries of £20K each.

Investment in training

There are two traditional routes available to prospective primary and secondary school teachers. These are a four-year undergraduate programme or a one year Professional Graduate Diploma in Education (PGDE). Each programme combines theoretical understanding and practical school experience and leads to a Teaching Qualification (TQ) in primary or secondary education.

Intakes into teacher education programmes and the quality of this provision are key to the Scottish Government's ambitions for school education. In November 2016, the Deputy First Minister and Cabinet Secretary for Education and Skills announced plans for tackling teacher shortages by broadening routes into the classroom and speeding up the process for those wanting to join the profession, without compromising on the standard of teaching in schools. This range of alternative routes include:
moves to get new teachers into the classroom more quickly for priority Science, Technology, Engineering and Maths (STEM) subjects;
targeted help for former teachers looking to return to the profession;
the development of teachers able to work in both the primary and secondary sectors;
integrated routes combining post-graduate education with a trainee teachers probation year; and
more joint degrees in teaching and specialist subjects.

Annual spend across the whole range of teacher education is approximately £50 million. Within that total, an average of £1.5 million has been spent in each of the past two years on developing these alternative teacher programmes.
GTCS Intervention

The General Teaching Council Scotland have highlighted the following actions to encourage more teachers into the teaching profession [123]:
Ongoing engagement with representatives of military personnel and registration of spouses who are teachers relocating to Scotland;
Engaging with Scottish teachers teaching overseas to determine date of planned return to Scotland and preferred locations for teaching in Scotland;
Ongoing engagement with other teaching councils worldwide to attract teachers to Scotland;
Continuing to streamline the re-registration and Qualified Outside Scotland processed to make it easier for teachers to register and get into schools more quickly; and
Continuing to publish positive articles in Teaching Scotland and elsewhere to present a positive image of teaching as a career.

Potential BREXIT implications

There are currently 523 EU nationals registered with the GTCS, working as teachers in Scotland. The current permanent vacancy stats show as in September 2018, 606 vacancies and should these EU teachers leave Scotland it would almost double the pressure on teacher recruitment.

These serious ramifications on filling teacher posts would have a negative impact on the learning and teaching for all our young people and seriously impede our ambitions for closing the attainment gap and achieving excellence and equity in Scotland's schools.

There was a drop in the number of registrations with GTCS by teachers from EU Member States in 2018. It could be assumed that this was a result of the uncertainty about what will happen with BREXIT as the negotiations have progressed. The UK Government has already announced that those EU nationals currently living and working in the UK will be able to stay, however, it would appear that uncertainty about BREXIT has already had an impact on attracting teachers to come and work in Scotland. The number of applications has increased over the course of the year but has not yet reached the number from previous years [124]:
2015 – 128 applications
2016 – 159 applications
2017 – 185 applications
2018 - 178 applications

Early Learning and Childcare

The Scottish Government's transformational policy to increase the provision of funded early learning and childcare from 600 to 1,140 hours per year by 2020 provides a clear set of challenges and exciting opportunities for the Early Learning and Childcare (ELC) sector, none more so than recruiting up to 11,000 additional workers to meet this target. Our workforce modelling and projections from local authorities provide the figure of 11,000 additional workers required.

The Scottish Government's Programme for Government 2018-19 [125] sets out the significance of this policy to Scotland. The policy will save families thousands of pounds, help ensure every child in Scotland has the best start in life and help close the attainment gap, as well as supporting people in to employment.

A landmark deal with local government on a multi-year funding package to fulfil the policy was agreed in 2018, ensuring the delivery of expanded hours to parents and children. However, the challenges faced in recruiting up to 11,000 additional workers to the sector are significant. Those challenges are set out in the Skills Investment Plan (SIP) [126] which was developed by and for the ELC sector.

The SIP concludes that "recruitment remains a challenge and that the demand for additional workers will only be met by widening the scope of recruitment and utilising non-traditional pathways to careers in ELC". The SIP also includes an action plan to address the challenges of expansion and those actions designed to address the challenge of diversifying the workforce are well underway. We are funding a number of stakeholders to help us reach the communities that are currently underrepresented in ELC. That includes specific work to encourage those from ethnic minority communities, as well as males, to pursue a career in ELC. We have developed a nuanced national recruitment marketing campaign which targets specific audiences, including those who are currently underrepresented in the sector. Various pathways to a career in ELC have been developed and articulated via the recruitment campaign.

All this work is designed to shift long held societal views on the sector and we expect to see the fruits of the campaign in the coming months and years.

However, recruitment challenges remain and the volume of additional workers required in a relatively short timescale, to ensure rollout in 2020, means we must pursue all options to ensure the commitment is fulfilled. Although ELC has a highly skilled and qualified workforce, remuneration in the sector is such that we are competing against a number of other sectors, including hospitality/tourism and other parts of the care sector. That is compounded by the fact that the workforce remains overwhelmingly female at 98% [127]. Thus, although we are strongly encouraging a more diverse workforce, our pool of potential candidates is considerably less than other competing sectors due to the historical gender profile of the workforce.

Another potentially challenging issue is the fact that 6.8% of the current ELC workforce are non-UK EU nationals, which represents the second highest proportion in the social care sector [128]. The uncertainties around Brexit could have significant consequences for those already part of the workforce, but also for the potential pool of candidates who may wish to live and work in ELC in Scotland.

The ELC workforce is registered with the Scottish Social Services Council (SSSC) under three categories of worker. Those roles and the relevant qualifications required to undertake them are:

Support Worker:
NC in Early Education and Childcare at SCQF Level 6 (RQF Level 3)
SVQ Social Service (Children and Young People) at SCQF Level 6 (RQF level 3)
Practitioner:
HNC Childhood Practice at SCQF Level 7 (RQF level 4)
SVQ Social Services Children and Young People at SCQF Level 7 (RQF level 4)
Lead Practitioner/Manager:
BA Childhood Practice – (RQF level 7)

The Scottish Government is working to ensure that adequate provision of training is in place to support the volume of additional staff being recruited. We have also widened routes in to the sector with the introduction of Foundation Apprenticeships and a significant increase in the number of Modern Apprenticeships, as well as an increase in the financial support provided for the apprenticeships.

Those who are undertaking roles at lead practitioner/manager level must have at least 2 years' experience in the sector, hence anyone joining the sector right now, will only be working at support worker and practitioner levels. It is the **support worker** and **practitioner** categories which form the vast majority of additional workers required for the expansion programme and which we would like to see appear on the Scottish Shortage Occupation List.

The SSSC as sectoral body has responded to the MAC's call for evidence separately, but have not included ELC. That is specifically due to the stage of delivery we are at. With a multi-year funding package in place, local authorities have been making progress with recruitment since summer 2018 [129]. The SSSC report: Children's Services Workforce 2017 [130], presents an overview of services at December 2017 and therefore does not show the volume of vacancies that are now coming on stream and which we anticipate in the coming 18 months or so.

A quote below from our colleagues at the SSSC explains why they have not submitted specific evidence on ELC. That is, because of the timescales involved in figures being published, resulting in evidence for current vacancies not being reported until early 2020.

Quote from ELC regulatory body SSSC:

As the workforce regulator for Social Services the Scottish Social Services Council is actively working with the Scottish Government to support the policy of expanding the early learning and childcare workforce. The policy requires an unprecedented expansion of the current workforce. It is estimated by Scottish Government that an additional 11,000 staff will be required by 2020.

SSSC data confirms that vacancies within the early learning and childcare sector are above the Scottish average and the day care of children's services have the second highest proportion of non-UK EU workers 6.8%, (Ipsos-Mori report, July 2018) in the social service sector.

The SSSC did not include early learning and childcare data in our recent submission to the Migration Advisory Committee. This reflects the stage local authorities are at with the recruitment of additional staff required. As a result the children services data report published by the SSSC in January 2019 does not reflect the significant increase in staffing levels and vacancies we anticipate between now and August 2020. The SSSC also supports the inclusion of support workers and practitioners on the Scottish Shortage Occupation List.

Other Public Services

This response is submitted alongside separate analysis from colleagues in Health and Social Care. Health and Social Care is a key sector that Scottish Government wishes to highlight as a particular area of concern in relation to shortages. Shortages in this sector are becoming more apparent as a result of the UK Governments outdated immigration policy and unwelcoming approach to migrants.

The UK Government in response to growing vacancies in the NHS, was forced to exempt nurses and doctors from the Tier 2 cap. It is crucial that the UK Government listens to the needs of our NHS and provides the necessary routes to labour for this sector. In addition, the proposal to have no route for so called low skilled immigration will be catastrophic for the social care sector, a sector that is seeing increased demand from our ageing population. The MAC has highlighted their concern for this sector [131] , it is therefore, important that the UK Government listens to these concerns and the MAC presents an effective solution that will meet the needs of this increasingly pressured sector.

In rural communities the impact of shortages in public services can be is particularly significant. In Scotland where 48.7% of the country is sparsely populated [132]. Shortages in our public services could mean the difference between a vital service remaining open for the resident population and a significant reduction in living standards due to service closure. By removing access to free movement the government is risking condemning many communities to an inadequate level of service coverage. It is therefore vital that the system is responsive to the skills needs of public services, in particular those in rural communities.

MAC REPORT AND UK GOVERNMENT APPROACH

Scottish Government provided detailed evidence to the MAC on the positive impact of EEA nationals. The evidence collated by the MAC and detailed in the report were very clear about the positive impact of migration and went a long way towards dispelling some of the commonly held misconceptions about EEA migrants. This reflected our clear view that migration had brought benefit to Scotland.

However, we were disappointed in the conclusions that were drawn from this evidence and particularly by the lack of engagement with the demographic evidence we provided. It is also regrettable that both the MAC and subsequently the UK Government are suggesting significant changes to migration without undertaking any modelling of the impact on business or public services.

The Scottish Government is clear that the proposals set out in the UK Government's White Paper do not reflect the needs of Scotland's economy or communities. Modelling in the White Paper suggests that if the recommendations were introduced it would affect 85% of long term EEA inflows into Scotland.

Including EEA citizens within the current UK Government Points Based System (PBS) will have a significant detrimental impact on the labour supply. In addition to reducing overall access to labour this approach will disproportionately impact on Small to Medium sized Enterprises (SMEs). The Federation of Small Businesses has highlighted that 95% of SMEs have never made use of the PBS, as the majority have recruited EU workers from Scottish and UK labour markets (85%) [133]. SMEs in particular are prevented from accessing the labour they need through the UK immigration system due to the costly and complicated nature of the system. Ending freedom of movement removes a source of labour for these businesses and puts one more barrier to their success.

The White Paper proposes no route for what the MAC and the UK Government term ‘low skilled labour’ – a term which does not reflect the value many of these roles bring to the economy and public sector. The proposal to create a temporary short term workers route does not address the serious issues presented by the removal of a low skilled route. It is a short term solution that only postpones the inevitable damage to business. This proposal for a 1 year temporary visa also ignores the incredible contribution EU citizens have made to our communities, it reduces these people to a number and sends a message that they are not welcome. It creates a two tier immigration system encouraging exactly the type of short term migration that the public in the National Conversation on Immigration said that they wanted to see reduced. It also continues the UK Government’s policy of dismissing Scotland’s unique demographic needs.

According to Home Office data released in 2018 [134], net migration from the EU has continued to declined from the peak in the year ending June 2016 (+189,000) to +87,000 in the year ending March 2018, its lowest level since 2012. The number of EU citizens who came to the UK in the year ending March 2018 was 226,000. The number of EU citizens leaving the UK (138,000 for the year ending March 2018) has remained stable following a previous increase between the years ending September 2015 and September 2017. This data shows that there has been an increase in EU migrants leaving the UK since the EU referendum and a slowing of EU migrants choosing to come here to work and make their homes. It is therefore incorrect to assume that the current levels of EU nationals in the workforce will remain in the roles they currently fill and therefore we can expect the number of shortages to rise.

According to this data, there were approximately 112,000 family related visas granted in the UK, year ending June 18, this has fallen by 28% in the last decade. In a scenario where this doubles with EEA migrants included into the immigration system this makes approx. 224,000 family related visas UK wide. But it is important to note this is UK wide. In addition, there are no figures on the number of people on family related visas in the working population therefore it is impossible for us to assume they will be sufficient to fill the shortages suggested.

To date, Scotland has received over 2,450 refugees under the Syrian Resettlement Programme since October 2015. Home Office statistics published on 23 August 2018 show that of the 12,599 refugees, who arrived in the UK under the Programme up to 30 June 2018, 2,326 (18.5%) were received by Scottish local authorities. Refugees working in Scotland make a great contribution to our economy. However, refugees and asylum seekers come here because they are fleeing war and persecution in their countries of origin, not to seek employment. We do not offer a place of safety on the basis of any economic contribution they might make but because we have a moral responsibility to do so.

It is inappropriate to see asylum as a route for low-skilled workers, especially as many refugees bring a wealth of skills and expertise with them. One of the key issues for refugees is finding employment which matches their skills and experience. We are working to reduce the barriers to refugees accessing employment appropriate to their skills through the New Scots refugee integration strategy and initiatives like the Refugee Doctors Project.

In terms of work, asylum seekers are currently not allowed to work while their application is considered (except in certain very limited circumstances) – this can have significant impacts on their wellbeing and on long term career potential. Home Office reasoning for this position is “this is because entering the country for economic reasons is not the same as seeking asylum, and it is important to keep the two separate.” [135] Scottish Government believes that asylum seekers should have the right to work (although recognises that not all will be able to do so) and supports the objectives of the Lift the Ban campaign.

Following the publication of the MAC’s EEA report a number of stakeholders in Scotland highlighted concerns that the report had ignored evidence from Scotland and Scottish Government expressed similar concerns, specifically that our evidence on Scotland’s distinct needs had been ignored. Despite this we have again produced a detailed response on tight timescales to ensure that the needs of Scotland are appropriately represented.

Scotland’s Population Needs and Migration Policy

The EEA report concluded that a Scotland’s needs were not significantly different to require a differentiated system as the challenges that we face are similar to those faced by the North of England. While there may be similarities, the report ignores the reality of the presence of devolved administrations and the Parliament. Scottish Government has been clear that we need a differentiated approach to migration tailored to meet Scotland’s distinct needs. The argument that because other regions of the UK are also impacted disproportionately does not support the conclusion that no differentiation is therefore required. Indeed the acknowledgement of that differential impact would therefore appear to strengthen the case for a differential solution.

Scottish Government Proposal

Specifically the Scottish Government has set out detailed proposals for how a system tailored to Scotland’s needs could work.

The current UK immigration system is complex for applicants and employers to navigate, and places many administrative and financial burdens on them. The UK immigration system should be reviewed to make it easier to understand and comply with, for both applicants and employers; and to reduce the cost, including associated fees and charges, of applying for visas, leave to remain, and citizenship.

The Scottish Government would do the same with any tailored approach to migration for Scotland it was responsible for: ensuring a clear route that was easy to navigate, and that costs were proportionate, for both applicants and employers. The proposal set out in our discussion paper, which explored how the current immigration rules could be adapted to allow for a new route to live and work in Scotland, would do this in a number of ways including the creation of a new 'Scottish visa'.

Devolution of some aspects of the current immigration system could allow the Scottish Government, accountable to the Scottish Parliament, to set criteria for a new international migration route to start to meet Scotland's most acute needs. This would include restricting migrants to living and working in Scotland, and working with the UK authorities on control and enforcement.

No sponsorship role for employers

The visa category described in our discussion paper does not have a sponsorship role for employers, which would remove an administrative burden for small and medium enterprises. Instead an applicant-led points-based route could be created - similar to the 'points-based system' of other territories in their countries, including in Australia, and the previous Tier 1 general migration visa in the UK immigration system that the current UK government has withdrawn.

Applicants would acquire points by providing evidence that they met criteria in categories such as age, education, skills, earnings and assets, and English language. Scottish Ministers would set those criteria, to be approved by the Scottish Parliament, in consultation with employers to match requirements of the Scottish labour market. If an individual reached the points threshold and was offered a visa, they would then be able to seek and take up work in Scotland, with the condition that they reside in Scotland for the time they are under immigration control.

No administrative and financial burdens associated with Tier 2

Employers taking on someone holding this visa would not need to have a sponsor licence, as it would not be a sponsored visa. Scotland has a higher share of SMEs in the economy than other parts of the UK, and a lower proportion of Tier 2 sponsor licences. This route would help small and medium-sized businesses access skills and talent they are currently excluded from.

There would be no need to undertake the ‘resident labour market test’ when employing an individual under this route, as they would already be part of the resident labour market. We welcome the commitment in the UK Government Immigration White Paper to remove this test which is an unnecessary burden on employers.

The immigration skills charge would not be payable, as currently defined by the UK, as this visa route would not be within Tier 2.

This route would not require a certificate of sponsorship, and so would not be affected by the Tier 2 quota. We note that the Immigration White Paper commits to removing the Tier 2 cap but reaffirms the target to reduce migration to the “tens of thousands”. We have consistently opposed this and have outlined to the UK Government that if this were achieved, according to our analysis, it could cost Scotland’s economy more than £10 billion per year in reduced growth by 2040.

There would be no salary threshold to meet – although salary levels could be part of the points-based selection process. We welcome the consultation announced in the White Paper to review the salary threshold and will outline the evidence on the detrimental effect the £30,000 threshold has on Scottish business and for other stakeholders and providers.

An additional route for migrants and employers

If a Scotland-specific visa were to be created within the UK immigration system prospective migrants and employers would still have a choice about which route through the immigration system to pursue. A new Scottish visa would be in addition to, rather than in place of, existing visa routes. So an employer could continue to apply under a Tier 2 visa route if they required the ability to redeploy or relocate that employee permanently within the UK.

As noted, the Scottish Government proposals would add one significant new condition to visas issued in this way: the holders would be required to reside in Scotland for the time they are under immigration control.

This would be required: (1) to ensure that migrants entering through this route are encouraged to settle in Scotland for the long-term, to help address demographic changes that are more pronounced in Scotland; and, (2) in order that any tailored approach to migration for Scotland had the confidence of other parts of the UK, ensuring that individuals do not enter Scotland with the intention of living and working permanently elsewhere in the UK. The ‘high bar’ of the points-based selection process, and partnership working on monitoring and enforcement between the UK Government and the Scottish Government, would work to ensure that holders of this visa did not breach the condition to reside in Scotland, and that appropriate action was taken if they did.

Implementation, control and enforcement

Employer and public service checks: procedures that the UK Government has put in place already require employers and public services to check the immigration status of employees and service users. Such mechanisms would help ensure that migrants entering the UK through this route are compliant with the conditions of their visa, including restricting residence to Scotland.

Common Travel Area: partnership working in this way already exists within the Common Travel Area. Both the UK and Ireland operate their own migration systems in which UK visa holders are able only to live and work in the UK, and Irish visa holders are able only to live and work in Ireland.

Administration: recent devolution of powers to the Scottish Parliament have seen two models of administration. In one model, it would be possible for Civil Servants in the Home Office (through UK Visas and Immigration) to process and make decisions on applications under a Scottish scheme where Scottish Ministers have set policy and immigration rules. In another model, a Scottish public body could be identified or created to undertake this work directly for Scottish Ministers. Partnership working with HMRC on Scottish income tax, which they collect, reflects the first model. The creation of Social Security Scotland in relation to devolving social security benefits reflects the second. We would aim to consult on the most appropriate model for migration.

Regional examples: both Canada and Australia operate devolved regional control, to address specific economic and demographic circumstances, within a national framework.

We recognise that utilising a 'Scottish Visa' would not be an appropriate option for every employer but it would be an additional route for employers looking to recruit the staff that they need. The Scottish Government proposals would overall reduce the burdens faced by employers, and would particularly open access to skilled migrant workers for smaller business where the Tier 2 system is too costly or administratively complex. It would also offer a clear alternative to the confusing UK system - and instead one that was easy to understand and comply with.

CONCLUSION

This paper builds on the detailed evidence that the Scottish Government provided to the MAC in October 2017 to set out the vital contribution that workers from other EU countries and internationally are making to Scotland. It provides detailed evidence in relation to a number of sectors of the Scottish economy while also providing detail on how the SOL could operate in future and how a differentiated approach for Scotland could work.

This consultation is taking place at a time of potential significant change in the UK immigration system. It is therefore crucial that this consultation is the start and not the end of an engagement process with key sectors in Scotland. The tight deadline for consultation responses is likely to mean that some sectors will find it difficult to provide detailed evidence in the timescale. It is important though that the needs of these sectors are not overlooked and therefore crucial that the MAC supplements this consultation process with a proactive engagement process with key sectors and employers.

Whatever the outcome of this consultation process it is important that the process for reviewing the SOL is also reviewed specifically to ensure that there is a formal role for the Scottish Government in commissioning and determining what occupations are in shortage in Scotland and to ensure that the process for reviewing the SOL is flexible and responsive to shifting needs.

FOOTNOTES/ REFERENCES

- “The contribution of EEA citizens to Scotland: response to the Migration Advisory Committee call for evidence”, available at https://www.gov.scot/publications/contribution-eea-citizens-scotland-scottish-governments-response-migration-advisory-committee-9781788514057/pages/1/
- “Scotland’s population needs and migration policy: discussion paper”, available at https://www.gov.scot/publications/scotlands-population-needs-migration-policy/pages/2/
- “The UK’s future skills-based immigration system”, available at https://www.gov.uk/government/publications/the-uks-future-skills-based-immigration-system
- “Scotland's Economic and Fiscal Forecasts December 2018”, available at http://www.fiscalcommission.scot/publications/scotlands-economic-and-fiscal-forecasts/scotlands-economic-and-fiscal-forecasts-december-2018/
- “Migration Advisory Committee (MAC) report: EEA migration”, available at https://www.gov.uk/government/publications/migration-advisory-committee-mac-report-eea-migration
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Scottish Government Response for Health and Social Care

About this Paper

This paper sets out the Scottish Government response to the Migration Advisory Committee's (MAC) call for evidence on the review of the Shortage Occupations List. The MAC was commissioned by the UK Government in June 2018 to undertake this review, partly in response to changes to the UK immigration rules exempting all doctors and nurses from the Tier 2 skilled migration visa cap. Rule changes came into force on 06 July 2018.

This paper:

Examines the main reasons for job shortages in health and social care and the measures that the Scottish Government has taken to address these shortages.

Sets out how our response to this call for evidence is informed by a number of broader considerations relating to the future of the UK's immigration system, and the terms of our proposed departure from the European Union.

Details the operating context for health and social care delivery in Scotland and how the workforce needs of the sector are dependent on our operational and service delivery priorities.

It should be noted that it is extremely difficult to provide effective responses to this call for evidence given the inherent uncertainty surrounding the future of the UK immigration system, and in particular the future role of the Shortage Occupations Lists.

Introduction: Our Position

In the referendum of 23 June 2016, while the UK as a whole voted to leave the European Union, a large majority in Scotland voted to remain part of it. The way in which the UK Government has chosen to respond to this is already having and will continue to have significant consequences for Scotland's prosperity, the rights and freedoms of its people, and the safety, quality and effectiveness of our public services. In December 2018, the UK Government published a long-anticipated White Paper on a future immigration system, which proposes major reform of how EEA nationals will be able to live and work in the United Kingdom. This wider political backdrop of policy reform and unpredictability frames the Migration Advisory Committee's (MAC) recent call for evidence on the Shortage Occupations Lists.

Fundamentally, there remain many significant uncertainties about the terms of the United Kingdom's proposed departure from the European Union. The White Paper on immigration itself makes clear that the UK Government's future immigration proposals are contingent on the UK leaving the EU subject to the terms of the current Withdrawal Agreement. Accordingly, the White Paper is predicated on their being an implementation period, during which EU citizens already resident in the UK (or otherwise arriving in the UK) will be subject to the EU Settlement Scheme and, in principle, have a route to permanence. It is not at all clear at this stage, that the proposed Withdrawal Agreement in its current form, will form the basis of the UK Government's departure from the European Union and accordingly, the White Paper on future immigration may need to be fundamentally revisited.

Despite this inherent uncertainty, colleagues from across Scotland's Health Boards and key social care stakeholders have again worked hard to compile the readily available evidence, in order to ensure that the needs of Scotland are appropriately represented.

Scotland is an outward-looking, welcoming and diverse country. We remain a country of inward migration, which brings significant economic benefit to every sector of the Scottish economy, and which helps us to address pressing demographic challenges associated with Scotland's ageing population and supporting our remote and rural communities. Nevertheless, migration is about more than mere economic benefit. Migration is about individuals and families choosing to build their lives here in Scotland and making a positive contribution to our culture, our communities and our society. Nowhere is this more evident than in the positive contribution made by migrants working in Scotland's health and social care sector.

In view of this, the Scottish Government believes that continuing the free movement of EU and EEA citizens is in the best interests of our health and social care sector, both for Scotland and for the UK as a whole. As such, EU citizens choosing to move to the UK would not be subjected to the restrictions of the Tier 2 visa system. Equally, the Scottish Government does not believe that a restrictive immigration model, which limits free movement and which subjects both individuals and employers to high fees and a heavy administrative burden is conducive to creating the dynamic, welcoming and responsive migration system that our health and social care system needs. The Scottish Government maintains that the least worst outcome, short of maintaining EU membership, is to continue to participate fully in the Single Market, as a member of the European Economic Area and to remain in the Customs Union, through which we would retain the free movement of people.

The health and social care workforce in Scotland benefits enormously from the contribution made by staff from across the European Union, and the Scottish Government has been consistently clear that free movement, and all the advantages it brings, should be allowed to continue in Scotland. For example evidence from the European Commission EC Regulated professions database (97 – 2016) demonstrates that in this period, across the whole EU 72,314 doctors applied to work elsewhere within the EU, of which 24,945 came to the UK. The equivalent proportion for nursing was equally high with 73,067 nurses moving within Europe, of which 34,678 came to the UK. The Scottish Government's Programme for Government 2018-19 notes that '*Inward migration is vital to meeting Scotland's economic, demographic and cultural needs. All of Scotland's population growth over the next 25 years is due to come from migration*.'

For migration from outside the EU, it is equally clear that a one-size fits all approach does not meet with Scotland's needs. The Scottish Government published a discussion paper on 7 February 2018 outlining Scotland's population needs and migration policy, which recommended devolving further powers to the Scottish Parliament to allow Scotland to take a differentiated approach. In doing so, that paper argued that major components of the UK Government's current approach to immigration policy were not propitious to the Scottish Government's domestic policy aims. In particular, that paper argued for the abolition of the net migration target and immigration skills charge in Scotland, alongside devolution of administrative responsibilities to the Scottish Parliament for determining the composition of the Scotland-Only Shortage Occupations List.

Overall, it is the view of the Scottish Government that the Shortage Occupations List is currently an inflexible tool. This is compounded by the fact that only Home Office Ministers can commission the MAC to review the lists, and only the Home Office can determine whether those lists are amended. The last wholesale review of the Shortage Occupations Lists took place some seven years ago. Whilst there was a partial review in 2015, it is clear that the current approach is not sufficiently dynamic or responsive. The Scottish Government would welcome the adoption of a revised approach, that reduced both administrative bureaucracy and financial burden, and which allows the Shortage Occupations Lists to be flexible to both local and regional challenges, as well as supporting a growing economy.

UK Government White Paper: A Future Skills-Based Immigration System for the UK.

Given the UK Government's stated commitment to a 12 month programme of engagement on the immigration proposals as set out in the White Paper it is regrettable that the consultation on the SOL is being viewed separately and to a different, significantly constrained timetable. A number of key sectoral interests have therefore indicated to us that they are finding it difficult to respond to the consultation within the time-frame. We would therefore call on the MAC to facilitate further engagement with stakeholders between this deadline and Spring 2019 to capture as much of this missing evidence as possible.

The existence of the Shortage Occupations Lists is intrinsically bound up with the restrictiveness of the wider Tier 2 immigration system. A case in point can be found in the changes to the Immigration Rules made in July of last year, which exempted all doctors and nurses from the Tier 2 visa cap. The rule changes followed a period during which applications for certificates of sponsorship had exceeded the monthly available allocation in every month since November 2017. The effects were felt across the UK economy. Arguably, the impact was most acutely felt within healthcare, where it was widely reported that in the 5 month period between November 2017 and April 2018, only 34% of all Tier 2 visa applications for doctors were granted, notwithstanding continuing acute shortages of medical specialists in parts of the health service across the whole of the UK.

It is welcome that the UK Government has accepted the recommendation of the MAC to permanently abolish the artificial cap on skilled migration. It is also welcome that the UK Government proposes to abolish the Resident Labour Market Test, which posed an unnecessary restriction on overseas employment and prolonged vacancy periods for posts that are critical to health services delivery.

Notwithstanding these changes, the UK Government's proposals for a future immigration system still present a number of acute risks for the future security and sustainability of the health and social care workforce in Scotland. These are a result of the narrow and arbitrary lens through which the proposals seek to define 'skilled migration', which do not take account of the social value of public sector employment, particularly that undertaken in the health and care professions. Further, these proposals seek to retain the principal elements of the current Tier 2 visa system, through which salary measures are used as an unreliable proxy for determining the skill level of a given job role.

Of particular and notable concern is the decision to retain the Minimum Salary Threshold at £30,000 for applicants seeking a Tier 2 visa. This decision is indifferent to the fact that many health and social care staff may routinely earn less than £30,000, including qualified nursing staff, social care staff, allied health professionals (such as physiotherapists and radiographers) and healthcare scientists (such as cardiologists, neurophysiologists, audiologists and nuclear medicine practitioners). It ignores the fact that even staff with a number of years post-qualification experience may not be earning in excess of £30,000 and it also ignores the fact that public sector employers, who are subject to national pay guidance and collective bargaining, are unable to unilaterally adjust pay rates in order to attract overseas staff to fill vacancies and skills gaps. Equally, the minimum salary threshold requirement for permanent residence

(£35,000) would exclude many health and social care professionals from ever being able to settle in the UK.

Table 1. Proportion of Workforce beneath £30,000 Salary Threshold and former £35,000 Settlement Threshold

	Estimated proportion of WTE earning <£30k	Estimated proportion of WTE earning <£35k
Healthcare Scientists	31.9%	49.9%
Nursing staff	45.4%	75.7%
Physiotherapists	25.0%	49.5%
Radiographers	27.2%	53.4%
Occupational Therapists	29.5%	57.4%
Speech & Language Therapists	21.4%	43.8%
Source: ISD national workforce data (WTE) as at Sep-18: https://www.isdscotland.org/Health-Topics/Workforce/Publications/2018-12-04/visualisation.asp These calculations are for basic pay (i.e. without on-costs or allowances, overtime etc.) using the 2019-20 pay scales. Radiographers include Diagnostic and Therapeutic Radiographers.		

The salary threshold of £30,000, will restrict access to new entrants within the professions outlined in Table 1. Staff earning entry level salaries, represent young, mobile, elements of the workforce, for whom relocation poses fewer challenges. These prospective staff have the potential to settle and establish careers within the NHS. Restricting the flow of entry level staff negatively impacts on international recruitment initiatives. Therefore, it is important that we make special provisions for new entrants, not only in terms of a reduced skills threshold as suggested by the MAC, but also a reduced salary. By extension, where Doctors appear on the list, we would support their inclusion at training grades of CT1 and above.

Similar detailed data on salaries is not readily available for the social service sector, but, data from the Annual Salary of Hours and Earnings, and estimates from stakeholders suggest that almost all social care staff earn less than £30,000. The Annual Salary of Hours and Earnings suggested that the median salary for UK care workers is under £15,000 per annum[188], while the average earnings in the adult social care sector in Scotland is believed to be approximately £18,400.[189]

[188] https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/careworkerssocashetable26

[189] https://data.sssc.uk.com/images/EconomicValue/The-economic-value-of-the-adult-social-care-sector---Scotland.pdf

A reduced skills threshold would potentially benefit the social services sector, as over 22,000 of the care and managerial workforce in social services in Scotland have to gain qualifications at RQF6, while from 2020 the majority of the care workforce will have to gain qualifications to RQF3[190]). However, Home Office guidance[191] currently defines the majority of care workers (SOC Code 6145) as "*lower skilled*" and ineligible for sponsorship in tier 2 (General).

The White Paper indicates that there should be some flexibility to the minimum salary threshold, to enable migration at lower salary levels. It is important that a reduction in the salary threshold is considered, to allow entry for appropriately skilled health and social services staff.

In addition to the proposed retention of minimum salary thresholds, it is concerning that the UK Government has accepted the recommendation of the Migration Advisory Committee not to adopt a so-called 'low-skilled' migration route. UK Government accepts that this is likely to have an acute impact on particular sectors of the economy, including social care. Nevertheless, the White Paper proposals for a transitional and time-limited route for temporary short-term workers will not address these likely impacts. It is the view of the Scottish Government that the proposal will categorically not meet on-going workforce needs across health and social care. In our view, such a scheme would promote instability and increase costs by encouraging higher levels of workforce turnover. Consequently, this would have significant negative impacts on health and social care employers, including health boards, local authorities and third and private sector care providers, not to mention the beneficiaries of health and social care. The transitional time limited route will also negatively impact the continuity of care, interfering with the relationships established between staff and service users, that form a key component of high quality, rights-based care provision.

Additionally, as the proposal stands, it is antithetical to the principles of fairness and dignity, offering applicants no right to access public funds, no ability to be able to extend their stay, no ability to switch to other visa routes, no ability to bring dependents to live with them, and no prospect of working towards permanent settlement. Not only is this grossly unfair, but the scheme will offer little or no incentive for international workers to seek to come to the UK in the first place and as such is not likely to provide the necessary assistance that employers will need as they seek to fill skills shortages across the sector. It must be recalled that there is significant interdependence across the health and social care system. Where shortages exist within the social care workforce that affect service delivery capacity, this can have a concomitant impact on service delivery within both primary and secondary healthcare services.

[191] https://www.gov.uk/guidance/immigration-rules/immigration-rules-appendix-j-codes-of-practice-for-skilled-work

Economic and Fiscal Impacts: The Net Negative Effect on Health and Social Care Services Delivery

Turning briefly to the UK Government's own analysis of the impact of the White Paper proposals, the Economic Appraisal appended to the White Paper acknowledges that moving to a system that applies both an RQF3+ skills threshold and a £30,000 salary threshold could reduce annual inflows of EEA long term workers by around 80%. Again, using the UK Government's own analysis, this could result in a reduction of between 200,000 and 400,000 fewer long-term EEA workers in the UK by 2025. This is predicted to have a negative effect on the UK's economic output with anticipated reductions in both aggregate GDP and GDP per capita. Again, the UK Government's own fiscal analysis indicates that this net reduction in EEA migration would have a negative impact on Exchequer receipts, particularly as EEA migrants tend to have a lower fiscal cost and present a greater fiscal benefit than the resident overall migrant population.

Analysis presented by the MAC indicated that an EEA national, aged around 20 and with no dependents, would only need to earn between £10,000 and £15,000 to provide a net fiscal contribution. This is supported by the Scottish Government's own analysis, which found that on average each additional EU citizen working in Scotland contributes a further £34,400 in GDP and that as there are some 128,400 EU citizens employed in Scotland, this implies that the total contribution to GDP is in the region of £4.42 billion per annum. The Scottish Government's own economic modelling also shows that on average, each additional EU citizen working in Scotland contributes some £10,400 in government revenue. The UK Government estimates that the cumulative fiscal cost to the exchequer of a reduction in EEA migrants is likely to be between £2 and £4 billion by 2025. Investment and reform is necessary in light of the predicted impact of Brexit on the health and social care sector, and the potential economic damage to Scotland's GDP of £12.7 Billion by 2030, compared with staying in the EU.

Equally, there are widely anticipated negative impacts on the labour market, which has implications for public services delivery, and which in turn will have impacts on the wider UK population. Worker inflows of EEA migrants (assuming an RQF3+ skills threshold and a minimum salary of £30,000) within medical services could be reduced by nearly 70%. This rises to almost 100% of EEA worker inflows into caring, leisure and other services. This does not necessarily represent a large overall proportion of the resident workforce, when contextualised in terms of the overall size of the health and social care sector. Nevertheless, the aggregate figures signally fail to account for the overall strategic and social contribution of specific posts to health and social care services delivery, nor do they factor in the impact that forestalling workforce supply will have in the context of workforce turnover. Once again, the UK Government's own analysis highlights that high, medium and lower skilled occupations are likely to face some labour market adjustment difficulties as a result of these immigration proposals.

Health Professionals, Therapy Professionals, Health and Care Services Managers and Welfare Professionals are identified as being posts of comparatively high relative value in terms of wages and overall contribution to public services, whilst also being likely to encounter labour market adjustment difficulties. A reduction in care services availability linked to staffing shortages would have significant knock-on effects due to the impacts on unpaid carers' ability to participate in the labour market, with over a third of carers reporting they have given up work to provide care.

In addition to the foregoing, it should be noted that a reduction in EEA worker inflows is likely to have a negative impact on the working age population overall. In Scotland in particular, all domestic population growth over the next 10 years is anticipated to come from inward migration. As Scotland is significantly less urbanised than the rest of the UK, the contribution of individual migrants to the communities in which they live, along with the wider contribution to public services delivery, society and Scottish culture, cannot be underestimated, and extends well beyond their work-related productivity. In particular, the pattern of population distribution and depopulation trends in remote and rural areas means that the value of migrants is more than their skills contribution to the labour market. Rural population sustainability is dependent on a progressive commitment to support rural services delivery, key services including GP and district nursing services, social care services and access to community hospitals are vital.

Health and Social Care Delivery in Scotland

Health and social care are largely devolved functions in Scotland. As such, the National Health Service (NHS Scotland) is structurally different from its counterparts in other parts of the UK. The vast majority of traditional health activity is conducted through NHS Scotland and a much lower proportion of healthcare activity is undertaken within the independent and voluntary sectors, as compared with England for instance. This means that the vast majority of the health sector workforce is employed by the public sector in Scotland. The private sector makes up 41% of the social services workforce, the public sector 31% and the voluntary sector 28%. However, this varies across Scotland, for example Orkney Islands Council employs 82% of the workforce in their area.

NHS Scotland is structurally organised into 14 regional (territorial) Health Boards, which are responsible for the protection and the improvement of their resident population's health and for the delivery of frontline healthcare services. Additionally, 7 special NHS Health Boards and 1 public health body, support the regional NHS Boards by providing a range of important specialist and national services.

As of 1 April 2016 specified health and social care functions have been delivered under the auspices of an Integration Authority, pursuant to the Public Bodies (Joint Working) (Scotland) Act 2014. There are 31 such authorities, who oversee an integrated budget and the commissioning of services for the provision of adult social care. In some instances, children's social work services have also been devolved to the integration authorities. Health and social care integration is the most significant reform to health and social care services in Scotland since the creation of the NHS in 1948. The clear aim of integration is to place a greater emphasis on joined-up services, anticipatory and preventative care, providing an improved service to carers and their families.

Health Boards in Scotland recruit locally to fill vacancies and are collectively the largest group of employers in Scotland; staff working for Integration Authorities may work variously for the relevant regional Health Board or Local Authority. With the exception of territorial boards operating in the central belt (NHS Lothian, NHS Greater Glasgow and Clyde and NHS Lanarkshire, all Health Boards in Scotland deliver their services within a remote and rural context, providing specialist, emergency and elective treatment to sparsely dispersed populations over large geographical areas.

The Current Shortage Occupations Lists – Clinical and Other Health and Social Service Professionals

The existing UK Shortage Occupations List specifies limited medical practitioner posts, in known areas of acute shortage, specifically radiology, emergency medicine and psychiatry. A number of allied health professionals, chiefly medical radiographers and healthcare science nuclear medicine practitioners are also included. All categories of nurse and all paramedics, are also included. Other than nurses working in the sector, the only social services workers included are social workers working in children's and family services.

UK Shortage Occupations List

SOC Code	Job Titles (& Further Criteria)
2211 Medical Practitioners	Consultants in the following specialties: Clinical radiology Emergency medicine Old age psychiatry CT3 trainee and ST4 – ST7 trainee in emergency medicine Core trainee in psychiatry Non-consultant, non-training, medical staff posts in the following specialties: Emergency medicine (including specialist doctors working in accident and emergency) Old age psychiatry Paediatrics
2217 Medical Radiographers	HCPC registered diagnostic radiographer Nuclear medicine practitioner Radiotherapy physics practitioner Radiotherapy physics scientist Sonographer
2219 Health Professionals not elsewhere classified	Neurophysiology healthcare scientist Neurophysiology practitioner Nuclear medicine scientist Orthotist Prosthetist
2231 Nurses	All jobs in this occupation code
3213 Paramedics	All jobs in this occupation code
2442 Social Workers	Only the following jobs in this occupation code social worker working in children’s and family services

The Scotland Only Shortage Occupations list additionally includes clinical oncology at consultant grade, alongside anaesthetics, paediatrics, obstetrics and gynaecology. Additional training and staff grade posts are also included. In terms of allied health professionals and healthcare scientists, the Scotland only list includes AHPs working in diagnostics radiology, as well as healthcare scientists such as radiotherapy physics practitioners and radiotherapy scientists.

Scotland Only Shortage Occupations List

SOC Code	Job Titles (& Further Criteria)
2211 Medical Practitioners	Jobs on the UK SOL. Consultant in clinical oncology, Non-consultant, non-training medical staff post in clinical radiology CT3 trainee and ST4 to ST7 trainee in clinical radiology All grades except CPT1 in psychiatry All grades in anaesthetics, paediatrics, obstetrics and gynaecology
2217 Medical Radiographers	Jobs on the UK SOL. Medical physicist Staff working in diagnostics radiology (including magnetic resonance imaging).

It has been argued that as the UK and Scotland only lists do not differ substantially, this demonstrates that there is limited regional variation in strategic workforce needs and shortages. In terms of health and social care however, the existing Scotland Only list not only includes additional consultant grade specialists, but it also includes additional staff and training grade posts, across some of our largest clinical job families, including anaesthetics and paediatrics. A number of these specialties continue to experience high vacancies and job shortages, underpinned by complex factors, as evidence set out in the forthcoming sections will demonstrate.

The Scottish Government's view, notwithstanding that doctors are currently exempt from the Tier 2 visa cap is that where there is continuing evidence of shortage within a specialty, then those occupation codes should be maintained on the Shortage Occupations Lists. Equally, given the highly competitive global market for consultants, alongside their lengthy education and training pathways, where there is on-going evidence of shortage at consultant grade, the SOL should routinely include training and staff grade posts within the same specialty. This would provide health boards with the necessary flexibility to consider reconfiguration of an existing service and think creatively about how they might respond to skills gaps. It would also allow boards to be more proactively responsive in a climate of on-going service transformation and allow boards to make best use of multidisciplinary teams.

Social Workers are on the UK Shortage Occupation List, with a job restriction to those working in children's and family services. The Scottish Government consider that Social Workers should be included in the Shortage Occupation List, or if necessary within the Scotland Only list, without qualification as to the specific nature of their role. The evidence we have indicates that it is social workers working with adults where shortages are greatest in Scotland.

Current Acute Shortages

Evidence from NHS Health Board returns, alongside vacancy information data which is published quarterly by NHS Information Services Division (the most recent data is accessible [here]) highlights the following occupations as having the most acute shortages

Health Workforce

Job title	Closest ONS job title	Closest ONS occupation code
Nurses & Midwives	Nurses	2231
Physiotherapists	Physiotherapists	2221
- Diagnostic Radiographers - Nuclear medicine practitioner - Sonographers - Radiotherapy physics practitioner - Radiotherapy physics scientist	Medical Radiographers	2217
Clinical Physiologists: - Cardiac Physiology		2219
- Neurophysiology		2219
- Respiratory Physiology	Respiratory Physiologists	2219
- Sleep Physiology		2219
- GI Physiology	Gastro Intestinal Technologists/physiologists	2219
- Vascular Science	Vascular technologists/physiologists	2219
Paramedics	Paramedics	3213
Doctors: - General Surgery	Medical Practitioner	2211
- Gastroenterology	Medical Practitioner	2211
- Psychiatry	Medical Practitioner	2211
- Radiology	Medical Practitioner	2211
- Histopathology	Medical Practitioner	2211
- Vascular Surgery	Medical Practitioner	2211

- Paediatrics	Medical Practitioner	2211
- Anaesthetics	Medical Practitioner	2211
- Oncology	Medical Practitioner	2211
- Urology	Medical Practitioner	2211

Social Care Workforce

Evidence from a range of sources suggests there are significant shortages in the following occupations.

	Job title	Closest ONS job title	Closest ONS Occupation code	Sector(s) most affected
	Social Workers	Social Workers	2442	Social work
	'Care at home support worker' or equivalent	Care workers and home carers	6145	Care at home
	'Care home support worker', or equivalent	Care workers and home carers	6145	Care homes for adults
	Nurse	Nurse	2231	Care homes for adults
	Housing Support Workers	Officer, support, housing & Worker, support, housing.	3234	Housing Support

The Principal Reasons for Acute Shortages

The principal job shortages across health and social care in Scotland reflect observable trends both UK wide and internationally, particularly in relation to medical specialists, nursing staff and general practitioners. Nevertheless, these observable market trends are also exacerbated by issues of population demography and the remote and rural context, which is a defining feature of the environment in which we deliver Health and Social Care services.

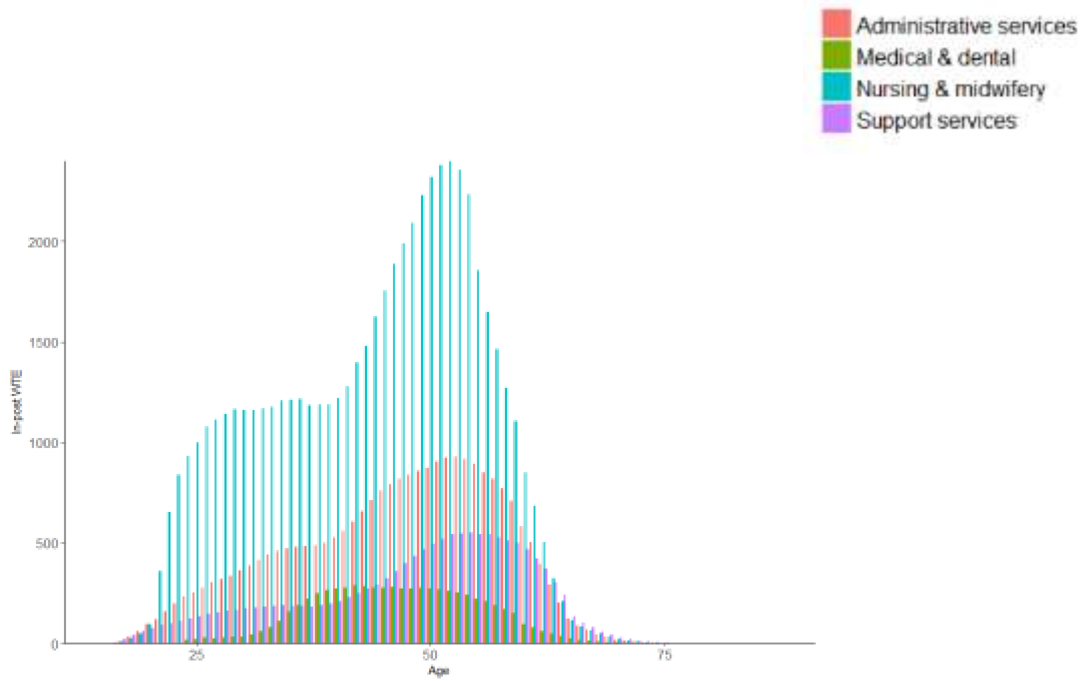
NHS Scotland and social care services are challenged with growing demand resulting from an ageing population, alongside other population health challenges, including an increase in the numbers of young adults living with disabilities. Demographic changes are anticipated to generate a 1% year-on-year, aggregate increase in demand for healthcare. Non-demographic growth, generated by increased public expectations, advances in new technology and service development, have been factored in to Scottish Government projections at 2-2.5% growth year on year. Pressures in the social care sector are likely to be slightly higher for a variety of reasons, including a focus on the very elderly, where demographic pressures are at their greatest. These factors continue to place pressure on training and recruitment, which we are actively addressing through workforce planning, to help ensure that our integrated health and care services have access to a workforce of sufficient size and skill.

Nursing and Midwifery

Statistics published by NHS ISD on 04 December 2018, indicate that at 30 September 2018, 3022.2 WTE vacancies existed within the Nursing and Midwifery workforce in NHS Scotland, equating to a vacancy rate of 4.8%. There are over 3,300 WTE more Nursing and Midwifery staff working in NHS Scotland than 5 years ago, with 5 years of consecutive growth. The number of community Nursing and Midwifery staff has increased by 473.1 WTE (4.1%) in the past year alone. Approximately 6,700 nurses work in the social services sector, the vast majority in care home for adult services.

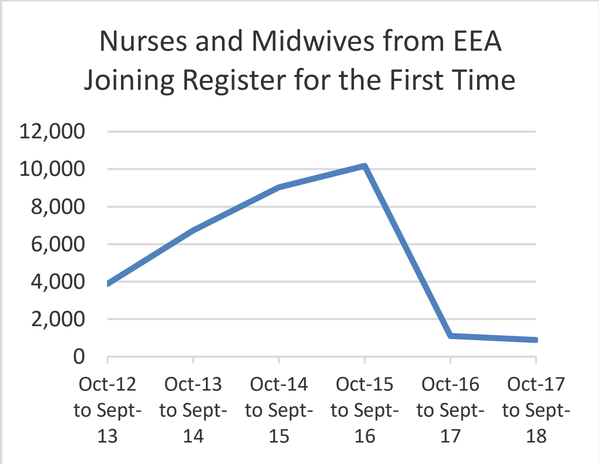
An ageing population with a significant proportion of the workforce approaching retirement, will inevitably increase turnover, and is expected to exacerbate existing vacancy issues. This issue is particularly prescient, and most prominent within the Nursing and Midwifery Job Family, as demonstrated in Fig. 1, where 19.2 % of the workforce is expected to retire in the next 10 years.

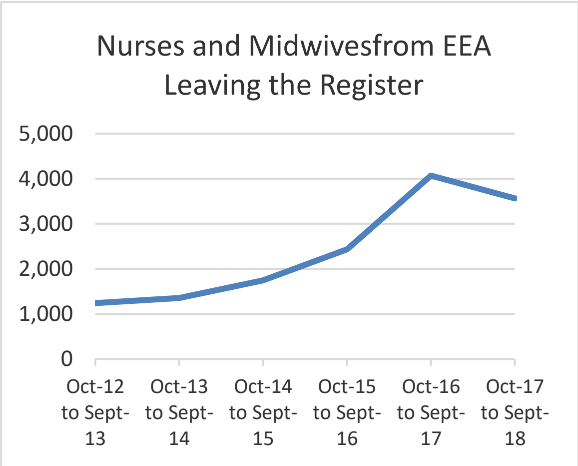
Figure. 1: Demographic composition of NHS Scotland workforce by job family, December 2018



Demographic challenges within Nursing and Midwifery are exacerbated by acute supply issues also. Notwithstanding their current exclusion from the cap, nursing staff may not meet with existing Tier 2 minimum salary thresholds, meaning that future changes to immigration rules could stifle supply. This coupled with projected reductions in the movement of staff from within the European Economic Area poses an acute threat. Data from the Nursing and Midwifery Council shows a rapid decline in the numbers of Nurses/Midwives joining the register for the first time following EU withdrawal (9,038 between Oct-14 – Sept-15; 888 between Oct-17 - Sept-18), alongside a notable increase in departures from the register, (1,743 between Oct-14 to Sept-15), as demonstrated in (Fig 2).

Figure 2. Nurses and Midwives Joining and Leaving the NMC Register





Social Care Services

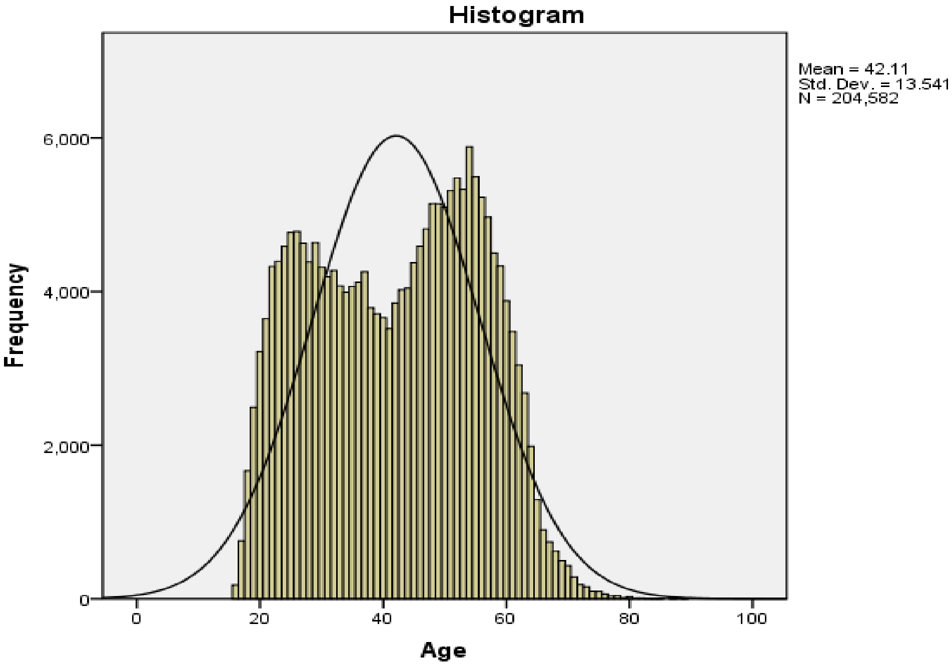
Statistics published by the Care Inspectorate and Scottish Social Services Council (SSSC) in January 2019, taken from 89% of services in Scotland, show that vacancy levels across social services are significant and increasing. 38% of services reported vacancies at the end of 2017, an increase of 2% points on the previous year. This compares to the 20% of all establishments reporting vacancies in Scotland. The rate of whole time equivalent vacancies for all social care services in Scotland is also increasing, up to 5.9% at end 2017 from 5.5% one year earlier. This is higher than the overall vacancy rate for all establishments in Scotland of 3.1%. Problems filling vacancies were reported by 45% of services at end 2017, up from 44% a year earlier. The main reasons reported for problems filling vacancies include :

Too few applicants with experience (58%)
Too few applicants (57%)
Too few qualified applicants (50%)

The social care sector benefits extensively from staff from across the EU. Robust estimates of the contribution of EU-nationals to the social services workforce indicate that 5.5% of adult social care staff in Scotland are from other EU countries.[192] However much higher figures are anecdotally reported for specific services and service providers, with stakeholders providing figures of 11-30% EEA nationals in some services at a recent discussion with Scottish Ministers.

The age profile of the workforce shown in Figure 3 indicates that a significant proportion of the workforce is approaching retirement, which will exacerbate vacancy issues.

Figure 3: Age profile of care service workforce December 2017[193]



1. **Social Workers**: The whole time equivalent vacancy rate for social workers in local authorities in Scotland was estimated by the SSSC as 5.7% in December 2017, with highest rates seen for those working with adults (7.6%) and in criminal justice (6.2%). Current shortages may in part be due to an increase in the proportion of social workers approaching retirement. There have also been lower numbers of qualifications and admissions to training programmes in recent years, possibly linked to a reduction in the numbers of qualifying undergraduate programmes.

2. **Nurses in social care**: 6,700 nurses, equivalent to 10% of NMC-registered nurses in Scotland, work in social care, the majority in care homes for adults. The majority are employed in the independent sector and an increasing proportion (30% as at December 2017, up from 27% in 2016)[8] are employed by nursing agencies. The

[192] https://www.gov.scot/publications/contribution-non-uk-eu-workers-social-care-workforce-scotland/pages/2/

[193] Adapted from Scottish Social Services Council (2018) Report on 2017 social service workforce data: https://data.sssc.uk.com/data-publications/22-workforce-data-report/178-scottish-social-service-sector-report-on-2017-workforce-data

percentages of non-UK EU nationals among NMC-registered nurses in the sector is 7.3%, while the percentage of non-UK EU nationals in nursing agencies is 16.5%. The nurse vacancy rate for care homes for adults was estimated by the SSSC at 14% in December 2017, while Scottish Care (the representative body for independent sector care providers in Scotland) estimated nursing vacancies among their members at 20%, with over 90% struggling to recruit nurses (2017 survey data). The main reason reported was the better terms and conditions available in the NHS. Overall nurse numbers and the ability to recruit from outwith the UK are therefore particularly critical for the social care sector.

3. **Care homes for adults care/support workers**: Care Inspectorate and SSSC reported data showed that 57% of care homes for adults reported vacancies at the end of 2017, with the same percentage reporting that they found vacancies hard to fill. The most common reasons reported were too few applicants (55%), too few applicants with experience (55%) and competition from other service providers (38%). The rate of WTE vacancies was 5.2%, up from 4.7%[8] the previous year. There are significant numbers of non-UK EU nationals (total number estimated of 3,150), making up 5.9% of staff in care homes for adults. This picture is supported by 2018 data from Scottish Care, covering around 10% of care home staff in Scotland. This showed that 61% of their care home provider members had care worker vacancies, with increasing numbers turning to agencies. 8.1% of staff were from outwith the UK, including 5% from the EU. 42% of services recruited from the EU for care roles.

4. Lack of ability to recruit non-UK nationals poses considerable risks to service provision. An earlier section of this response highlighted some of the challenges in relation to the salary threshold and the Home Office's guidance on skilled workers. Recruiting from outwith the UK is particularly challenging for smaller services. For example, half of all private sector care home for adults services have 49 or fewer staff. The equivalent figure in the voluntary sector is 21.[194]. A more complex process for recruiting from outwith the UK is likely to prove challenging.

5. **Care at Home and Housing Support care/support workers:** Care Inspectorate and SSSC reported data showed that 60% of care at home/housing support services reported vacancies at the end of 2017, with 57% reporting that they find vacancies hard to fill. The most common reasons reported were too few applicants (71%), too few applicants with experience (56%) and candidates unable to work the hours needed (56%). The rate of WTE vacancies was 7.4%, up from 7.1%[8] the

[194] https://data.sssc.uk.com/data-publications/22-workforce-data-report/178-scottish-social-service-sector-report-on-2017-workforce-data
[8] https://data.sssc.uk.com/images/StaffVacancies/Staff-vacancies-in-care-services-2017.pdf (pages 7, 24, 35, 38, 47 & 52)
[9] https://www2.gov.scot/Resource/0053/00538124.pdf (page 38)

previous year. The number of non-UK EU nationals working in care at home/housing support services was estimated at 2,850 (4.1%)[9] in early 2018.

6. The challenges arising to this sector from a reduction in ability to recruit from outwith the UK are similar to those outlined above for care homes for adults, with average salaries of the order of £18,000 according to stakeholder estimates. From 2020 all care workers in these services will be required to register with the SSSC and gain the qualification required for their role (at least RQF 3).

Doctors: Consultants

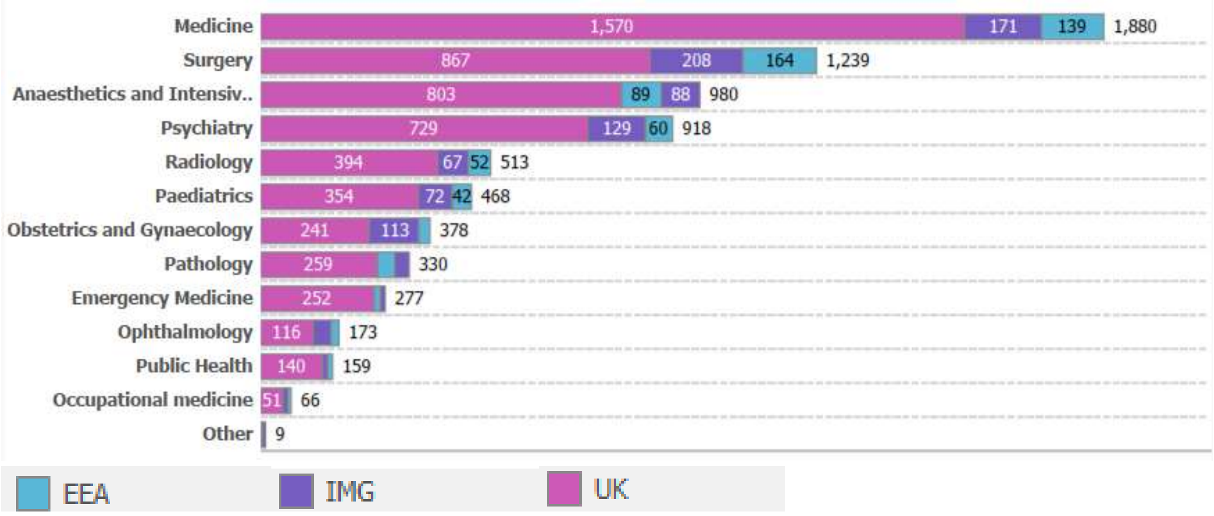
7. The consultant workforce in NHS Scotland is also vulnerable to changes in migration strategy. Much of the medical workforce originates from outside of the UK: 16.6% of all doctors currently practising in Scotland have a primary medical qualification from outwith the UK (3,781/22,740) with 5.7% from the EEA (1,303/22,740). **Fig 4** uses GMC data to give an indication of the exposure of the consultant workforce to both EEA and International staff.

8. Most notably: Vascular Surgery, Orthopaedics and Diagnostic Radiology all rely on intra-European migration, with a significant proportion of the existing workforce having a primary medical qualification from within the EEA. Indications are that the United Kingdom has reduced appeal as a destination for EU migrants, as the UK is perceived as an increasingly hostile destination for immigrants. A British Medical Association (BMA) survey in November 2017 reported that almost a fifth of EU-27 doctors working in the UK have made plans to leave since the referendum vote.

9. The international recruitment market for consultants is porous, and an insufficiently flexible approach to the migration of medical professionals going forward would compromise service delivery within NHS Scotland. Given the lengthy training pathways, demand for consultants cannot be met exclusively through the creation of new domestic training places, particularly in the short to medium terms. Given the mobility of fully trained consultants, guarantees cannot be made that trainees will remain in Scotland. The existing Tier 2 system presents logistical and administrative barriers that interfere with the recruitment of consultants to NHS Scotland. It is essential that these are minimised to ensure that we are not competitively disadvantaged.

10. Health Boards surveyed have indicated that in the short-term the most acute problems with recruitment exist in Psychiatry, Radiology, General Surgery, Geriatric Medicine, Histopathology and Gastroenterology. A more detailed discussion of the shortages experienced amongst the medical workforce, alongside current salary information, can be found within the submission from NHS Education Scotland, the sponsor in Scotland for all doctors in training, and in the returns from NHS Lothian and NHS Greater Glasgow and Clyde, which are appended at Annex A.

Fig 4. Origin of Consultants in Scotland on the Specialist Register:



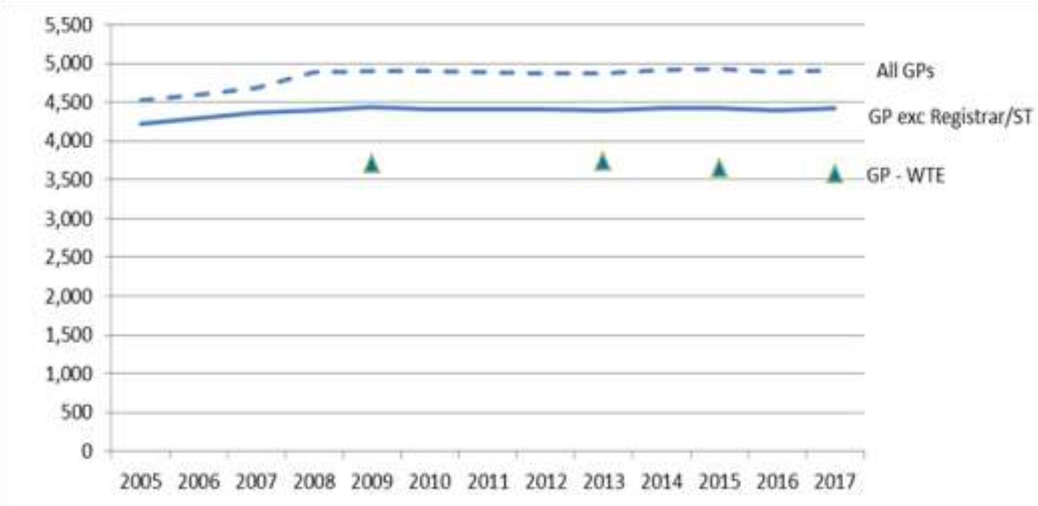
General Practice

11. Recent evidence demonstrates that there is a declining number of registered GPs in practice in Scotland. This comes at a time where the demand on primary care services is steadily increasing due to a combination of an ageing population and rising levels of multi-morbidity. The number of people aged 65 and over is estimated to increase by around 60% from 0.93 million to 1.48 million by 2039, leading to substantial rises in a range of long-term conditions[195]. People with long-term conditions already account for about 50% of GP appointments, placing significant and increasing strain on services. Patients are also demanding more from their healthcare professionals: they rightly expect higher standards of care, more information about their treatment, more involvement in decisions about their care and improved access to the latest treatments.

12. While the headcount number of qualified GPs working in NHS Scotland has increased by around 200 since 2005 to around 4,400, there has been a steady fall in the estimated whole time equivalent[196] since 2013 (Figure 5).

[195] Department of Health (2012), *Long Term Conditions Compendium of Information: Third Edition* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/216528/dh_134486.pdf
[196] The GP whole time equivalent figures are estimated based on data from the biennial *Primary Care Workforce Survey* and therefore are indicative.

Fig 5: GP headcount and whole time equivalent, 2005-2017[197]



13. The combination of falling capacity and steadily rising demand from an increasing ageing population is placing general practice under significant and unprecedented pressure. This is apparent from the latest *Primary Care Workforce Survey*[198], which found that:

- Nearly a quarter (24%) of responding GP practices reported current GP vacancies, compared to 22% in 2015, and 9% in 2013.
- The GP vacancy rate has increased from 1.7% of total sessions in 2013 to 5.6% in 2017.
- The estimated WTE of GPs has decreased by over 4% since 2013.
- Nearly 9 out of 10 practices reported using GP locums in the 12 months preceding the 2017 surveys.
- There has been a continued decrease in the proportion of GPs working eight or more sessions per week: from 51% of GPs in 2013 to 37% in 2017.
- Over a third (36%) of all GPs are aged 50 years or over, with a significant risk these doctors will leave the profession as demand continues to outpace workforce supply.

14. As set out in the *Health and Social Care Delivery Plan*[199], the Scottish Government's vision for the future of primary care is for enhanced and expanded multi-disciplinary community care teams, made up of a variety of professionals each contributing their unique skills to managing care and improving outcomes. This is accompanied by a clearer whole system quality improvement and clinical leadership for General Practitioners (GPs) via the new General Medical Services

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[197] Data from *GP Workforce and practice list sizes 2007–2017* and *National Primary Care Workforce Survey 2017*

[198] NHS National Services Scotland (2018), *Primary Care Workforce Survey 2017* http://www.isdscotland.org/Health-Topics/General-Practice/Publications/2018-03-06/2018-03-06-PCWS2017-Report.pdf

[199]Scottish Government (2016), *Health and Social Care Delivery Plan* http://www.gov.scot/Resource/0051/00511950.pdf

(GMS) Contract. Strong primary care services focused on prevention, anticipatory care planning and self-management are fundamental to ensuring the sustainability of the NHS.

15. The recent Nuffield report *Shifting the balance of care: Great expectations*[200] highlighted the implementation challenges involved in shifting care out of hospital settings to deliver the triple aim of improved population health, better patient care, while reducing costs. It stressed the need to properly resource primary and community care in taking on additional responsibilities as transition is further embedded.

Allied Health Professionals

16. The AHP workforce has increased by over 30% in the last 10 years - from 8,800 in 2006 to around 11,500 in 2017. This reflects a growing need for professionals with a diverse range of specialist skills who can make a vital contribution as first point of contact practitioners for diagnostics, early rehabilitation and enablement. Amongst Allied health professionals, shortages persist within Radiography & Sonography, Prosthetics and Orthotics, and amongst Paramedics, all of whom are present on the current SOL. Other notable shortages have been highlighted within physiotherapy, and occupational therapy.

17. Within physiotherapy, NHS Scotland currently has some 205.6 vacancies, equating to a vacancy rate of 6.7%. These issues are expanded upon within the NHS Lothian return, which has been appended. Additional profiles have been provided within Annex C for several key roles, experiencing acute vacancy (Cardiac Physiology/ Prosthetics and Orthotics/ Physiotherapy).

18. A significant proportion of Allied Health Professionals rely upon their presence on the Shortage Occupations List to meet the Tier 2 salary threshold. International recruitment of AHPs will often be contingent on their presence of these occupations on the Shortage Occupations List. **Table 1** indicates the proportion of AHPs affected by the £30,000 threshold, as well as the £35,000 settlement threshold, using 2019-20 pay scales

Healthcare Science Professions

19. Healthcare Scientists are the fourth largest clinical group, and their work underpins over 80% of all clinical diagnoses. Further technological advances will bring many more opportunities for Healthcare Scientists to work across disciplines and NHS

[200] Imison, C. et al. (2017), *Shifting the balance of care: Great expectations* (2017), The Nuffield Trust https://www.nuffieldtrust.org.uk/research/shifting-the-balance-of-care-great-expectations

Board boundaries. The NHS Scotland workforce covers over 50 different scientific specialities in the three main strands of healthcare science – life sciences, physical sciences and physiological sciences.

20. Demand profiles for cardiac physiology suggests that demand for additional cardiac physiologists could range between 35 and 156 WTE within 10 years, on top of the current shortage of 16 WTE. Additionally, the Academy of Healthcare Science were able to highlight that in Vascular Science 20% of the labs (4 out of 20) say they have unfilled vacancies but we were unable to collect further evidence, within the short time-frames. Other notable shortages have been highlighted within Clinical Physiology; most acutely in Cardiac Physiology and Vascular Science These issues are expanded upon within the NHS Lothian return, which has been appended. Additional profiles have been provided within Annex C for several key roles, experiencing acute vacancy.

21. The educational pathways for Healthcare Scientists vary in length and complexity, spanning a wide range of professions, with slight deviations in titles representing distinct and strategically significant roles. These job titles have often confounded classification and caused problems with Tier 2 visas particularly within various strands of Physical Sciences including: Medical Physics and Nuclear Medicine, as indicated within the appended return from NHS Lothian. There is currently no process whereby employers are able to appeal decisions, when disagreements with the Home Office occur, and in some cases this has caused considerable uncertainty for applicants.

22. Within Healthcare Science: Vascular scientists; Medical Illustrators; and the Maxillo-facial workforce are reliant on graduates from courses in England, and therefore have limited success in attracting individuals to work in Scotland.

Measures Taken to Reduce Shortages

23. To accommodate changes in the Health Workforce, NHS Scotland has grown by ~5000 WTE in the past 5 years and continues to grow. The Scottish Government has undertaken extensive workforce planning to mitigate the impact of Shortage Occupations. This includes the publication of a national Health and Social Care Workforce Plan.

24. The Scottish Government has a continuing commitment to "Grow our Own" NHS Scotland workforce. Between 2015-16 and 2020-21 the Scottish Government will have increased the annual intake of medical places in Scottish universities from 848 to 1038 (22%), including funding Scotland's first Graduate Entry Medical programme. The Scottish Government has responded to vacancies in entry level and non-medical roles by introducing a tranche of funding to support Modern Apprenticeships through the "Get Into Healthcare programme".

25. To increase the attractiveness of work in remote and rural areas: Improvements have been made to digital networks, so that staff receive the support they need, and can access professional development opportunities. Support for remote and rural GPs has been provided through the rural fellowship scheme, as well as the attend anywhere video-conferencing service. The Scottish Government has offered a Targeted Enhanced Recruitment Scheme (TERS) offering a bursary for £20,000 to successful applicants to selected GP programmes, to support those working in a more rural location. NHS Scotland have also responded to changing demands to the health system by developing enhanced and expanded multi-disciplinary community care teams, and restructuring the provision of essential services where necessary.

26. To meet projected future requirements, 2,600 additional nursing and midwifery training places are being created over this parliament as part of a wider package of measures to accelerate the supply of newly qualified nurses and midwives. It was announced in November 2018 that the number of nursing and midwifery student places will be increased by 7.6% in the 2019-20 educational year. This will be the seventh year in succession that student numbers in this field has increased in Scotland. On 9 October 2018, the Scottish Government announced its intention to increase student bursaries for nursing and midwifery students to £10,000 in 2020-21 up from up from £6,578. All eligible students will also benefit from an interim increase to £8,100 in 2019-20. This rise of £3,422 a year will help cover accommodation and living expenses during their studies. In addition, bursaries for care experienced students will move to £8,100 this financial year, an uplift of £1,522. An additional discretionary fund of at least £1 million was launched in 2016 to provide a 'safety net' for nursing and midwifery students in most need. In 2017/18 we invested an extra £3 million per year to increase support for nursing and midwifery students with children or dependents.

27. NHS Scotland have made valuable use of the existing exemptions for Doctors and Nurses to the Tier 2 cap, investing £4 million in international recruitment. On 06 October 2018, the Cabinet Secretary for Health and Sport formally approved the creation of an NHS Scotland International Recruitment Unit. Specific areas of shortage have been addressed through targeted campaigns, with an additional £4 million spent on the Radiology Transformation Programme. The Scottish Government is also undertaking a targeted recruitment campaign across all levels of Psychiatry.

Social Care Workforce

28. **Professionalisation** – Most staff within the social care workforce must register with the SSSC and acquire a qualification as part of their registration. This

qualification typically leads to higher retention levels and improves transferable skills enhancing career development.

29. **Integration and Workforce Planning** – The National Health and Social Care Workforce Plan Part 2 – a framework for improving workforce planning for social care in Scotland, recognises the diverse nature of social care and has seven key recommendations. These recommendations help to deliver sustainable and high-quality services with improved outcomes for those who use them.' They include:
    - Collation of data to support workforce planning; analysis of labour markets to underpin workforce planning; improving guidance for workforce planning to support partnership working across the sector; co-production of workforce planning tools to enable service redesign and new models of care.
    - Actions to address existing workforce challenges, including a national campaign to promote the sector as a positive career choice; enhancements to career pathways; improvements to training and education; and development of a professional framework in practice for social care and social work

Pay Provisions – Health and Social Care

30. The Scottish Government has also recently agreed a 3 year pay deal for all non-medical, dental or executive staff in Scotland, to ensure that pay is competitive, and that NHS Scotland remains an attractive place to work. Staff at the top of their pay scale earning up to £80,000 will receive a 9% pay rise over 3 years. The increase for staff not yet at the top of their band could be considerably more – up to 27% over the 3 years. This maintains competitive pay, with staff of equivalent grades across the UK.

31. The Scottish Government has also introduced the real Living Wage for adult social care, currently £8.75 per hour**.** There will now be the expectation that adult social care workers are paid at least the Living Wage regardless of whether they work for the public, private or voluntary sectors. The Scottish Government's budget includes support for additional expenditure by local government on social care, with an ongoing commitment to ensure all adult social care workers receive at least the real living wage.

Annex: UK Wide Shortage Occupations List Vacancy Data

SOC Code	Job Titles (& Further Criteria)	Number of Vacancies	Vacancy Rate (%)
2211 Medical Practitioners	Clinical radiology	43.2	11.9
	Emergency medicine	11.1	4.6
	Old age psychiatry	11.7	15.2
	CT3 trainee and ST4 – ST7 trainee in emergency medicine Core trainee in psychiatry **Non-consultant, non-training, medical staff posts in the following specialties:** Emergency medicine (including specialist doctors working in accident and emergency) Old age psychiatry Paediatrics		
2217 Medical Radiographers	HCPC registered diagnostic radiographer	57.4 (Bands 5-9)	3.4
	Nuclear medicine practitioner Radiotherapy physics practitioner Radiotherapy physics scientist Sonographer	11.3	3.8
2219 Health Professionals not elsewhere classified	Neurophysiology healthcare scientist Neurophysiology practitioner Nuclear medicine scientist		
	Orthotist **	3.4	4.3
	Prosthetist **	0.5	1.6
2231 Nurses	All jobs in this occupation code	3022.2	4.8
	- Adult Nursing	1636.4	4.6
	- District Nursing	239.6	6.5
	- Mental Health Nursing	411.0	4.3
	- Paediatric Nursing	218.8	9.9
3213 Paramedics	All jobs in this occupation code	45.1	3.0

****** Orthotics and Prosthetics services are contracted to the private sector. Therefore this does not accurately represent the number of vacancies in the broader health workforce.

Scotland Only Shortage Occupations List

SOC Code	Job Titles (& Further Criteria)	Number of Vacancies	Vacancy Rate (%)
2211 Medical Practitioners	Consultant in clinical oncology	4	4.2
	Non-consultant, non-training medical staff post in clinical radiology	Data Unavailable	Data Unavailable
	CT3 trainee and ST4 to ST7 trainee in clinical radiology All grades except CPT1 in psychiatry All grades in anaesthetics, paediatrics, obstetrics and gynaecology		
2217 Medical Radiographers	**Jobs on the UK SOL.** Medical physicist		
	Staff working in diagnostics radiology (including magnetic resonance imaging).	71.5	3.4

Other Health Professionals

Total Workforce	Profession		Total vacancies	Vacancy Rate (%)	Vacant 3 months or more
3086.2	Physiotherapy		205.6	6.7	52.6
2347.4	Occupational therapy		94.0	4.0	25.9
2118.1	Diagnostic Radiography		71.5	3.4	16.0
1005.4	Speech and Language Therapy		52.8	5.3	16.4
1513.5	Paramedics		45.1	3.0	22.5
257	Clinical Physiology	Cardiac Physiology	16	6.22	
		Neurophysiology		Data Unavailable	
		Respiratory Physiology			
		Sleep Physiology			

		GI Physiology			

Consultants

Total Workforce	Specialty	Total vacancies	Vacancy rate (%)	Vacant 6 months or more
364.2	Clinical radiology	43.2	11.9	40.2
348.9	General psychiatry	41.3	11.8	25.5
313.0	General Surgery	29.1	9.3	5.5
201	Geriatric Medicine	18	9	6
125.7	Histopathology	14	11.1	10
122.6	Gastroenterology	14.6	11.9	9.6
76.8	Old age psychiatry	11.7	15.2	8.3
88.3	Urology	8.0	9.1	5.7
49.0	Forensic psychiatry	6.8	13.9	3
31.8	Oral & maxillofacial surgery	5	15.7	4
39.5	Palliative medicine	4.7	11.9	1.7
95.1	Oncology	4.0	4.2	2.1
9.9	Vascular surgery	4	40.4	2
8.1	Oral medicine	1.5	18.5	1.5

Clinical Physiologists; Cardiac Physiology

Cardiac Physiologists carry out cardiac diagnostic tests, such as echocardiograms, pacemaker and other implantable device checks, blood pressure measurement, and tilt-table tests. In many hospitals cardiac physiologists take on specialist roles normally carried out by medical staff such as running chest pain and arrhythmia clinics and can be responsible for the long term monitoring of patients with congenital conditions, heart valve disease or replacement valves. Cardiac Physiologists can play a key part in reducing admissions to hospital for patients.

In NHS Scotland over the last 5 years there has been a 46% increase in the demand for cardiac physiology services. As of 2018 the Cardiac Physiology workforce in NHS Scotland consists of 257 whole time equivalent (WTE) staff. 70% of departments in Scotland indicated they have at least one vacant post and the overall vacancy rate is estimated at 10%. This being the case it is assumed that the establishment for cardiac physiology is approximately 283 WTE. However, some NHS boards still require to use bank and locum staff, even when there department has a full complement of staff. There is a current shortage of 16 WTE.

Short term solutions have been explored to mitigate existing vacancy issues and to reduce patient waiting times. These include:

- Demand management through redesign of pathways, standardised referral criteria and use of alternative assessment methods.
- Build Consultant vetting into the clinical assessment, to ensure appropriate referrals.
- Facilitate international recruitment, where appropriately qualified staff exist, through inclusion on the Shortage Occupations List.
- Encourage the retention of existing experienced staff members and returners to practice using flexible working patterns, bursaries, Professional Development and extended training roles
- Limit/cap the use of locum/agency staff (cost of 1 locum would employ 2 permanent cardiac physiologists. Establish mandatory local "banks" which pay less than locum agencies, but more than Agenda for Change.

Medium Term solutions (across the 3 to 5 Years) centre around increasing the workforce by promoting recruitment into Scientist Training Programmes and Practitioner BSC programmes. This in house training approach brings the added benefit of allowing trainees to contribute to service delivery during their training.
Using the conservative estimate of 30 additional WTE required within 4 years, this would require substantial investment in these training programs now in order to see the benefit within 4 years. The current production rate of Cardiac Physiologists in Scotland is around 5 per year.

Physiotherapy

The number of physiotherapists working in NHS Scotland has remained fairly static over the last five years but the demand for this role is increasing dramatically as services are transformed across Scotland. This is seen particularly in primary care where first point of contact practitioner (FCP) physiotherapists can safely manage the majority of the musculoskeletal (MSK) caseload in general practice, freeing up GPs time to manage more complex care. NHS Boards across Scotland have indicated challenges in recruitment across all of the allied health professional (AHP) workforce but particularly around physiotherapy. There are currently 205.6 physiotherapy vacancies, which represents a rate of 6.7% of the total physiotherapy workforce.
Increased demand for physiotherapists is likely to continue over the coming years as the FCP role becomes more recognised and valued; services continue to be developed; and the benefits are realised. Primary Care Implementation Plans that have recently been submitted by NHS Boards (18 out of 31 received to date) indicate that adverts will shortly go out for up to 73 FCP physiotherapists across Scotland.

Prosthetics/Orthotics Scotland
British Association of Prosthetists and Orthotists (BAPO)

Prosthetists and Orthotist have been on the national workforce shortage list for the last 3 years and the situation is worsening with Health Education England actively supporting the profession and trying to find alternative training courses including developing apprenticeships. The profession has been identified as small and vulnerable within the UK.

In the UK two training schools exist for undergraduate education (Strathclyde University - Scotland, and Salford University - England). Qualifying entitles you to apply for HCPC registration, to practice as a Prosthetist/Orthotist. Prosthetics/Orthotics experiences a high attrition rate with graduates entering clinical practice lasting an average of 3-5 years before moving on, whilst others return home or choosing alternative professional routes such as further education.

Historically the workforce in Scotland has been fairly stable but with recent changes to service provision such as the Musculoskeletal (MSK) 4 week targets, the numbers of clinicians have been rising in most boards. Whilst five years ago, a job advert in Scotland would attract at least 6-8 applicants, now NHS Scotland have unfilled posts and services report that it is increasingly difficult to recruit to temporary contracts.

For example NHS Greater Glasgow and Clyde report a vacancy rate of around 12% for the past year. In the last 12 months they have lost 10 staff (some temporary, some bank) and have 2 members of staff on maternity leave. NHS GG&C were unable to fill a recent yearlong maternity cover due to 0 applicants.
NHS Forth Valley – run a mixed model service with 2.8 WTE employed by the NHS and 0.7 WTE employed by a contractor supplying clinical service to the board as part of a national contract. The contractor has had a band 6 vacancy for over 6 months being unable to recruit to this position.
One of the benefits of using a contracted model is the larger pool of staff available to cover holidays/sickness and study leave. NHS Forth Valley report they have not had full cover for any of the above roles in over a year, due to staff shortages in Scotland by the contractor resulting in service disruption. Two months ago NHS Forth Valley advertised for a 3 month secondment band 5 backfill post and had no applicants.
Because there is a shortage of Orthotists in England new graduates often start in band 6 positions and then are unwilling to apply for a band 5 in Scotland. In other cases graduates are often employed prior to graduation in England.
With such a small workforce in Scotland the Prosthetics/Orthotics workforce can be adversely affected by external factors and has a small pool of resources available to address these issues.

Supporting Evidence

Publications – Social Care in Scotland.

Coalition of Care and Support Providers in Scotland (2018) 2017 Benchmarking report for Voluntary Sector HR Network and CCPS

Scottish Care (2017) Care Home Workforce Data Report

Scottish Care (2018) The 4Rs: The open doors of recruitment and retention in social care

Scottish Government (2018) Delivering for today, investing for tomorrow: The Government's Programme for Scotland 2018-19

Scottish Government, Convention of Scottish Local Authorities et al (2018), Update on the Scottish Living Wage Commitment for adult social care workers

Scottish Government (2018) The Contribution of Non-UK EU Workers in the Social Care Workforce in Scotland

Scottish Government (2018) Early Learning and Childcare providers: delivery support plan

Scottish Social Services Council (2018) Scottish Social Services Sector: Report on 2017 Workforce Data

Staff Vacancies in care services 2017_report (Jan 2019), Care Inspectorate and Scottish Social Services Council

Scottish Social Services Council

8. If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

Introduction

We have set out below three tables with some commentary and details of relevant sources. Please note that the SSSC is the official statistics producer for data on the Scottish social service workforce. The data we use in our official statistics publication is based on a response rate in excess of 97% (please see, Scottish Social Service Sector: Report on 2017 Workforce Data, published by the SSSC in August 2018).

Nurses

Table 1 below provides a breakdown of the number of nurses working in the social service sector in December 2017. The vast majority are employed either in care homes for adults (CHAs) or by a Nurse Agency (which supply staff to the sector and the NHS). If we focus just on those services that work directly with service users then CHAs account for 94.7% of all nurses working in the sector. And within CHAs, care homes for older people employ 92.7% of all CHA nurses.

Not all CHAs or CHAs for older people employ nurses. There were 1,125 CHAs in December 2017 and of these 841 were care homes for older people of which 500 employed one or more nurses. 305 care homes for older people also reported at that time that they had one or more nursing vacancies. In other words 61% of all CHA (older people) that employed nurses had one or more nurse vacancy rate.

Table 1: Estimated number of nurses by sub-sector and employer type, 2017

Sub-sector	Public	Private	Voluntary	Total
Adoption services	0	-	0	**0**
Adult day care	10	0	0	**10**
Adult placement services	0	-	0	**0**
Care homes for adults	20	4120	300	**4450**
Central and strategic staff	0	-	-	**0**
Child care agencies	0	0	0	**0**
Childminding	-	0	-	**0**
Day care of children	0	0	0	**10**
Fieldwork service (adults)	0	-	-	**0**
Fieldwork service (children)	80	-	-	**80**
Fieldwork service (generic)	10	-	-	**10**
Fieldwork service (offenders)	0	-	-	**0**
Fostering services	0	-	0	**0**
Housing support/care at home	0	80	10	**90**

Nurse agencies	-	2000	0	**2000**
Offender accommodation services	0	-	10	**10**
Residential child care	20	0	10	**40**
School care accommodation	0	-	10	**10**
Total	**150**	**6200**	**350**	**6700**

Source: Scottish Social Service Sector: Report on 2017 Workforce Data

The nurse vacancy rate (as a percentage of the nurse workforce) in care homes for adults (CHAs) was estimated at 14.0% in December 2017. This vacancy rate is considerably higher than that calculated for the social service workforce as a whole which was 5.7%[201], or for all CHA staff (5.2%)[202] or for the whole Scottish economy (3.1%)[203]. (NB The rate was calculated by dividing the sum of the whole time equivalent (WTE) vacancies for nurses by the combined sum of the WTE nurse vacancies and the sum of the WTE of nurses in post[204].)

Practising social workers

Numbers of PSWs grew steadily from 2003 to 2013 (26% increase), however, since 2013 numbers have levelled off and remained at around 5,300 WTEs. This may be an indication that demand has also levelled off but the available data on vacancies seems to indicate otherwise. (NB Practising social workers include both social workers and senior social workers with the latter usually managing small teams of the former and having regular contact with service users.)

While all 32 local authorities provide the SSSC with workforce data annually not all provide vacancy data. Table 2 provides details of the WTE vacancies reported by local authorities each year since 2011 and shows that the percentage in December 2017 was 5.7%.

Table 2: WTE vacancy rate practising social worker posts 2011-17

	2011	2012	2013	2014	2015	2016	2017
WTE SW vacancies	261	338	270	269	309	270	256
WTE of SWs in responding LAs	4249	4192	4280	4298	4086	3077	4226
WTE of SWs in responding LAs as percentage of WTE of SWs in all LAs	81.4	80.9	79.7	80.1	75.3	58.2	79.1
% WTE vacancy rate	5.8	7.5	5.9	5.9	7.0	8.1	5.7
No. of LAs responding	27	28	27	27	25	23	27

Source: SSSC

Table 3 provides a breakdown of the WTE vacancy rate for different types of social workers. Only a minority of local authorities now employ PSWs as generic social

[201] See Staff vacancies in care services 2017, SSSC/Care Inspectorate, published January 2019
[202] As footnote 1.
[203] 3 See (UK) Employer skills survey 2017, DoH, published August 2018
[204] 4 NB this is a different approach to that within Staff Vacancies in care services, 2017.

workers with most separating PSWs into those working with children or adults or within the criminal justice system (NB there is no separate probation service in Scotland, such work is undertaken by local authority social work services).

Table 3: WTE vacancy rates of different types of PSWs 2017

	SSW Children	SW Children	SSW Adults	SW Adults	SSW Criminal Justice	SW Criminal Justice	SSW Generic	SW Generic
% vacancy rate	4.00	5.18	2.91	7.57	0.96	6.21	3.51	8.25

Source: SSSC

ScreenSkills

Job Title	ONS job title	ONS SOC	SOL
VFX Supervisor	Arts officers producers and directors	3416	Current
2D Supervisor	Arts officers producers and directors	3416	Current
3D Supervisor	Arts officers producers and directors	3416	Current
CG Supervisor	Arts officers producers and directors	3416	Current
Producer	Arts officers producers and directors	3416	Current
Production Manager	Arts officers producers and directors	3416	Current
Technical Director (includes specialisms – Effects TD, Crowd TD, Creature TD, Lighting TD, Pipeline TD and Generalist TD)	Arts officers producers and directors	3416	Current
Animator	Artists	3411	Current
Compositing Artist	Graphic designers	3421	Current
Matte Painter	Graphic designers	3421	Current
Modeller	Graphic designers	3421	Current
Rigger (Animation)	Graphic designers	3421	Current
Stereo Artist	Graphic designers	3421	Current
Texture Artist	Graphic designers	3421	Current
Systems Engineer	IT business analysts, architects and systems designers	2135	Current
Software Developer	Programmers and software development professionals	2136	Current
Shader Writer	Programmers and software development professionals	2136	Current
Creative Director	Arts officers producers and directors	3416	Request
VFX Technical Artist	Artists	3411	Request
Concept Artist	Artists	3411	Request
Layout Artist	Graphic designers	3421	Request
Pre-visualisation Artist	Graphic designers	3421	Request
VFX Editor	Photographers, audio visual and broadcasting operators	3417	Request
Production Coordinator	Arts officers producers and directors	3416	Request
Assistant Technical Director	Arts officers producers and directors	3416	Request
VFX Trainer	Graphic designers	3421	Request

Skills Development Scotland I (Letter)

Skills Development Scotland

Migration Advisory Committee
2nd Floor
Peel Building
2 Marsham Street
London
SW1P 4DF

11 January 2019

Dear Sir or Madam,

Response to the MAC Shortage Occupation List (SOL) Consultation – Skills Development Scotland

In addition to Skills Development Scotland's online response to the Shortage Occupation List consultation, I have outlined several strategic challenges for Scotland which should be considered when developing the UK future immigration policy.

I also attach a slide pack outlining our evidence base on Scotland's labour market. This document was drafted with a view to supporting external organisations and industry bodies in responding to the MAC SOL Consultation, ensuring that partners have the opportunity to highlight any skills shortages that they believe may be exacerbated by the MAC's recommendations for the SOL and wider immigration system post-Brexit.

The slide pack provides an overview of the current skills landscape in Scotland, highlighting the crucial role of non-UK labour within Scotland's workforce and the need for Scotland's skills needs to be considered in addition to the rest of the UK.

Skills Development Scotland (SDS) is an NDPB of the Scottish Government. As Scotland's skills body, we are central to driving the success of Scotland's economy, working with partners to create a Scotland where:

- Employers are able to recruit the right people with the right skills at the right time
- Employers have high performing, highly productive, fair and equal workplaces
- People have the right skills and confidence to secure good work and progress in their careers
- There is greater equality of opportunity for all.

The following strategic drivers likely to be impacted by a new immigration policy are outlined below.

1. Scotland's Future Population

For many years Scotland's population growth has been reliant on immigration. Population projections from the National Records Scotland and Office of National Statistics forecast a continued reliance on EU nationals. The net population natural change (the number of births minus the number of deaths) will be negative each year for the next 25 years.

Consequently, future population growth is solely reliant on immigration to Scotland, the majority of which are EU nationals.

Scotland also has a rapidly ageing population. Over the next 25 years, people aged 75 years and over are projected to increase by 79%. Demand for public services such as Health care, will increase as the population ages. There will be increased demand for a labour market to service the need.

In contrast to the rapidly ageing population, the working age population (16-64 year olds) is anticipated to grow very slightly (1%) whilst the proportion of children is anticipated to decline by -15%.[1]

Scotland has been, and continues to be, reliant on working age migrant labour to support economic growth and widen the labour market.

2. Scotland's Labour Market Reliance on EU Nationals

The figures contained within the slide pack indicate that particular sectors, regions and occupations have above average (> 6%) concentrations of EU nationals, and in some cases combined with above than average skills gaps – leaving them particularly vulnerable to the impact of Brexit. Subsequently, sectors, regions, and occupations with existing skills challenges are likely to see skills shortages and gaps exacerbated by a decrease in the availability of EU labour.

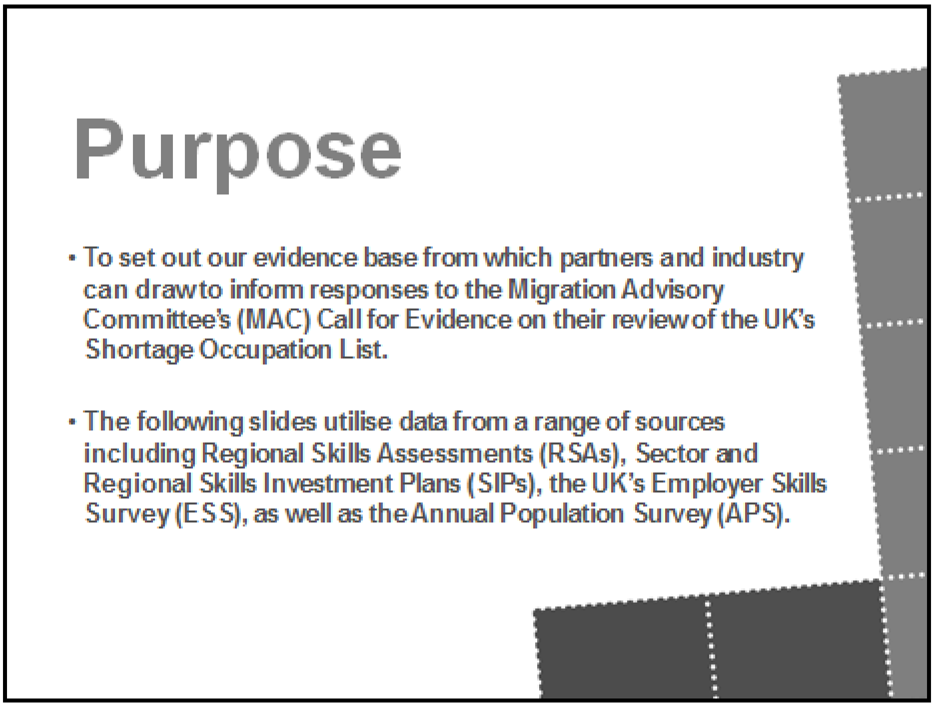
A low-migration scenario resulting from a new immigration policy could lead to the exacerbation of these challenges. More broadly, such a scenario would likely exacerbate wider challenges within Scotland's economy including an ageing workforce, lower public spending and rapid technological change.

I am happy to discuss these issues further and look forward to reviewing the committee's report upon publication.

Yours sincerely

Gordon McGuinness
Director, Industry and Enterprise Networks

Skills Development Scotland II (Slides)



Key Messages

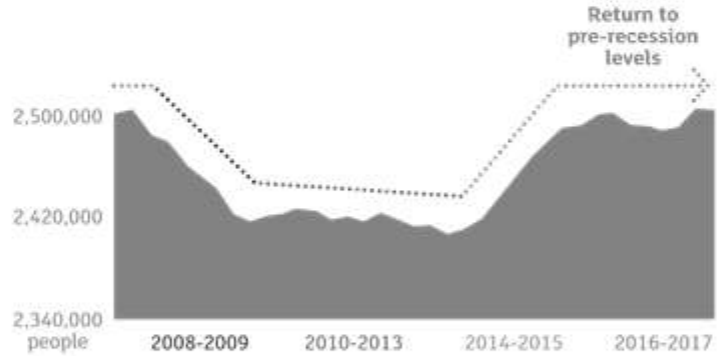
- Employment in Scotland has returned to pre-recession levels, but overlapping strategic challenges remain for the labour market including working-age population, public spending, and the fourth industrial revolution.
- A low-migration scenario brought on by Brexit could lead to the exacerbation of these challenges.
- There are over 140,000 EU nationals across low, medium, and high skilled jobs in Scotland's economy, making up 6% of our workforce
- There are particular sectors, regions and occupations that have higher than average (> 6%) concentrations of EU nationals – leaving them particularly vulnerable to the impact of Brexit
- Sectors, regions, and occupations with existing skills challenges are likely to see shortages and gaps exacerbated by a decrease in the availability of EU labour
- National-level skills gaps, shortages and under-utilisation have either sustained or modestly increased between 2015-17. These challenges and wider recruitment difficulties are likely to be a permanent feature of the Scottish labour market.

Skills Development Scotland

Scotland's Labour Market

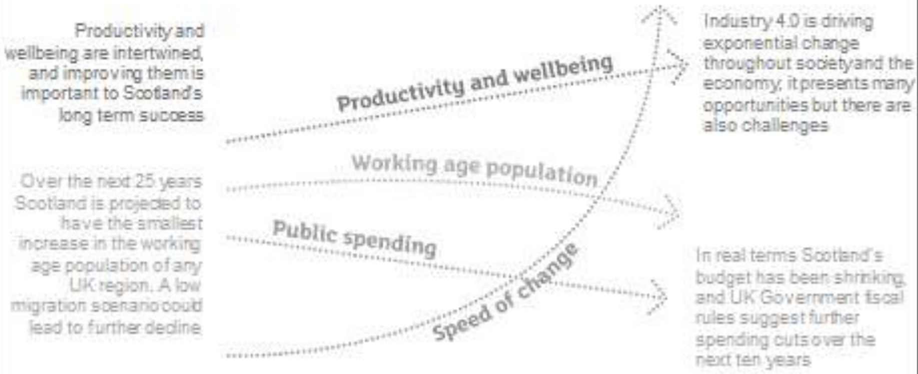
Scotland's Labour Market: Employment

The number of people employed in Scotland has remained relatively stable following a return to pre-recession levels. This period of stability follows a rapid drop between 2008-2009, followed by a more gradual decline between 2010-13.



Scotland's Labour Market: Strategic Challenges

Our evidence has highlighted four primary strategic challenges that Scotland's labour market and economy are facing.



Scotland's Labour Market: Wider Trends

There are other challenges too. Understanding and taking steps to address them is important for society, the labour market and the economy.

The rise of non-standard work

Living standards

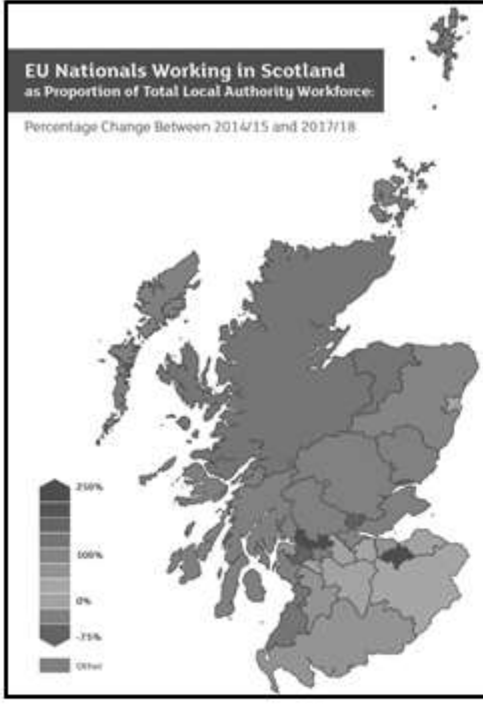
Skills shortages & gaps

Underemployment & under-utilisation of skills

Youth unemployment

Skills Development Scotland

EU Nationals Working in Scotland



Total Employment

143,000 EU Nationals (16-64) employed in Scotland

6% of Scotland's total workforce

An increase from 110,000 in 2015/16 (4.4% of workforce)

Spatial Concentration

16 out of 29* local authorities have seen increases in the level of EU nationals within their workforces

*Data suppressed for 3 of 32 LAs

Spatial Concentration

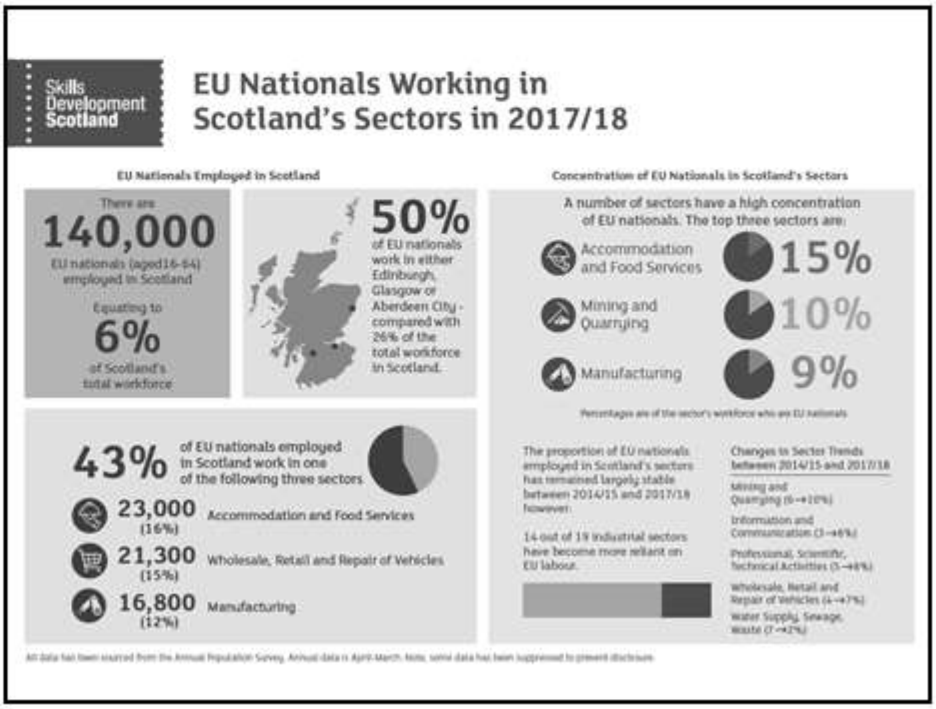
38,600 EU nationals employed in Edinburgh City (14% of workforce)

14,700 in Aberdeen City (12%)

14,200 in Glasgow City (5%)

50% of EU Nationals work in either Edinburgh, Glasgow or Aberdeen City - compared with 26% of the total workforce in Scotland


Skills Development Scotland
EU Nationals Working in Scotland's Occupations in 2017/18
EU Nationals Employed in Scotland
There are
140,000
EU nationals (aged16-64) employed in Scotland
Equating to
6%
of Scotland's total workforce
50%
of EU nationals work in either Edinburgh, Glasgow or Aberdeen City - compared with 26% of the total workforce in Scotland.
41%
of EU nationals employed in Scotland work in one of the following three occupations
26,200 (23%) Elementary Administration and Service Occupations
11,500 (10%) Science, Engineering and Technical Professionals
9,000 (8%) Textiles, Printing and Other Skilled Trades
Concentration of EU Nationals in Scotland's Occupations
A number of occupations have a high concentration of EU nationals. The top three occupations are:
Textiles, Printing and Other Skilled Trades 17%
Process, Plant and Machine Operatives 13%
Elementary Trades and Related Occupations 12%
The proportion of EU nationals employed in Scottish occupations has increased between 2014/15 and 2017/18.
15 of the 25 occupations have become more reliant on EU labour.
Changes in Occupational Trends between 2014/15 and 2017/18
Textiles, Printing and Other Skilled Trades (9→17%)
Science, Engineering and Technical Professionals (3→8%)
Customer Service Occupations (2→6%)
Elementary Trades and Related Occupations (10→12%)
All data has been sourced from the Annual Population Survey. Annual data is April-March. Note: some data has been suppressed to prevent disclosure.


Skills Development Scotland
EU Nationals Working in Scotland's Sectors in 2017/18
EU Nationals Employed in Scotland
There are
140,000
EU nationals (aged16-64) employed in Scotland
Equating to
6%
of Scotland's total workforce
50%
of EU nationals work in either Edinburgh, Glasgow or Aberdeen City - compared with 26% of the total workforce in Scotland.
43%
of EU nationals employed in Scotland work in one of the following three sectors
23,000 (16%) Accommodation and Food Services
21,300 (15%) Wholesale, Retail and Repair of Vehicles
16,800 (12%) Manufacturing
Concentration of EU Nationals in Scotland's Sectors
A number of sectors have a high concentration of EU nationals. The top three sectors are:
Accommodation and Food Services 15%
Mining and Quarrying 10%
Manufacturing 9%
Percentages are of the sector's workforce who are EU nationals
The proportion of EU nationals employed in Scotland's sectors has remained largely stable between 2014/15 and 2017/18 however:
14 out of 19 industrial sectors have become more reliant on EU labour.
Changes in Sector Trends between 2014/15 and 2017/18
Mining and Quarrying (6→10%)
Information and Communication (3→6%)
Professional, Scientific, Technical Activities (5→8%)
Wholesale, Retail and Repair of Vehicles (4→7%)
Water Supply, Sewage, Waste (7→2%)
All data has been sourced from the Annual Population Survey. Annual data is April-March. Note: some data has been suppressed to prevent disclosure.

Skills Development Scotland

Scotland's Skills Challenges

Employer Skills Survey 2017

The steep rise in vacancy levels among employers in Scotland from 54,000 to 74,000 between 2013-2015 was met with a modest increase to 75,000 in 2017, maintaining the relatively high demand for labour.

The proportion of establishments in Scotland with Skills Shortage Vacancies (SSVs) was sustained at 6% between 2015-2017.

The proportion of establishments reporting skills gaps in Scotland has risen from 14% to 16% between 2015-2017.

89% of employers who tried to recruit non-UK nationals to 'hard to fill' vacancies and 93% of those trying to fill skills gaps looked to EU nationals.

Finally, 35% of establishments reported that they had at least one member of staff with both skills and qualifications above the level that they require for the job, an increase from 32% in 2015.

Spatial Skills Challenges

The regions with the highest incidences of SSVs were West Lothian, Forth Valley and West (all 9%), followed by Glasgow (8%).

West Lothian, Forth Valley and Ayrshire are those areas with the highest density of SSVs, with 38%, 35% and 33% density respectively.

West Lothian saw the highest incidence of skills gaps, followed by Fife and West.

West also sees the highest density of skills gaps (6.7%), followed by West Lothian (6.2%) and the Highlands and Islands (6.1%).

Spatial Skills Challenges

Future jobs growth in Scotland is expected to be driven by Edinburgh and Glasgow cities. These two RSA regions are expected to account for 83% of the net additional jobs in Scotland to 2027.

Rural areas are expected to have fewer jobs in 2027, including the Highlands and Islands, Dumfries and Galloway and Borders.

Prospects for the major employment centres are positive, yet a number of areas face the likelihood of very low levels of employment growth. These areas also face the possibility of further population loss.

Of these job openings, an ageing demographic will ensure that the vast majority will be driven by replacement demand. This is expected to be the case in all of Scotland's regions.

Sector Skills Challenges

The sectors with the highest density skills gap in 2017 were:

Manufacturing (7.2%)
Hotels + restaurants (6.8%)
Wholesale and Retail (6.8%)

The sectors with the highest density of skills under-utilisation in 2017 were:

Hotels + restaurants (17%)
Information + Communications (24%)
Arts and Other (14%)

The sectors with the highest density of SSVs in 2017 were:

Business Services (37%)
Financial Services (34%)
Construction (34%)

While sectors such as professional services and health and care will provide significant new job opportunities for well-qualified staff, a decline in parts of the public sector and manufacturing will present a challenge for redeploying skilled and experienced workers. Again, an ageing demographic will ensure that the vast majority of job openings across sectors will be driven by replacement demand

Occupation Skills Challenges

The occupations with the highest density SSV in 2017 were:

Skilled Trades (42%)
Managers (39%)
Professionals (35%)

Those with the highest SSV incidence were:

Skilled Trades (24%)
Professionals (19%)
Caring and Leisure (16%)

The occupations with the highest density of skills gaps in 2017 were:

Sales and Customer Services (7%)
Elementary Trades (6.8%)
Machine Operatives (6.7%)

Those with the highest skills gap incidence were:

Sales and Customer Services (4%)
Elementary Staff (4%)
Admin/Clerical Staff (3%)

With EU nationals concentrated in both highly skilled and low skilled jobs, occupational skills shortages and gaps are likely to be exacerbated by a decrease in the availability of EU labour at all levels.

Social Care Wales

Briefing for MAC March 2019

1. Context and Migration stats.

Work published by the Bevan Foundation in 2018 provides an outline of the past, current and future demographic trends in Wales. It looks at the current population and reasons for recent trends, paying particular attention to the role migration has played and may continue to play in the future. The main findings include:

- Without migration Wales' population will drop;
- In 20 years' time, Wales' working age population, those aged 16-64, will be lower than it was in 2017 and will drop more with less migration;
- At the same time Wales' ageing population will increase by as much as 34 percent in 20 years.

All of this could put strains on health and social care services as well as on the economy. Migration is a complex issue, but if Wales wants to continue growing its population and minimise the reduction in the numbers of people of working age, it will need to look to immigration, both from in and outside of the UK to do so.

Wales population has increased by 230,300 people in 20 years, some 8 percent. This is modest compared with growth of over 13 percent in the UK as a whole. The mid-year population estimates for 2001 and 2017 show the population of Wales ageing over the last 16 years with the number of people aged 65 years or over increasing by 27%. In 2017, just under 21% of the population were aged 65 years or over compared to 17% in 2001.

Over the last 16 years Wales' population has aged. There are more people aged 65 years or over and aged 90 or over that make up a larger share of the population. At the same time, there are fewer people aged 20 or younger. Although, the share of the population that is of working age has stayed the same.

Net migration has played a pivotal role in Wales' population change. Between 2016 and 2017, 97 percent of Wales' population growth resulted from the net migration of people. In total, 57 percent of Wales' population growth was from internal net migration and 39 percent was from international net migration.

Local area migration estimates between 2016 and 2017 show that more people came into Wales from outside the UK than left Wales: 15,230 people from outside of the UK moving in and 10,140 people moving out. This made net international migration during the period a total of +5,090 people.

The vast majority of those immigrating to Wales from outside the UK were people aged 15- 24 years old (48 percent) and 24-44 years old (40 percent). Only 8 percent were aged 45- 59/64, and the proportion aged 60/65+ was negligible. More young people came into Wales than left and as a result, younger age groups accounted for almost all net long-term international migration. More than half of the net increase comprised of 15-24-year olds (7,000 people), while 24-44-year olds made up an additional 46 percent (6,000 people). Only a very small proportion of net international migration comprised people aged under 15 or over 60/65 years old.

In 2016, the majority of people coming into Wales from outside the UK were born outside the EU so the consequences of continued migration, post Brexit may be lower than in other parts of the UK. An estimated 11,000 people born outside the EU immigrated to Wales, compared to 5,000 people born within the EU (28 percent of international immigrants) and 11 percent of immigrants who were born within the UK . Although data is limited, the majority of those coming into Wales from outside the EU were from East Asia (5,000 people) and the Middle East and Central Asia (2,000 people).

The net effect of long-term international migration on the population of Wales in 2016 was to increase its diversity: there was a decrease of 3,000 UK-born citizens, an increase of 4,000 EU-born citizens and an increase of 9,000 non-EU-born citizens. However non-UK born citizens are still a relatively small proportion of the population in Wales making up only 6 percent of the total population in 2017.

In 2016, half of the people who immigrated to Wales from outside the UK came for formal study – 9,000 people in total. An additional 28% came for work-related reasons: of these 3,000 came for a definite job and 2,000 people came to look for work. We don't have reliable statistics about the numbers of people immigrating to Wales to join the social care sector, but given some of the evidence offered from social care service providers it may be a significant number.

2. Social Care and non EU workers

Our data on this is weak in Wales, however in England in 2015 18.6% of social care workers were born outside the UK. Amongst non UK born workers, 72% were born outside of the EU, this is 1 in 7 of all care workers in England. The majority coming from India (13%), Philippines (11%), and Nigeria (7%). The main countries for EU nationals are Poland (12%) and Romania (11%).

In England[205] among migrant care workers, over 150,000 (56%) are employed in care homes, while 81,000 work in adult domiciliary care (home care) and an additional 35,000 work in other care workforce roles such as adult community care services.

After accounting for factors such as gender, age and years of experience in the sector, migrant workers – and particularly non-European migrant workers – are significantly more likely to be high skilled (have a qualification equivalent to level 4 or above) compared to UK born workers.

This has been driven by the visa restrictions for non EU workers to date. Tier 3, through which low-skilled non-EU workers would be able to enter the UK labour force, has never been opened. This is limiting the extent to which non-EU migrants can enter the social care sector and this will become increasingly important if the EU route reduces post Brexit.

[205] Independent Age: Moved to Care: the Impact of Migration on the adult social care workforce 2017

Non-EU migrants are currently judged on a points-based system, with Tiers 1 and 2 (for high-skilled non-EU migrants) now subject to an annual cap of 21,700 people. Care workers do not appear on the Migration Advisory Committee's Tier 2 Shortage Occupation List making it still more difficult to recruit from the rest of the world. A further tightening of this requirement could have significant negative effects for social care services and its workforce. Many of the workers we need would be Tier 3 workers and therefore not meet the visa criteria for higher skilled workers. The recent changes for Tier 2 workers having to earn more than £35,000 after 5 years to remain in the UK is also thought to be an issue for the sector. Even registered nurses in nursing homes (one of the largest shortage groups and the group most often filled by Tier 2 workers) are struggling to meet the salary requirement.

Migration is a solution to workforce shortages:

- The sector has higher vacancy rates (4.8%) that the rest of the UK workforce (2.6%).
- It is growing faster than most UK industries.
- We have a high turnover rate of around 32% per year in these lower level jobs.
- The sector can be seen as unattractive due to low salaries, unsocial or uncertain hours, low status, and while the roll out of regulation of the workforce is being viewed positively by many people, others see the qualifications requirements and cost as a threat to their workforce.
- Migrant worker are typically younger than UK born worker and have higher skills levels this will be important in dealing with our aging workforce.

3. **Social care and Brexit**

The implications of Brexit are wide and far-reaching, and there is no doubt that what happens to the NHS will inevitably have a knock-on effect on social care, and vice versa.
As Care Forum Wales commented in their evidence to the National Assembly's 'The cost of caring for an ageing population' Inquiry, the uncertainty around immigration status post-Brexit is having an effect in terms of recruitment with many providers reliant on people from overseas to fill posts'.
At the UK level, there is a concern and trepidation around the impact of Brexit on the sector. The King's Fund have said that leaving the EU will have far-reaching implications for health and social care, and that Brexit is already having an impact in terms of the recruitment and retention of EU nationals in parts of the workforce. The June 2018 report by the Institute for Public Policy Research warned that the end of EU free movement risks collapsing social care in the UK. Given the migration figures above we believe Wales will be significantly affected though not as catastrophically affected as the IPPR report suggests for the rest of the UK. The UK sector already has a deficit of 90,000 vacancies, and 87% of all EU workers employed in social care would not meet the conditions for work visas currently imposed on non-EU nationals.
One of our main concerns in Wales centres around the rights of EU nationals to remain in Wales and continue as employees. Social care is the seventh largest employment sector in Wales. The sector as a whole employs over 90,000 people with another 23,000 worker in early years and child care, which is higher than the NHS.
The Welsh Government estimates that a total of 9,100 EU nationals work in; health and social care, education and public administration. Across the UK, the number of

EU nationals working in social care is greater than those working in the NHS, an estimated 7% or 95,000 of the adult social care workforce in England. Initial findings from a recent study indicate around 6% of the workforce across social care and child care in Wales are EU nationals. West Wales and Gwent have the greatest numbers of EU staff. This confirms the view that certain areas of Wales are more reliant on EU workers

The social care sector can't compete with the terms and conditions offered by the NHS and others leading to high turnover rates. The likelihood of social care employees leaving the sector for the NHS in Wales may be one scenario, and an additional scenario is that health and social care workers leave Wales for England in order to fill employment gaps there where the % of care workers in London from EU backgrounds is over 18%.

Brexit may undermine the drive towards preventative and person-centred care, inhibiting the sector's ability to keep people healthy and independent in their own homes and preventing or delaying the implementation of the Social Services and Well-being (Wales) Act. With fewer workers on the ground able to care for people in the places that matter to them, it is highly likely that visits to the GP and hospitals will increase, placing further pressures on the NHS. This is a vicious cycle that we can ill-afford to enter. As Professor Gerald Holtham's Paying for Social Care paper highlights, Brexit 'could remove or reduce a source of cheap but skilled or experienced labour for the sector'. Furthermore, the ICF's July 2018 report, The Economic Value of the Adult Social Care sector in Wales', highlights that if Brexit 'reduces the supply of adult social care workers from other EU countries, employers will have to recruit from other sources'.

The sector cannot afford to lose any potential employees and contributors, and therefore addressing the perception issue and selling Wales to our European and international neighbours must be a priority post-Brexit. We agree with the recommendations in the Commons Health and Social Care Committee 'Brexit and health and social care' April 2017 report and in particular that the UK Government recognises the value of the contribution of lower paid health and social care workers post-Brexit regardless of their nationality.

At the Wales level, we also welcome the Welsh Government's Brexit and Fair Movement of People report. With regards to migration and recognising the broad and invaluable contribution of EU nationals to the care sector in Wales, again we support the call to ensure that legislation and other actions to prevent exploitation of workers is more strongly enforced, particularly for the low paid. Tackling this exploitation will improve wages and conditions for all workers, and supporting EU nationals in the care sector and their access to the Home Office pilot Settled Status application process will be important in the coming weeks.

Work around a strategy to develop the workforce with Health Education and Improvement Wales, Welsh Government and others continues apace. Work is also underway on a joint research project with the Welsh Government using the EU Transition Fund. We welcome the Minister for Children, Older People and Social Care's statement that the Welsh Government will continue to work with key stakeholders, including Social Care Wales, to quantify the potential impacts of Brexit on the sector and to consider options for their management. This includes making further effective use of the £50 million European Transition Fund.

Work has also begun with the Wales Audit Office to look at the implications of Brexit on the social care sector and our preparedness as an organisation. We give our full support to the desired outcomes identified in the NHS Confederation's 'Key issues for health and social care organisations as the UK prepares to leave the EU' paper, particularly 'A continued domestic and international pipeline of high calibre professionals and trainees in health and social care; Continued recognition of professional qualifications for people trained in the EU and mechanisms to alert each other of health and social care professionals who are prohibited or restricted to practice; health and social care organisations continuing to participate in EU collaborative programmes, and lead and contribute positively to European reference networks; and continued engagement between the Welsh Government and the UK Government to ensure the interests of the health and social care sector in Wales are safeguarded'. These points are all crucial to the future prosperity of the sector in Wales.

Our written evidence to consultations provides another opportunity to address some of these issues. Our response to the National Assembly's Inquiry on 'What will replace EU funding post-Brexit?' made the point that the implications go far beyond workforce concerns. Many of the workforce development activities within our sector have relied on European funding streams, some of which are national (apprenticeships) and others which have been regional, such as the Skills for Employers and Employees project in north Wales and Skills for Industry in south west Wales. The European Social Fund Operational Programme for both West Wales and the Valleys and East Wales refer to social care as a sector which should encourage skills and training opportunities for both men and women. The reliance on EU interventions, or something akin to European investment, will remain and increase following the Welsh Government's decision to extend the regulation through registration of the social care workforce until 2022. Similar points were raised in our response to the Fair Work Commission Call for Evidence.

Details around post-EU funding remain vague, and new proposals such as the UK Government Shared Prosperity Fund also present concerns given the questions around the Welsh Government's involvement and influence over the distribution of this fund. The drive towards integration needs to go beyond health and social care and consider closer synergies with other sectors, including housing, transport, and community schemes and projects.

The ongoing work to establish an integrated, seamless system of health and social care in Wales continues following the publication of A Healthier Wales, and this partnership approach provides an opportunity to work closer together in terms of information sharing and the exchange of good practice. In a Brexit context, which may accelerate the 'more demand, fewer resources' dynamic, the need to work collaboratively in new, smarter and innovative ways will become more important than ever.

Social Care Wales remains committed to working with our partners and prepare, as much as possible, for all eventualities, permeations and scenarios as we approach the Brexit end game (or not). Continued investment by government in the social care sector and workforce development will be central to the successful implementation of Prosperity for All, and in the delivery of A Healthier Wales.

Social Care Wales launched a national Attraction, Recruitment and Retention Campaign on 5th March 2019, to encourage more people to join the sector, as we estimate we will need another 20,000 social care workers and 2700 Early Years

workers by 2030. Unemployment levels are low, which makes it difficult to attract “new blood” from within Wales.
Consideration to lift restrictions on the Qualification and Salary requirements for SOL would be welcomed.

Society of London Theatre and UK Theatre

MAC Review of the Shortage Occupation List

14. If you have any supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching

Job descriptions are not commonly used for dancers but, to assist the MAC, we have compiled descriptions (attached) of the range of skills sought by the leading dance companies for the occupations of skilled contemporary dancer and skilled ballet dancer.

Job Description/Person Specification – Skilled Contemporary Dancer - Rambert Dance Company

Job Description

To attend class (6 per week), rehearse and dance such parts as the Company may call upon you to play, including supporting activities such as photo shoots, workshops, open days etc.

Person Specification

Innate ability
• Able to demonstrate that technical skill is infused with a personal quality, that quality being right for the style of the company.

Training
• Trained and skilled in both ballet and contemporary dance techniques (preferably Cunningham).

Physical attributes
• Able to demonstrate the levels of flexibility (especially of the spine), strength and stamina necessary to undertake a wide range of roles and to train, rehearse and perform 6 days a week.
• Excellent level of fitness and resistance to injury (your musculoskeletal system will be examined to assess the likelihood of future injury e.g. hip-knee-ankle alignment and your injury history will be reviewed).
• Able to jump and turn, and for male dancers, able to lift other dancers.
• Able to demonstrate a wide range of movement, from the elongation and extensions required by ballet techniques to displaying grounded movement and a sense of weight for contemporary techniques.

Repertoire
• Able to quickly learn a wide range of repertoire.
• Able to perform to the highest professional standard, in front of an audience in a major venue, such as Sadler's Wells.
• Good working knowledge of dance terminology.

• Able to demonstrate musicality.
• Able to take direction from choreographers and interpret their requirements.
• Able to contribute to the process of creating new works.
• Likely to have experience of working with a range of respected chorographers.

Availability
• Free of any commitments that would prevent you from regularly touring with the company, both in the UK and overseas.

Job Description/Person Specification - Skilled Classical Ballet Dancer – Entry Level (Corps de Ballet)

This is a description of what the leading ballet companies look for when recruiting dancers at entry level. Recruitment to higher ranks calls for the same, plus significant additional innate ability and experience at elite level.

NB Outside innate ability, these requirements may vary slightly from one company to another.

Job Description
• To attend class (4 to 6 per week), rehearse and dance (or understudy) such parts as the Company may call upon you to play, including supporting activities such as photo shoots, workshops, open days etc.

• To maintain the highest standards of attendance, reliability, teamwork and professionalism in all aspects of the work

• To manage own learning and continuous development

• *To contribute to a culture of continuous improvement*

Person Specification

Innate ability
The personal quality with which a dancer infuses their technical skill and which determines whether they are right for the particular style of the company.
Physical attributes
• Able to demonstrate the levels of flexibility (especially of the spine), strength and stamina necessary to undertake a wide range of roles and to train, rehearse and perform 6 days a week.
• Excellent level of fitness, physique and resistance to injury.
• Able to complement the existing corps de ballet in height, build and physique.
• Able to jump and turn, and for male dancers, able to lift other dancers.
• For female dancers, able to perform extensively on pointe; able to perform with partners for jumps, lifts and throws.
• Able to demonstrate a wide range of movement to the aesthetic standard required by classical ballet technique, and new classical ballet choreography.

Skills and knowledge

• Good knowledge of the classical ballet repertoire (including learning full length ballets).
• The ability to learn quickly and retain information to perform different roles in a range of ballets.
• Highly organised and disciplined approach, able to respond effectively to short notice demands of the schedule.
• The ability to work with a high volume workload.
• A very good knowledge of ballet theory including notation, terminology, mime and history of ballet.
• A good understanding of and ability to perform different choreographic styles.
• The ability to perform in costume in classical or modern classical repertoire to a high professional standard, in front of an audience in a major venue.
• Musicality, and good acting ability or character interpretation as required, to provide artistic interpretation within the role.
• Desirable - prize winner at one of the UK ballet schools or a Prix de Lausanne international prize winner, or able to demonstrate equivalent standard of talent.

Qualifications
It is desirable, but not essential, for dancers to have completed:
• the Trinity College National Diploma in Professional Dance (NVQ level 6) or the BA in Modern Ballet at The Royal Conservatoire of Scotland;
• the National Certificate in Professional Dance (NVQ level 4);
• one A-Level;
• and two BTEC National Awards in Performing Arts (Dance and Arts Management) (NVQ level 4)1.

1 According to the London School of Economics' Research Lab, the following qualifications are equivalent to graduate level or NVQ 4:
• BTEC Higher National Certificate (HNC)
• Higher National Diploma (HND)
• City & Guilds Full Technological Certificate / Diploma.

Training
Dancers will have normally completed a full-time three-year course in classical ballet training, for students aged 16 – 18, at one of the UK ballet schools (the Royal Ballet School, the English National Ballet School, Elmhurst School for Dance and Central School of Ballet), or through Scottish Ballet’s Associates Programme, or at an institution of a similar standard outside the UK.
The dance training covers classical ballet, pas de deux, solos, repertoire, character, contemporary, stagecraft, make-up and body conditioning. In the third and final year the students gain performance experience by performing with a leading professional company and as a touring group.
(Prior to this training at tertiary level education, a minimum of two years’ training will have been undertaken, although this would be exceptionally short compared to the average. Normally, training starts for girls at 3 or 4 years old and for boys at 7 or 8. From this age until 15 or 16, the individual will be intensively trained alongside their conventional education. At 15/16 the tertiary education begins. It is therefore quite usual to see 10 years’ training in ballet before the requisite technical capabilities are developed for work in a professional company.)

SRK Consulting

5 January 2019

Migration Advisory Committee Secretariat
Migration Advisory Committee
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Via email: MAC@homeoffice.gsi.gov.uk

RE: Review of Occupations on Shortage Occupation List

We refer to your Call for Evidence dated 9 November 2018, in respect of thr Shortage Occupation List ("SOL") and wish to submit evidence in support of retaining or including the following occupations and job titles on the SOL for the Mining Sector. We have indicated the SOC2000 Code for each occupation/job title below:

- mining engineer (2121) – open pit mining engineer, underground mining engineer, mineral economist;
- geologists (2113) – resource geologist, mining geologist, structural geologist;
- metallurgical/mineral processing engineers (2129);
- hydrogeologists and hydrologists (2113);
- geochemist (2113);
- chemical engineer (2125);
- social scientist (2322);
- environmental scientist (2113);
- civil engineer (2113); and
- geotechnical engineer (2121) – tailings engineers.

About SRK Consulting (UK) Limited

SRK Consulting (UK) Ltd (SRK (UK)) is an independent, international consulting practice, providing focused advice and solutions to clients, mainly in the mineral and water resource industries. Formed in Cardiff in 1988, SRK (UK) currently employs 119 staff with a turnover of £13.2 million in professional consultancy fees, for the 9 month period ended 31 December 2014. The wider SRK international group of companies employs over 1,400 staff in 50 offices on 6 continents and has operating companies in South Africa, Turkey, Canada, the United States, Russia, India, Australia, Brazil, China and Chile.

The majority of SRK (UK)'s 119 employees live in the local area. A breakdown is provided below for information:

Cardiff and surrounding areas:	104
England	13
Elsewhere in Europe	2

A large portion of SRK (UK)'s mandates involve providing consultancy services to the international Mining, Financial and Legal Institutions many of which are based in London, New York and Toronto. This primarily involves reviewing reports produced by others in support of the raising of both debt and equity. Notwithstanding this, SRK also undertakes design studies directly for mining companies based in the UK and elsewhere.

SRK (UK) has established itself as a leading mining consultancy which is highly regarded for its independence, experience and quality. It is therefore critical that we are able to attract and recruit highly skilled individuals to serve these, as well as our other clients.

Over 85% of our turnover is provided by consulting projects on a world-wide basis and in April 2013 SRK was awarded the prestigious Queen's Award for Enterprise and International Trade and has also previously been awarded the Queen's Award for Enterprise in 2006 and the Queen's Award for Export in 1998.

SRK (UK) has a major shareholding in SRK Kazakhstan (UK) Ltd which is registered in the UK and which also has a Branch Office in Almaty, Kazakhstan. We also have a shareholding in other SRK practices, notably in Ghana and India and we need to bring across new employees from these practices to spend some time working in SRK (UK) in order to coach, mentor and train individuals in SRK's practices. We also need to bring individuals over from other SRK sister practices to coach, mentor and also bring niche expertise and knowledge into SRK (UK).

In support of our application we would be grateful if you could consider the following information in respect of each of the job titles/occupations set out above. We have adopted the Skilled, Shortage Sensible criteria.

Skilled

- Typical basic earnings for each of the job titles/occupations identified above are in the region of XXX. In addition all employees receive the following benefits:
  - Access to a non-contributory Group Personal Pension Scheme – minimum employer contribution of 5.25%.
  - Group Life Assurance (Death in Service Benefit) – 4 x basic salary.
  - Permanent Health Insurance – 75% of earnings.
  - Private Medical Healthcare.
  - Health screening.
  - Bonus of between 10% - 30% of basic salary.
  - SRK is an employee owned company and we also encourage our employees to purchase shares in SRK (UK) and SRK (Global).
- As a minimum, individuals must possess a Bachelor Degree in a relevant subject. However, the majority of employees also hold a Masters Degree in a relevant subject. SRK (UK) requires technical staff to be, or work towards becoming a member of their relevant Professional Institution, which

includes the Institute of Materials, Minerals and Mining; The Geological Society; and The Society of Environmental Engineers, and encourages employees to obtain professional qualifications such as CEng, CGeol, IEng, CSci, or CEnv.

- Some services SRK provides to clients require that employees are Competent Persons for the reporting of Mineral Resources and Reserves. In addition to requiring membership of a professional institute, this also requires a number of years' experience in specific minerals and mining methods.
- SRK (UK) has a technical staff compliment of 77 engineers, geologists and scientists who are Fellows and Members of their relevant professional institute and the majority hold Chartered status or are working towards this. The technical employees collectively hold 17 PhD's; 50 Masters Degrees and 77 Bachelor Degrees
- Relevant practical experience and exposure to the international mining industry of at least three years is essential. Whilst appropriate qualifications are required, of crucial importance to us is operational experience. It is essential for us to attract and recruit individuals from places such as Australia, South and North America, Russia, Kazakhstan and Africa where they gain practical and operational experience in the mining industry.
- Although the natural resource industry is experiencing challenges, new production is being limited by skills shortages[206], this is expected to improve and SRK (UK) requires to be in a position to compete for permanent skilled and experienced professionals in the specialist fields of:
    - Geology – resource, mining and structural geologists;
    - Mining engineering – open pit and underground engineers;
    - Mining Geotechnical/Rock/Tailings Engineering – geotechnical engineers;
    - Water Resources – hydro-geologists/hydrologists;
    - Geo-environmental and Geo-chemistry – geo-environmental engineers, chemical engineers and scientists;
    - Natural Resources Environmental – social and environmental scientists/engineers;
    - Mine Infrastructure Engineering – civil engineers and scientists; and
    - Mining Economics – mineral valuation specialists.
- It generally takes up to 6 months to fill a vacancy. Invariably, we find that suitable candidates reside outside the European Economic Area (EEA) because of the skills shortage within the EEA (see information about the shortage of university courses in the UK below). This inevitably prolongs the recruitment process.
- Once vacancies are filled, individuals tend to remain with SRK (UK) for at least 5 years or longer. SRK (UK) actively encourages employees to progress their careers within the company and the group and frequently seconds and transfers employees to and from our overseas practices to ensure essential skills and company knowledge are retained within the SRK group.
- Retention of employees is crucial to the success of SRK (UK). Salaries are reviewed annually and the average pay rise for employees occupying the above job titles/occupations was typically between 5 and 10%.
- We have a number of individuals approaching retirement age and given that the decline in

[206] https://www.hsbcnet.com/gbm/global-insights/insights/2014/skills-shortage-hits-mining.html
http://www.vancouversun.com/business/2035/Mining+skills+shortage+2014+beyond/9368553/story.html
http://careerminer.infomine.com/using-the-skills-shortage-in-the-resources-industry-to-your-advantage/

educational courses this will be an issue for us in the next 5 years.

- Mining companies increasingly see international experience as an important credential for top performers and a necessity to support growing operations in developing countries; they identify the risk of wage inflation and the need of companies to increase employment rates particularly of skilled staff that may have been laid off during the financial crisis.
- The nature of the above job titles/occupations inevitably means that employees are often required to spend time working abroad on site. Employees work anti-social hours and overtime. These factors undoubtedly influence individuals when deciding whether to apply for a position and also whether to accept an offer of employment with SRK (UK). We currently have a number of employees who have spent extended periods working in West Africa.
- Additionally, SRK (UK) experiences difficulties in attracting candidates as the global mining companies tend to offer higher salaries therefore reducing the pool of labour available to us in Europe. SRK (UK) is unable to compete with such salaries and this further narrows the labour market to recruit from.
- We are also investigating options to amalgamate the offices in the UK, Turkey, Russia and Kazakhstan under one umbrella which will involve the creation of SRK Europe, which will be registered in the UK. Again, this will require employees from the offices outside the EEA to spend a minimum of one year in the UK to undergo on-the-job training before they return to their home office.

Sensible

- Due to the extremely limited nature of the UK mining industry and decline in Universities offering relevant courses in the UK and the EEA, we have experienced difficulty in appointing experienced EEA nationals with the required level of practical mining skills and experience to support our increasing international business.
- The closure of the UK Mining industries impacted on the decline of Universities offering courses in the Mining and Mineral Resources subjects. There are now only a limited number of Universities in the UK offering relevant courses which has resulted in a lack of available graduates. These are as follows:
    - Camborne School of Mines – University of Exeter: Undergraduate and Postgraduate courses in Mining Engineering; Postgraduate courses in Minerals Engineering; Undergraduate courses in Applied Geology; Postgraduate courses in Mining Geology;
    - University of Leeds: Undergraduate and Postgraduate courses in Chemical and Mineral Engineering; Postgraduate studies in Earth, Energy and Environment;
    - University of Birmingham: Undergraduate and Postgraduate courses in Hydrogeology; and
    - University of Nottingham: Undergraduate and Postgraduate courses in Environmental Engineering/Management.
- SRK (UK) has also invested a great deal of time and resources to encourage UK graduates/workers to take up a career in mining consultancy and a summary is provided below:

  Scholarship Programmes

    - For the academic years 2017/18 and 2018/19 SRK (UK) has offered two separate scholarships of £1,500 to two students to assist with their MSc studies (Hydrogeology), paid directly to the University of Birmingham. Those scholars are also given the opportunity to take part in a suitable research project for their MSc which is also supported by SRK (UK).

- SRK (UK) has also provided £2,000 towards the cost of PhD studies from Southampton University.

Internship Programme

- SRK (UK) continues to offer internships across our three technical departments, which will usually be for a period of three months.
- SRK (UK) is also collaborating with University of Bath to offer a work-based project to students as an eight-week practicum during spring 2019. This is an alternative to a dissertation, whereby students have the opportunity to undertake a work-based project, working with SRK (UK) in international development.

Teaching

- SRK employees currently lecture on several of the relevant courses remaining in the UK and have in the recent past acted as external examiners and indeed assisted in the coordination and provision of modules of both masters and undergraduate courses.

Work Experience Programme

- Work experience is offered to students studying from a variety of universities in the UK and Europe. An accommodation allowance of GBP30 is paid per night for a period of up to ten nights.

Careers Fairs

- SRK (UK) attends at least four career fairs per year and also sponsor career days throughout the country.

- Despite the above commitment we provide in terms of time and resources, we are increasingly finding that when individuals graduate, in order to progress their career they seek to secure a job overseas to obtain the operational experience which they are unable to benefit from in the UK. We are also losing employees to overseas mining companies as they too are looking to gain this exposure.

Conclusion

SRK (UK) has endeavoured to attract candidates from the UK and EEA and has also made concerted efforts to invest in and train graduates from within the UK and EEA however for the reasons stated above together with a shortage of highly skilled candidates with relevant practical experience and exposure to the international mining industry, the pool of available candidates from which we are able to draw from within the resident labour market has greatly declined.

This general absence of UK-sourced experience, in addition to retiring experts means a loss of knowledge and consequently a skills gap is emerging. It is therefore essential to the continued success and growth of our business that we can be flexible and recruit high calibre individuals in order that we can compete on an international basis.

Maintaining a sensible and fair balance of attracting domestic and experienced migrant workforces may help to ensure the future growth of the industry, including productivity in the UK.

In addition, the roles we have identified are NQF level 6+ and all meet the minimum salary requirements currently in place. We are therefore not requesting that the Home Office relaxes its position regarding the level of skill and reward available to migrant workers.

We trust that we have provided a practicable justification as to the reasons for wishing to apply for the above mentions job titles/Occupations to be retained or included on the SOL, however should you have any queries or require further information to enable you consider our request, please do not hesitate to contact us.

Glossary

Fellow of the Institute of Materials, Minerals and Mining (FIMMM): a prestigious grade for those with an established and enhanced reputation in materials, minerals and mining technology.

Professional Member (MIMMM) is the main professional grade requiring an accredited Masters degree, or equivalent, in a relevant science, technology or engineering field, coupled with at least four years' approved training and responsible experience.

Chartered Engineer (CEng) must be able to demonstrate their professional engineering experience and managerial skills. They must have practical knowledge and understanding of the engineering principles relevant to the disciplines of the Institute.

Fellow of the Geological Society will have a degree or equivalent qualification in geology (or a related subject), or have not less than 6 years' relevant experience in geology or a related subject (e.g., membership of another learned society, either in UK or overseas).

Chartered Geologist: a Fellow of the Geological Society with not less than five years' relevant postgraduate experience in the practice of geology.

Strategic Transport Apprenticeship Taskforce

STRATEGIC TRANSPORT APPRENTICESHP TASKFORCE: RESPONSE TO THE MIGRATION ADVISORY COMMITTEE CALL FOR EVIDENCE ON EEA WORKERS IN THE UK LABOUR MARKET

Summary

Transport is a fundamental to the UK strategy for productivity and growth in post Brexit Britain; but there are existing skills shortages and gaps resulting from historic underinvestment, an ageing demographic and poor perceptions of the sector. Potential constraints on labour supply stemming from future migration policy add a further dimension to these challenges.

Strategies to grow sustainable pipelines of skills have been in place since before the referendum, not least the Transport Infrastructure Skills Strategy which gave rise to this taskforce (STAT). Our "One Year On" report, published in July 2017, shows that we have made real progress driving investment in skills across our organisations and down our supply chain, and in year two we will be building on this momentum.

The STAT membership collectively covers a (directly or indirectly) a workforce of some 800,000[207] employees right across the transport sector and across the regions. Whilst we have a good understanding of our skills needs, we do not have a single, comprehensive picture of the reliance in transport on non-UK EU labour. Once the right to work in the UK has been established, there is no requirement to maintain records on the nationality of employees, and so organisations have not normally asked for this data – seafaring being a notable exception. In addition, post referendum, there have been real sensitivities around asking employees to declare their nationality.

Our evidence therefore relies on discrete industry surveys with a limited sample size, as well as anecdotal data. Whilst there are clearly limitations in this data, we believe our collective industry knowledge and expertise allows us to draw certain, overall conclusions.

There is a picture emerging of potentially strong reliance on non-UK EU workers in certain regions and in certain specialisms. This also appears to be stronger in the lower tiers of the supply chain and among agency workers, and less so in our delivery bodies, for example, Network Rail, Highways England. Whilst there is a proportion of these workers in what we have traditionally understood as the "lower" skills level (two

[207] See table 1.2.1 ONS lists 1.5m people employed in transport and storage as at August 2017. However there may not be a direct correlation with workforce included in this paper by the STAT membership. For example, Highways England internal analysis estimates there may some 60% skills overlap between highways and local roads and general construction.

and three). With UK unemployment at a 42 year low[208], we must not assume that the levels of experience these workers bring can always be quickly replaced like for like.

Ameliorative action currently underway tends to focus on supply side, and specifically on the apprenticeships agenda. Whilst this is a real opportunity, it is not a quick fix. There are challenges around implementation in a policy environment that is still bedding in; and programmes which develop the skills we need as a sector can take three years and more for a learner to complete. Many plans will only truly come to fruition around 2030, when the school children of today are entering the workforce.

Businesses need lead time to plan and certainty to invest. There are opportunities to review the way in which we procure and manage our investment programmes which would support this certainty - but these are not short term. For our major projects, Modern Methods of Construction (MMC) present a real opportunity to address regional disparities and spread economic benefits, but this will take time and investment to truly take hold.

Until such time as policy and strategies around developing sustainable skills can fully come to fruition, some highly specialist roles, and those demanding hands-on experience will still need to be filled by non-UK employees. A visa system therefore needs to be straightforward and flexible enough for businesses to use when needed. Ideally this will accommodate a need for workers at a range of skill levels, as well also taking into account regional or project based variations.

STAT believes to the best of its knowledge that the contents of this paper are correct at time of writing. As we continue to build our body of evidence we encourage the MAC to keep talking to us.

Introduction

The Strategic Transport Apprenticeship Taskforce (STAT) welcomes the opportunity to respond to the Migration Advisory Committee call for evidence to support its inquiry into European Economic Area (EEA) workers in the UK labour market.
STAT was established in April 2016 as the primary delivery vehicle for the Transport Infrastructure Skills Strategy. STAT is a voluntary collaboration of transport employers; the Chair is appointed by the Secretary of State for Transport, and ministers are kept informed of progress. Mike Brown, Commissioner of Transport for London, currently chairs the taskforce.

The Transport Infrastructure Skills Strategy (TISS) was published in January 2016 as a response to the risks to our investment programme of skills shortages. An ageing

[208] ONS, Unemployment rate to August 2017.

workforce, a lack of diversity and the challenge of attracting talent compound these challenges. All of these are key factors in stagnating productivity.

The strategy set stretching ambitions for the creation of new apprenticeships; tackling the transport sector's poor record on diversity, and recognised the need to collaborate on promoting transport as a career to young people, parents and teachers. The Chief Executive Officers (CEOs) of Network Rail, Highways England, Crossrail, High Speed 2 Ltd (HS2), Transport for London (TfL) and the Permanent Secretary of the Department for Transport (DfT) all committed to delivering it[209].

Now one year on, as we prepare for a post-Brexit Britain, there is even more imperative to invest in skills. Our collaboration is gaining increasing momentum as membership expands to become more representative of the sector as a whole. Membership of the STAT includes:

- Rail Delivery Group (RDG), representing train operators
- Trades Union Congress (TUC)
- Heathrow Airport
- National Skills Academy for Rail (NSAR)
- Highways England
- Network Rail
- Transport for London (TfL)
- Crossrail
- Maritime Skills Alliance
- UK Major Ports Group
- HS2 Ltd
- Chartered Institute for Logistics and Transport (CILT)
- Skanska
- Department for Transport (DfT), which provides the secretariat.

This response is divided into four parts. The first part gives the transport sector context, an overview of its contribution to the economy, size of workforce and skills types it employs. Part two examines the sector's reliance on the non-UK EU workforce and potential impacts of Brexit-related immigration change. In the third part of the paper, we set out ameliorative actions planned or already in train, and finally draw initial conclusions.

1 Context

1.1 Transport's role in the UK economy and growth

1.1.1 The transport sector drives UK economic growth by connecting businesses to businesses; businesses to workers; and business to customers: Demand for rail travel

[209] https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/495900/transport-infrastructurestrategy-building-sustainable-skills.pdf

doubled over 20 years to 1.7bn journeys annually,[210][211] and is set to increase by 40% by 2030[212.] The industry and its supply chain contributes up to £10.8bn Gross Value Added (GVA) per annum [213] and by reducing road congestion and enabling companies to locate closer to each other;

1.1.2 Vehicle miles driven on roads have risen by 23%since 1993[214]. By 2040 this is set to increase by between 19% and 55%[215]. The GVA of the road haulage sector is £11.9bn[216];

1.1.3 UK air passenger numbers are set to increase by 2% per annum[217] and the GVA of the sector is circa £14bn[218]; and
1.1.4 Maritime trade is expected to double by 2030. The GVA of the maritime sector is circa £13bn[219].

1.1.5 There is a £88bn pipeline of investment in transport infrastructure this parliament,[220] supporting record investment in rail, road, ports and airports; funding the biggest rail modernisation since Victorian times, and the most extensive improvements to roads since the 1970s.
1.1.6 Our ability to trade freely depends on the speed and reliability of the global connections made possible by our ports and airports, and 95% of international UK freight by weight moves through our ports[221]; 40% by value of goods traded with non-

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210 Much of STAT's evidence cited in this paper relates to non-UK EU nationals, and not EEA nationals and is referenced as such. In practice we believe any differences would be only very slight.

211 Office of Road and Rail, *2015-16 Q4 Statistical Release.*

212 National Infrastructure Commission modelling, using Department for Transport's National Modelling Framework

213 UK national accounts 2015 (direct), p20, Rail Supply Group, *Fast Track to the Future,* https://www.railsupplygroup.org/wp-content/uploads/2016/01/RSG-Brochure-Jan-2016.pdf (supply chain)

214 Department for Transport statistics, Traffic volume - miles (TRA01), Table TRA0101

215 Department for Transport, *Road Traffic Forecasts 2015,* p39

216 Annual Business Survey 2015, ONS

217 Department for Transport, *UK Aviation Forecasts 2013*

218 Annual Business Survey 2015, Revised Results

219 DfT analysis of ONS GVA from the Input-Output Supply and Use Tables (unless stated otherwise); estimates for maritime business services from: The economic impact of the UK Maritime Services Sector, Oxford Economics, 2015; estimates for marine leisure: selected sectors from UK Leisure, Superyacht and Small Commercial Marine Industry: Key Performance Indicators 2013/14 (British Marine Federation)

220 National Infrastructure Delivery Plan, 2016 – 2021, Infrastructure and Projects Authority (IPA), 2016

221 DfT maritime statistics, Eurotunnel data (from ORR) and CAA for aviation

EU countries are carried by airfreight.[222] Heathrow carries more freight by value than all other UK airports combined[223].

1.1.7 1.7bn tonnes of freight are carried annually[224] on the strategic road and rail networks. Domestic roads and rail services extend supply chains, facilitate just in time distribution and access international gateways.

1.1.8 UK productivity has been falling behind our peers, and there are notable regional differences in GVA across the regions. In addressing these disparities, policy is to create a network of highly productive modern city regions with goods and labour moving freely between them. Clearly investment in transport will be key to driving productivity and growth.

1.1.9 But to do this we need to have the capacity and capability to deliver, and this means addressing critical skills challenges that have been holding the sector back for too long a time. These challenges include skills shortages; an ageing demographic and poor diversity. These combined mean that the sector does not have the tools to attract the broad range of talent it needs.

1.1.10 The Government's Industrial Strategy encourages businesses to invest for the long term, and developing a sustainable workforce is a critical part of the plan for post-Brexit Britain.

1.1.11 Fundamental to this strategy for productivity and growth is the creation and expansion of the skilled workforce we need to deliver our economic infrastructure. Far-reaching reforms to technical and vocational education have been designed to develop this capability.

1.1.12 These reforms will take time to bed in. As they do, employers need to work closely with education establishments to make sure that our sector is in a position to make the most of the opportunity the reforms offer as quickly as possible.

1.1.13 The skills challenges in our sector were recognised before the referendum to leave the European Union (EU). Measures to address these, such as the Transport Infrastructure Skills Strategy (TISS), aimed at building a sustainable pipeline of skills, as well as other sector-specific ameliorative actions [see Section 3] are already underway or in the planning. However most of these strategies have a medium term (to 2030) timeline before they will truly come to fruition.

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[222] HMRC, www.UKTradeInfo.com

[223] Ibid

[224] Transport Statistics GB401, 2015

1.1.14 The decision to leave the EU adds a further dimension to the imperative to invest in skills, as even in the short term, employers may no longer have such easy access to labour from the EU countries to fill shortages, as they have had previously.

1.1.15 In the transport sector, there is some quantitative evidence to support a strong reliance on non-UK EU workers in parts of the sector, notably in transport construction, freight and logistics, and concerns about potential impact of future migration policy based on qualitative data in aviation and the maritime sector. There are significant regional variations and a stronger reliance in certain roles, including specialisms.

1.1.16 However, data collection has been challenging and the evidence is by no means comprehensive. There are real sensitivities around asking existing staff about their nationality, and there are few comprehensive records across organisations as this type of data collection has not previously been a legal requirement.In the absence of comprehensive records, the sector has relied on a mixture of anecdotal evidence and discrete surveys to estimate reliance on non-UK EU workers. This paper is an initial pass at bringing together what we know now.

1.2 Size of the workforce

1.2.1 Current workforces are significant in size and average salaries tend to be higher than the national median of £12.18 per hour or £28,000 per annum.

Sector	Workforce size	Average salary
Maritime	185,700 [directly employed]	£29, 493 per annum[225]
Aviation	300,000[226] (of which Heathrow has 6,500 direct employees and 76,500 indirect)	£17.95 per hour[227]
Strategic and local roads and supply chain	70,000, of which 48,000[228] capital	£31 000 per annum

[225] ONS ASHE Annual Survey of Hours and Earnings 2016 annual gross salary table 16.7a

[226] DFT aviation deep dive analysis

[227] BEIS stat: These stats exclude service activities incidental to air transportation

[228] Transport Infrastructure Skills Strategy: One year on, 2017, https://www.gov.uk/government/publications/transportinfrastructure-skills-strategy-one-year-on, figure based on Highways England analysis modelled by NSAR [23] Highways England analysis

	projects, 22, 000 maintenance[23]	
Rail and supply chain	220,000 – 250,000[229], of which 30% delivery bodies; 30% TOCs and FOCs; 40% supply chain.	£34 000 to £44 000 per annum[230]
Road freight	315,000[231]	£27, 500 per annum[27]

Table 1 Workforce size and average salary

1.2.2 Normalising these numbers is difficult. Where possible we have identified where this figure includes the direct, specialist supply chain. There are many jobs reliant on these sectors, such as retail jobs in airports or stations. There are also contracting and agency roles that will be captured by other sectors such as agency cleaners or non-specialist construction roles.

1.3 Workforce skills

1.3.1 The following section gives a brief introduction to our workforce in terms of skill levels and geographical spread, where available. Because of the nature of transport networks and operations, there is of course broad national coverage, with some regional variation and shifts expected over time as major projects reach implementation phase.

Rail

1.3.2 The table below shows the breakdown of rail employees by their approximate skill level. The table also shows how far, on average, each type of employee is willing to relocate for work. Elasticity of relocation is shown because it cannot be assumed labour shortages in one area can be resolved by moving the unemployed from another.

[229] Transport Infrastructure Skills Strategy One year on report gives a conservative estimate of 220,000 which does not include organisations outside delivery bodies; TOCs and FOCs and supply chain. Rail Delivery Group estimates upper end of the range https://www.raildeliverygroup.com/aboutus/publications.html?task=file.download&id=469772895

[230] Both taken from the ONS ASHE 2016 op cit

[231] (LGV Drivers only, Freight Transport Association, Logistics Report 2017 [27] ONS ASHE op cit

Role	% of rail[232] workforce	How far will relocate for new job[29]
Operative, technician	48.5%	11-27 miles
Advanced technician or supervisor	23.6%	50-60 miles
Professional manager, engineer	26.8%	Between regions
Executive	1.1%	International

Table 2, Rail skills breakdown

1.3.3 The rail industry is committed, not only to providing high-quality employment, but also training and developing its own staff so vacant and higher skilled roles can be filled. Many of the roles available in the industry have specific training required across all of the skills levels outlined above. This includes a mixture of both academic and vocational training.

1.3.4 To illustrate skills levels, the length of some typical training times are outlined below:

- International train drivers, including language courses, one year (plus three years continuous main line driving experience on electric traction and impeccable safety record)
- Track engineer, via apprenticeship scheme, three years
- Signaller, nine weeks basic course, can be longer for more complex roles
- Vehicle Engineer supply chain, degree plus two-year training programme
- Chartered Engineer, Master's Degree plus four-year structured development programme

Strategic and local roads and supply chain

1.3.5 The table below shows the breakdown of road employees by their approximate skill level.

Role	% of strategic and local road workforce[233]
Operative, technician	57%
Advanced technician or supervisor	18%

[232] Transport Infrastructure Skills Strategy One year on op cit, based on data modelled by NSAR [29] Rail Delivery Group

[233] Transport Infrastructure Skills Strategy One year on op cit

Professional manager, engineer	20%
Executive	5%

Table 3, Road skills breakdown

Road Freight

1.3.6 The Road Freight sector employment is spread nationally with clusters of big box logistics (units of 100,000 sq ft or more) in London, the Midlands and major cities such as Liverpool, Manchester, Leeds, Newcastle and Glasgow. There are also clusters in the areas around ports and rail depots.

1.3.7 Employment is spread relatively evenly across the major conurbations but with variations in the reliance on migrant workers.

Maritime

1.3.8 The maritime sector is made up of a number of specialised clusters, often found around, but not necessarily restricted to, the areas around ports. Clusters of specialised businesses such as those found in London, Merseyside, the Solent and the Humber develop around specific aspects of the sector and are powerful engines of local growth.

1.3.9 Employment is not concentrated in one region, with London, Scotland, the South-East and the South-West, all having a 16-17% share of total employment. One fifth of total British employment[234] is outside England.

Heathrow

1.3.10 Heathrow airport employs 6,500 direct employees with 76,500 indirect employees working across a range of airport operations including construction, logistics, retail and hospitality sectors[32].

1.4 Skills challenges

1.4.1 The transport sector has identified challenges characterised by specific skills shortages, poor diversity and an ageing demographic. The ageing workforce is particularly pronounced in the rail and road freight industries. The 'core' role shortages

[234] Derived from the Business Register and Employment Survey (Office for National Statistics); and The economic impact of the UK Maritime Services Sector, Oxford Economics, 2015 (for maritime business services) [32] Heathrow Airport, March 2017, *Heathrow pledges to create over 500 airport apprenticeships this year*, http://mediacentre.heathrow.com/pressrelease/details/81/Corporate-operational-24/8352

in the transport sector are well documented and we are responding to them but expect, as roles become increasingly ‘digital’, to see shortages here too as there will be insufficient supply and competing demand.

1.4.2 For rail, the challenges outlined for the whole sector may result in a need to recruit more than 50,000 people[235] over the next 10 years as a conservative estimate, to replace those employees forecast to reach retirement age[236] as well as to deliver on future investment and growth. We estimate peak demand for the railway workforce at 2020/ 2021 largely driven by HS2. At this point, an additional 7,150 people will be required in signalling nationally, 10,000 people in track, and 3750 in electrification.[237] Some industry estimates have put the future recruitment need as high as up to 100, 000 people, with the same research highlighting the cost of not securing these new resources as £300m per annum to the rail industry and £380m each year to government by 2024[238].

1.4.3 The rail industry has five main direct areas of shortage, mainly in core rail engineering disciplines and train drivers. These are currently weighted toward the southern half of the UK. In 2021, which we forecast to be the peak year, we will need an additional 7150 people in signalling, 10,000 in track and 3750 in electrification. The West Midlands will be the region of highest need at that point.[239]

1.4.4 To replace workers that are anticipated to retire over the next 10 years it is estimated [240] the Highways sector will require 21,000 new workers. This excludes demand for additional workers due to the growth in the Highways sector, for example, as planned during the first Roads Period for Highways England. There is an increasing need for workers with digital and civil engineering skills[241].

1.4.5 Following a period of decline, the number of Heavy goods Vehicle (HGV) drivers employed has been rising since 2013. Meanwhile, the number of HGV drivers unemployed has been falling recently. The number of people claiming Jobseekers' Allowance who stated that “HGV driver” was their usual occupation has continued to fall from 15,255 in Mar-09 to only 530 drivers (0.2% of total drivers) as of Aug-16.[242] However, the Freight Transport Association (FTA) believes the sector is short of

[235] Industry estimate (NSAR)

[236] NSAR modelling

[237] Transport Infrastructure Skills Strategy One Year on op cit

[238] The Cost of Not Addressing Skills in the Rail Sector, Atkins for RSSB and NSAR, October 2015

[239] Transport Infrastructure Skills Strategy One year on op cit

[240] Highways England analysis

[241] Highways England analysis

[242] *Nomis - Claimant count by occupation (August figures) 14 September 2016*

43,000–45,000[243] drivers and the Road Haulage Association (RHA) has suggested it is closer to 60,000[244]. The driver shortage is believed to be increasing as the number of drivers retiring from the industry exceeds new entrants. The average age of HGV drivers was 47.9 years old as at June 2016.

1.4.6 In maritime, there is a potential shortfall of around 3,800 deck and engine officers at sea in the UK shipping industry by 2026[245]. In addition, the UK's global subsea market requires an extra 10,000 skilled workers to join the sector to retain its leading global status.

1.4.7 Subject to expansion at Heathrow, the DfT estimates jobs created locally around the airport 38,000 - 77,000 in 2030, or 39,000 - 78,000 in 2050[246]. Heathrow estimates a total of 180,000 [247] jobs **nationally** and 10,000 [248] apprenticeships should be generated[47].

2 The non-UK EU workforce

2.1.1 Data on the non-UK EU workforce is not available in a uniform and normalised format. Often organisations do not collect this information, as law does not require it.

2.1.2 There are concerns in some organisations about starting to ask this information of existing employees. This is because employers do not want to make non-UK EU workers feel concerned about their jobs whilst the Brexit negotiations are on-going and the final position is unclear. Going forward, consideration is being given among some employers to recording the nationality of new joiners.

2.1.3 This section sets out data gathered by our members, quantitative and qualitative, on the extent to which modes may currently rely on the non-UK EU workforce, over and above that which is available in the Labour Force Survey.

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[243] *FTA methodology: the driver shortage is estimated by comparing job growth since 2001 for the general population with HGV drivers based on ONS LFS statistics*

[244] *Evidence provided to the House of Commons Transport Committee inquiry "Skills & workforce planning in the road freight sector", 20 July 2016*

[245] p67, Oxford Economics, *Seafarer Projections November 2016*

[246] Source: Table 6.1, Department for Transport, *Further Review and Sensitivities Report: Airport Capacity in the South East,* https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/562160/further-reviewand-sensitivities-report-airport-capacity-in-the-south-east.pdf

[247] PwC, *Airports Commission modelling 1. Strategic Fit: GDP/GVA Impacts*, https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/439176/strategic-fit-updated-gdpgvaimpacts.pdf

[248] Heathrow Airport, *Heathrow pledges to create over 500 airport apprenticeships this year*, http://mediacentre.heathrow.com/pressrelease/details/81/Corporate-operational-24/8352

[47] Transport Infrastructure Skills Strategy: One year on op cit [48] Chamber of Shipping Manpower Survey.

2.1.4 Whilst this data is not comprehensive, we are starting to see strong regional variations, as well as a greater reliance in certain specialisms – for example in the maritime sector, 28% of certified officers on vessels in the UK shipping industry are EU nationals[48]. Anecdotally, there is a higher reliance on non-UK EU workers among agency staff across all modes.

2.1.5 There is no difference in recruiting practices for non-UK EU or UK staff, although there appears to be a higher proportion of non-UK EU workers among agency staff. We have no evidence that workers in our sector have been leaving the UK following the vote to leave the EU.

Rail overview

2.1.6 On behalf of the rail industry, NSAR have undertaken research across a range of organisations within the sector [249] . The Rail Delivery Group (RDG) has supplemented this with some additional information from its passenger and freight members.

2.1.7 NSAR conducted anonymous research with a range of organisations involved in the delivery of rail services and the supply chain. 52% of the respondents thought that Brexit would have an impact on their organisation and made the following verbatim comments as far as they are relevant to this consultation.

2.1.8 *One respondent said, "[the] ability to speak a number of different languages is not found in the UK".* According to the European Commission, the UK has the second lowest take up of the learning of foreign language study in the whole EU. Less than 10% of secondary students learn two or more foreign languages at secondary at school. 30% of secondary pupils learn French in "general programmes"[250].

2.1.9 *A second indicated that the "skills base is not in the UK, France has high speed trains so workers are skilled in this area"*. France was at the vanguard of developing a high-speed rail network introducing trains as early as 1981. As High-speed rail is developed in the UK it is beneficial to draw on the skills not only of home grown talent but also from those with practical implementation experience.

2.1.10 According to the NSAR research, there is an average of 17% of the whole rail workforce who are non-UK EU nationals.

2.1.11 However, the average figure hides some strong emerging regional and skillsbased variations. In London and the South-East, up to 40% of the workforce at level 2 may be made up of non-UK EU nationals.

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[249] Reference NSAR survey sample size and methodology

[250] European Commission, http://ec.europa.eu/eurostat/statisticsexplained/index.php/Foreign_language_learning_statistics

2.1.12 The chart below shows the variations within similar organisations and across the different businesses in different locations in the rail industry.

2.1.13 There are also areas of specialist expertise, for example electrical engineers, where reliance on migration is high. International firms also have a strong (circa 40%) reliance on non-UK EU workers.

Business types	Estimated proportion of non-UK EU workers	Particularly affected areas of the country
Passenger operators	15-40%	London
Human resources including catering, training and health	2-15%	London
Infrastructure	1-30*%	Warrington, Doncaster Trowbridge, London and the South East
Professional advice, consultancy and services	5-33%	London South East
Rolling stock maintenance, parts and systems	1-25%	Isle of Wight, Worcester Derbyshire, Eastleigh
Signalling and telecoms	1-14%*	Nationwide

Table 4, Rail breakdown of non-UK EU workforce

**there were outliers at 85% for infrastructure and 95% for signalling and telecoms.*

2.1.14 The highest concentrations of non-UK EU nationals appear to be in the supply chain and not in client organisations.

2.1.15 This is borne out by estimates from Crossrail, whose most recent estimate of non-UK EU citizens on the Crossrail project was produced in July 2016. Crossrail emphasises the limitations of the data given there is currently no requirement to maintain records on the nationality of employees once the Right to Work in the UK has been established.

2.1.16 For those employed directly by Crossrail, it was estimated that approximately 15% did not hold a British passport, the majority of whom, approximately 1214%, were non-UK EU citizens. Recent estimates of numbers of non-UK EU nationals directly employed by TfL were somewhat less than 10%, and we believe that for the client organisations outside London this figure will be significantly lower at less than 5%.

2.1.17 In August 2016, the number of non-UK EU citizens engaged through our tier one contractors and their supply chain was estimated at approximately 40%.

2.1.18 Following the Brexit referendum, both Crossrail (CRL) employees and workers engaged through our contractors and their supply chains raised concerns about their future employment. CRL issued a blog providing reassurance that there had been no change in the employment status of non-UK EU workers. No further concerns have been raised and no further action has been taken.

2.1.19 The CRL project will end in 2019 and all staff and workers will be demobilised between now and then. It is unlikely that the consequences of Brexit will have a major impact on the construction of the new railway.

Rail operators

2.1.20 The research below shows the information provided by a number of RDG members on their workforces and experience so far with regards to workforce pressures. These are not the same operators as those identified in the NSAR research.

2.1.21 Whilst this is just a snapshot members who had some data or experiences readily available, it does show a representation of operators across a broad geography and running very different types of services. What is not shown in this data is the reliance on agency staff for many of the frontline staff engaged in train cleaning for example. This number may not be shown in the wider supply chain figures either.

Member	Type	% NonUK EU workforce	Level	Comments
Anon	TOC	7.63% (n48)	38 Frontline (Low) 7 Managerial (medium) 3 Head of Department (High)	*We have very low turnover at our organisation and no one has left citing Brexit as the reason. Our recruitment team have reported no change in the diversity/nationality of candidates who apply for roles at our organisation with over 21,000 train driver applicants for 400 roles and more recently 500 applicants for two Community Ambassador roles.*

Anon	TOC	4.16% (n137)	103 Frontline 26 Engineering Depots (semi-skilled) 8 Management and clerical	*It would be difficult for us to manage if the existing group ceased to have eligibility to work in the UK.* 75 out 137 non-UK EU group based in South East.
Anon	TOC	2.28% (n98)	2 Admin 60 Operational 30 Drivers (inc trainees and shunters) 14 Managerial and engineering 1 Director	None
Anon	TOC	1% (n22)	Mostly low skilled	Engineering roles have been difficult to fill for some time. *Some staff from Eastern Europe have shown some uncertainty. Our suppliers such as cleaning contractors and frontline customer service have reported challenges in filling roles since the referendum.*
Anon	TOC	2%	Mostly frontline	Work is still Ongoing to identify the future plan. Would support sponsoring visas if necessary.
Anon	FOC	Unknown	Frontline predominantly British. Higher numbers in managerial roles	Many management staff come in from overseas offices on secondments for three months to five years.
Anon	FOC	Unknown	Unknown	Concerned about the loss of drivers in haulage sector who play an integral role to

Member	Type	% NonUK EU workforce	Level	Comments

				logistics as a whole, of which rail is one part. Some issues are hidden as many drivers are employed via agencies.
Anon	TOC	0.21% (n12)	Mostly in medium to high skilled roles	There is a general concern about skills shortages in engineering, planning and infrastructure but this is unrelated to Brexit.

Strategic Roads and supply chain

2.1.22 Highways England carried out a survey of its supply chain, covering both construction and maintenance. Of 600 questionnaires circulated, 84 responses were received. Included in this, 80% of the Highways England top 30 suppliers. 69% of respondents said non-UK EU workers were important or very important to the highways sector. London and South-East were more dependent on nonUK EU labour.

2.1.23 In the Tier one direct workforce**,** nearly one in two companies have greater than 10% non-UK EU labour; and 1 in 5 companies have greater than 20% non-UK EU labour.

2.1.24 In the sub-contract workforce, more than one in two companies have greater than 10% non-UK EU labour, one in three companies have greater than 20% non-UK EU labour.

Road Freight

2.1.25 The use of non-UK EU workers is widespread across all job categories in the logistics sector. In total, approximately 14% of employees are non-UK EU nationals[251].

2.1.26 In warehousing and goods handling there are 90,000 non-UK EU nationals[252]. In addition to the direct workforce, here is also a large agency pool not included in this figure.

2.1.27 The road freight sector is increasingly reliant on foreign drivers. Non-UK nationals represent 11% of the HGV driver population, of which 1% are nonEU and 10% EU Nationals (predominantly from Poland, Romania and Hungary).

[251] Labour Force Survey Q2 2016
[252] CILT

2.1.28 There are 22,000 non-UK EU van drivers. As a proportion, non-UK EU workers account for 13% of the LGV workforce; 8% vans; 18% forklift truck workforce.

Maritime

2.1.29 Accessing highly skilled non-UK EU and non-EU workers is important for shipping, marine manufacturing and maritime business services. For example, there is concern at the prospect of the end of free movement of labour could put at risk the sector's ability to maintain the necessary level of skills to remain competitive. This also leads to concern over where future generations of skilled workers will come from, and the sector knows it may need to carry out further succession planning for labour, including provision for future training and colleges.

2.1.30 Many companies, particularly in shipping, are international and rely on being able to transfer senior and specialist personnel freely between operating companies. Implementation of an appropriately responsive visa system is therefore a high priority for many companies.

2.1.31 For the superyacht sector, the problem is almost the reverse of that found by transport companies based in the UK: it needs free access for British nationals to jobs based overseas. The fast-growing superyacht industry is an anglophile one, dominated by British crew, and that dominance relies upon UK nationals being able to take up posts onboard yachts which are based throughout the Mediterranean and beyond. The nature of the market requires fast responses, so new visa procedures which are slow or unpredictable are likely to damage the prospects for British crew.

2.1.32 The UK has 24 maritime universities and colleges attended by over 10,000 students each year, which are a significant attraction for international students[253]. Maintaining access to these for foreign students is an important part of the sector's all-round offer to international companies, critical to the growth of the training sector and to maintaining expertise from which the UK companies and trainees benefit.

2.1.33 85% of users of roll-on/roll-off (RoRo) services entering and leaving the UK are non-UK nationals, mostly from the EU, and there is a shortage of UK workers in this sector[254]. The introduction of working restrictions and visas could have a significant impact here.

2.1.34 EU Nationals make up 13% of workers on vessels in the UK shipping industry and 28% of certified officers[255] meaning EU nationals are a significant portion of the skilled workforce. An even larger group - 37% - are citizens of a country outside the EU, and

[253] DfT Maritime Growth Study

[254] Maritime Skills UK

[255] Chamber of Shipping Manpower Survey.

only 35% of officers (i.e. managers) are from the UK[256]. Shipping is an international industry, and this is a common pattern in Northern Europe. Under the banner, 'SMarT Plus', leading bodies in the sector have published a £15m proposal to Government to increase by 50% the number of UK-based officers in training, but even if it is accepted it is inconceivable that the UK shipping industry could meet its need for officers from UK labour alone without a long period to adjust.

2.1.35 Below officer level in the shipping and related sectors, the proportion of nonUK EU, non-EU, labour is as high as 75% even at skill levels equivalent to Level three and four[257]. It is higher still below that, with the complication that though many of these employees bring highly-valued experience they often have very little by way of formal qualifications to substantiate their value.

2.1.36 An important implication here is that if UK companies cannot employ the people they need at economically-viable rates, they may well lose business to fleets operated elsewhere; international trade by sea is peculiarly vulnerable to such competition.

2.1.37 Other evidence is largely anecdotal. There are indications that small ports on the east coast rely heavily on non-UK EU labour. The larger ports will also rely on logistics and distribution workers for their efficient function. Ports have a wide range of structures, and while the industry has concerns about the potential implications for its workforce post Brexit, these are not currently quantifiable.

Heathrow

2.1.38 Heathrow airport accepts that the future workforce will change in terms of demographics and diversity as a result of Brexit, and is developing its future workforce strategy within this context.

2.1.39 There is an international workforce at Heathrow Airport, particularly cabin crew but in many other disciplines too such as maintenance and baggage handling. Whilst there is no exact data for the numbers of non-UK EU workers at the airport, we know that a number of construction related roles and logistics, for example, HGV drivers are predominantly from the EU.

2.1.40There are already skills shortages in these sectors today so there is a concern that we could be further impacted by Brexit. Retail and hospitality comprise a large part of airport operations and there are a number of non-UK EU workers in these sectors.

2.1.41 We have yet to determine the impact on EU labour supply for UK based airlines.

[256] Ibid

[257] Maritime Skills UK

2 Ameliorative action

3.1.1 There are two ways of mitigating the risk that Brexit may exacerbate the current skills gap in all transport sectors; increasing supply or reducing demand.

3.1.2 Increasing supply of the home-grown workforce is essentially about improving education and training to cater for demand, and making the sector more attractive to talent.

3.1.3 There are a number of strategies and sector plans in place aimed at meeting skills challenges using these types of initiatives – these are discussed in further detail at paragraph 15 and onwards below. Strategies are often focussed around the provision of apprenticeships – a flagship government policy with a high-profile manifesto commitment - as a means of attracting new staff or up skilling the existing workforce using quality assured industry standards.

3.1.4 Apprenticeships are seen as the ideal opportunity to increase both the volume and quality of supply in the industry, in particular, since there are no longer barriers to participation based on age; and standards have been or are in development right through to degree, masters, and even PhD level. They are therefore an opportunity to attract new talent to the sector right the way through the skill levels. This includes as an alternative to university for the brightest students, as well as to upskill the existing workforce, to meet changing skills needs resulting from new technology (e.g. digital rail), mapping clear and rewarding career pathways through the disciplines.

3.1.5 However, apprenticeships are by no means a "quick fix." Current policy is in transition, and new standards take time to undergo the development and approval process under the recently established Institute for Apprenticeships (IfA).

3.1.6 Recent disappointing news from the Department for Education (DfE) shows that apprenticeship starts are significantly lower across the economy since the levy was implemented in April 2017[258]. Experience of large employers from within STAT membership suggests that some employers may have accrued large amounts of levy funding in their accounts which they have not been able to spend to date because the relevant standards are still undergoing approvals processes. It may not be possible for businesses to spend all the funding accrued within the two-year permitted carry over period, and so this investment may be lost to skills.

[258] Further Education and Skills, DfE and SFA, October 2017
https://www.gov.uk/government/statistics/furthereducation-and-skills-october-2017

3.1.7 Once a learner is in place, an apprenticeship may take three years or more to complete. This is particularly the case in certain of the technical and engineering disciplines needed in our sector.

3.1.8 There is also a specific issue relating to apprenticeship funding rules where migration policy is changing. The apprentice has to a) have the right to work for the duration of the scheme; and b) be a UK or EU resident for the past three years. Right to work for the duration of the scheme, where schemes end post 2019, is currently an unknown, and employers may be less willing to invest in individuals who they may lose after this date.

3.1.9 Increasing supply and/or quality of supply either through apprenticeships or other means, requires industry to invest long term in skills (the levy will cover tuition fees but not salaries or in-house training costs). So as with any longterm investment, this in turn requires business confidence. Where an economic environment is uncertain, and where visibility of a future pipeline of work can be poor, (particularly among the lower supply chain tiers), this confidence can quickly ebb, to the extent that the success of these strategies can be put at risk.

3.1.10 Generally, demand can be managed by either changing the volume of outputs or by improving productivity. In the transport sector, STAT believes there are productivity gains to be had in managing more effectively the way we plan and procure major investments. This would require industry and government working together to, for example, manage peaks and troughs of major infrastructure works, increasing certainty and confidence to invest in skills and keeping the workforce more stable. There are various workstreams aimed at improving productivity and efficiency in the sector, including through the emerging sector deals, and STAT is supportive of this work.

3.1.11 Modern Methods of Construction (MMC) present an opportunity to spread the employment benefits more widely across the country, can be targeted at areas of higher unemployment, and can contribute to rebalancing the economy. MMC has been successful in a in a number of major transport projects, most notably in Heathrow Terminal 5 and Crossrail.

3.1.12 At Heathrow Terminal 5, mechanical and electrical engineering modules were assembled in areas including the West Midlands, Kent, and Renfrew in Scotland, and transported by road to Heathrow. The structural steelwork for Terminal 2 was constructed in Lancashire and Yorkshire.[259]

3.1.13 At present, MMC accounts for just 10% construction industry output, but a with 42% employers with over 100 staff planning to use MMC within five years, there is considerable potential for growth in this area. Nevertheless, there are challenges, not

[259] Transport Infrastructure Skills Strategy One year on op cit

least in growing the relevant skills and training programmes (CITB)[260] and in driving the investment to do this on the part of a traditionally fragmented construction industry.

Key supply side strategies currently in place are:

3.1.14 The **Transport Infrastructure Skills Strategy** set an initial ambition for 30,000 apprenticeships in roads and rail sectors and down supply chain; to tackle the poor record on diversity by aiming for women to represent 20% of new entrants to technical and engineering apprenticeships, and for parity with the working population by 2030; and to reflect a 20% improvement on black and minority ethnic (BAME) entrants, where there is under-representation. The strategy also recognised the need to collaborate on promoting transport as a career to young people, parents and teachers.

3.1.15 The “One Year On” report published in July 2017 sets out progress in creating transport apprenticeships and ensuring infrastructure investment provides thousands of high-quality training and job opportunities across the country. In terms of numbers:

- In roads and rail delivery bodies (Highways England, Network Rail, Crossrail, TfL and HS2) 2,000 new apprenticeships in the first reporting year, created through direct levers like procurement;
- Forecasts show a steep ramp in coming years as more contracts come into effect and Apprenticeship Levy beds in 15,000 apprentices next year in road freight;
- Up to 35,000 new apprentice starts forecast in roads and rail to 2022 (a trajectory up to 5,000-8000 apprentices per year)
- Proportion of higher level skilled staff in road/rail workforce to grow by 10%; and
- 10,000 across operations at Heathrow across the country, generated by expansion.

In each individual industry there are a number of work streams and projects in progress to address demand and supply of skills. These are described below:

Rail

3.1.16 The ability of the industry to retain staff is very important during times of labour market uncertainty. We’re proud to offer our team some of the most competitive work benefits in the country.

3.1.17 Job satisfaction starts with job security. With just 3% staff turnover compared with a national average of 13%, ours is among the most stable sectors. Our record in career

[260] CITB, https://www.citb.co.uk/documents/research/offsite_construction/offsite_construction_full_report_20170410.pdf

progression is similarly strong. We currently invest £250-350m in up-skilling our staff every year.

3.1.18 In addition, NSAR, RSG, RDG, and DfT are facilitating the effective operational delivery of the **Rail Sector Skills Delivery Plan** through engagement and cross-industry collaboration within the sector. Progress has already been made in delivering on key targets set out in the plan, but more knowledge and support is required to mitigate any potential negative effects of Brexit.

3.1.19 The plan has six strategic themes, namely: Leadership; Intelligence, Promotion and Attraction; Recruitment and Retention; Standards and Qualification; and Training and Assurance. Industry champions have been assigned to lead on the 13 work streams and achieve the outcomes committed in the plan. The champions meet on a quarterly basis to understand interdependencies, agree Key Performance Indicators (KPIs), collaborate with each other to discuss progress and plan next steps.

3.1.20 Further details are available in Appendix I.

Highways England

3.1.21 The goal of the **Highways England Skills Plan** is to respond to the increase in investment within Highways England over the coming years, as well as structurally improve the skills development environment within the sector.

3.1.22 It focuses on the following areas;

- Skills and workforce intelligence;
- Promotion, attraction and diversity;
- Recruitment and retention;
- Training and assurance; and Productivity and innovation.

3.1.23 The plan seeks to propose an integrated suite of improvements and interventions that will require a significant collaborative approach at the sector, client and supply chain level.

3.1.24 The foundation for these improvements is the development of an intelligent forecasting and resourcing model, extensive engagement with the sector and supply chain, and an industry working together to embrace strategic change and improvements in skills development.

3.1.25 It is planned that improvements will include both tactical and strategic solutions that should deliver speedy and longer-term sustainable change to improve the structure of the sector.

Road Freight

3.1.26 The road freight sector has developed a Large Goods Vehicle (LGV) Driver apprenticeship as part of the new **Trailblazer Apprenticeship**. These will attract funding from the apprenticeship levy. The qualification will help to provide a solution to the ongoing LGV driver shortage with funding being made available to smaller employers who are not required to pay the levy (with a total pay bill of under £3m). The key will be for the industry to ensure take up.

3.1.27 The Government has reviewed the funding available and the maximum amount available for the LGV standard has been set at £5,000 with 90% of the cost of training being paid by the government with eligible employers co-investing the remaining 10%. The removal of the age cap on funding support for apprenticeships has been positive for the freight industry as this will allow the freight industry to attract older workers that better fits the age requirements for the LGV driving licence.

3.1.28 The road freight industry has set a target for 15,000 LGV apprenticeships in the first year (2017-18) but believes that it could exceed that figure as the number of training providers for the Trailblazer standard increases.

Maritime

3.1.29 The UK's maritime industry and Government are working together to promote the career opportunities available within the sector. The 2015 **Maritime Growth Study** report recommended the sector should identify and prioritise the key skills issues and develop a 'skills strategy'.

3.1.30 All parts of the maritime sector – ports, shipping, specialist sectors, commercial services - are investing in creating new apprenticeships through the Trailblazer reforms, including degree-level apprenticeships for the first time. In a strong example of partnership, the maritime minister called on employers in the industry to double the number of apprentices they employ, and the sector's representative body Maritime UK, accepted the challenge.

3.1.31 Beyond apprenticeships employers and trade unions in the shipping industry have come together to create a proposal to Government which would result in a 50% increase in the number of junior officers who start their training each year – taking the industry up to numbers recommended as needed as long as 20 years ago.

Heathrow

3.1.32 The proposed expansion of Heathrow Airport could, according to Heathrow's own estimates, create up to 180,000 jobs and 10,000 apprenticeships across the country. The Airport has set up a **Skills Taskforce**, chaired by Lord Blunkett, which will help shape Heathrow's future education, employment and skills strategy.

3.1.33 Heathrow's Employment and Skills Academy set up in 2004 supports local residents to access employment opportunities at the airport. The Academy provides pre-employment training, job opportunities and progression support, and apprenticeships. Apprenticeships are currently offered at level 2-5 in a range of disciplines including retail, hospitality, business administration, management, construction, aviation and logistics. Level six and seven are being planned for delivery in 2018.

3.1.34 Heathrow Airport's Engineering Apprenticeship Programme provides the opportunity to become an electrical, mechanical or electronic engineer over a four-year period, with almost all apprentices gaining employment.

4 Conclusions

4.1.1 Currently we do not have a comprehensive picture of or reliance on non-UK EU workers across transport, nor do we have a clear picture of our future relationship with the EU.

4.1.2 It is therefore difficult at the present time to make plans specifically targeted at people and skills challenges post Brexit. However, there are some general conclusions that we can draw on the basis of the evidence and views we have collected in the development of this paper.

4.1.3 It is essential for businesses to have the **lead-time to plan, and certainty to invest**. The transport sector has begun to take steps with strategies in place since before the referendum to tackle shortages and to grow a sustainable pipeline of skills to deliver our ambitious investment programmes and underpin growth right across the economy. We must continue to recognise that training and development take time and resources.

4.1.4 Strategies aimed at building a pipeline of skills may only truly come to fruition in the 2030s, when today's school children are at the point of entering the workforce. This notwithstanding, progress is being made – we have embedded skills requirements in contracts involving public money, and secured commitments from elsewhere in the sector.[261] But apprenticeships may take three years or more to complete. We need to ensure that current policy in transition continues to support driving the numbers and quality of new starts we need; and funding rules need to be supportive and robust to future migration policy.

4.1.5 The industry, working with government, must be smart about how it addresses any changes to the availability of labour. Whilst maintaining a flexible supply of labour is essential, industry and government should also **consider demandside management,**

[261] Transport Infrastructure Skills Strategy, One year on

in the transport sector. This would mean reviewing productivity and planning more efficiently while continuing to drive ambitious investment levels that underpin economic growth.

4.1.4 Our data does show **regional variations** in reliance on non-UK EU workers across the sector, as well as in certain specialisms. We also know that some groups of workers do not travel far to seek alternative employment. We cannot therefore assume that roles in one region can be filled by unemployed people from another region. Modern Methods of Construction (MMC) present opportunities to address regional disparities and to balance economic benefits in our major infrastructure projects, although clearly this will not be a solution for the entire sector.

4.1.3 Some highly specialist roles, and those demanding hands-on experience will still sometimes need to be filled by a non-UK EU (or non-EU) employees, in particular while our plans are coming to fruition. STAT therefore believes that the UK must remain **an attractive place to work,** with a visa system that is straightforward and flexible enough for businesses to use when needed. A visa system should be flexible enough to accommodate a need for workers at a range of skill levels, as well as, potentially, to take into account regional or project based variations.

5 Appendix I: Rail Sector Skills Delivery Plan

5.1 Leadership: Pledges

Input on skills into Initial Industry Plan (IIA) for Control Period (CP) 6 is submitted to DfT and response is expected in September 2017. Apprenticeships targets now in all Franchising going forward including reporting.

Focus: NSAR is working on a productivity pledge and contributing to the development of a sector deal.

5.2 Leadership: Commercial Environment

NSAR on behalf of the industry developed the skills chapter of the Initial Industry Advice for CP6. TfL have advised the DfT of their capital investment plans for the control period which total £3.6bn. DfT's response to the IIA is expected in September 2017.

Franchising contracts from DfT now has mandated apprenticeship annual targets, to be 2.5 % pa of the total workforce. Future contracts will also mandate support for the Rail Sector Skills Delivery Plan.

Focus: develop strategic workforce plans to deliver apprenticeship numbers from franchising contracts already under delivery.

5.3 Intelligence

NSAR have developed a Skills Intelligence Model (SIM) with 85% of industry workforce data – a software which provides reporting on workforce planning and future skills requirements.

A Skills Forecast baseline report has been produced for the rail sector - submitted to STAT to publish

A new intelligence unit has been set up to identify and report on current and future skills shortages at regional rail level

5.4 Promotion and Attraction

Rail Delivery Group (RDG), on behalf of the rail industry, has embarked on a media campaign aimed at improving the general public's image of the industry and developing a positive rail image. RDG has committed £6m pa over the next 3 years for this campaign.

Research is being undertaken to understand the barriers to attracting talent into the rail sector, followed by the development of a marketing and communication strategy for a Promotion and Attraction campaign by December 2017.

Outreach activity is ongoing on a semi regular basis throughout the industry; include talks at schools and universities, inclusion in broader initiatives such as Women in Science and Engineering (WISE), STEMNET, and open days where businesses open their doors to the public. Focus: outreach coordinators to be appointed to manage sector outreach activities and to build relationships at regional levels (supported by organisations like Young Rail Professionals (YRP) and Women in Rail (WiR) where appropriate).

Most medium to large businesses in the industry have a Diversity and Inclusion policy/strategy outlining their plans to support women, disabled and ethnic minority groups within the workplace. Few go as far as to understand the representation of these groups as a proportion of their overall workforce and find ways to increase diversity. As an initial step to better understand sector level diversity, a rail diversity survey was launched to gather baseline diversity and inclusion data - deadline for responses end of September 2017

Focus: Women in Rail registration for 2018 mentoring programme opens late September 2017

5.5 Recruitment and Retention

NSAR have developed a system/framework: NSAR-CONNECT – a new online service connecting individuals with oversubscribed schemes to opportunities in the rail sector. The tool is already being used by organisations within the rail industry and has candidates from Network Rail, Transport for London and other rail employers. Work continues to attract more beneficiary companies and candidates.

5.6 Standards and Qualification

New apprenticeship standards have been released and more are under development; employers can draw on their levy funding for the delivery of these apprenticeships. NSAR Levy Planning tool available for employers to calculate their levy contribution and model their workforce planning needs

5.7 Training and Assurance

Assurance panel setup and Quality Assurance Framework launched
Training Provider Directory reviewed and renewed

National Training Partnership launched - comprising of selected further education (FE) Colleges, partner universities, Development Centres, specialist training academies and NSAR Quality Assured training providers. The Training's Partnership's aim is to secure a steady long-term flow of talented people entering the rail industry through an apprenticeship to meet predicted workforce demands.

- Integral to the success of the initiative is the support of Network Rail and Transport for London (TfL) and their agreement to allow access to their training centres and facilities to the Colleges and training providers within the network.

5.8 Conclusion

In summary, the delivery of the Rail Sector Skills Delivery Plan is progressing well with engagement from key stakeholders and regular communication to the industry through newsletters and social media channels. Some of the work streams are further down the delivery stage compared to the others due to interdependencies

Glossary of Abbreviations

BAME	Black and Minority Ethnic
CEO	Chief Executive Officer
CILT	Chartered Institute for Logistics and Transport
CP	Control Period
CRL	Crossrail
DfE	Department for Education
DfT	Department for Transport
EEA	European Economic Area
EU	European Union
FE	Further Education
FTA	Freight Transport Association
FTE	Full Time Equivalent
GVA	Gross Value Added
HGV	Heavy Goods Vehicle
HS2	High Speed 2
IfA	Institute for Apprenticeships
IIA	Initial Industry Plan
KPI	Key performance Indicator
LGV	Large Goods Vehicle
MMC	Modern Methods of Construction
NSAR	National Skills Academy for Rail
RDG	Rail Delivery Group

RHA	Road Haulage Association
RoRo	Roll on Roll off
SIM	Skills Intelligence Model
STAT	Strategic Transport Apprenticeship Taskforce
TfL	Transport for London
TISS	Transport Infrastructure Skills Strategy
TUC	Trades Union Conference
UK	United Kingdom
WiR	Women in Rail
WISE	Women in Science and Engineering
YRP	Young Railway Professionals

Textile Services Association

Considerations on the respondents

We received 10 responses from 10, which combined cover the majority of the hospitality and workwear textile services market, and a fifth of the healthcare textile services market.

The respondents included in this survey cater for most of the UK large hotel chains and franchises, and process largely in excess of 2m items per week.

Among the respondents were also some of the leaders in the workwear sector, some of which cater for the needs of the high-tech industry with specialised cleanroom workwear, cleaning supplies and cleanroom decontamination services.

The responses are split as 70% hospitality, 60% workwear, 30% healthcare, however some of the respondents work for two or more sectors.

The survey's findings in summary are:

1. *What is the percentage of vacancies against total workforce for all job roles in your organisation?*

The answer refers to December 2018.

The weighted average of responses was 6.3%

2. *What is the percentage of vacancies against total workforce for all job roles in your organisation?*

We asked to score against a list including General manager, Engineer, Production Manager, Production Shift Manager, Team Leader/Supervisor, Driver (Over 7.5ton), Driver (Under 7.5ton), Production operative. The answers refer to December 2018.

The below values are weighted averages

General Manager: **2.5%**
Engineer: **6.5%**
Production Manager: **2.5%**
Production Shift manager: **6.5%**
Team Leader/Supervisor: **4.4%**
Driver (Over 7.5ton): **10%**
Driver (Under 7.5ton): **3.3%**
Production Operative: **6.3%**

3. *What is the percentage rate for staff turnover across the whole of your organisation this year?*

4. For this question, we asked members to think of the turnover overall in 2018. This was in average for all job categories.
   The weighted average of responses was 17.8%.

5. *What is your staff turnover rate" at the following job levels?*

We asked respondents to score against a list including General manager, Engineer, Production Manager, Production Shift Manager, Team Leader/Supervisor, Driver (Over 7.5ton), Driver (Under 7.5ton), Production operative. The values apply to 2018.

The below values are weighted averages

General Manager: **2.5%**
Engineer:**14.3%**
Production Manager: **2.5%**
Production Shift manager: **4.4%**
Team Leader/Supervisor: **4.4%**
Driver (Over 7.5ton): **20.3%**
Driver (Under 7.5ton): **9.3%**
Production Operative: **15.2%**

We also asked for additional comments and received:

1. Customer Services has an unusually high turnover which is not reflected in other departments. This is attributed to difficulties finding the right people at entry level in a front-line role). The leavers are almost all very new employees within their probation period whilst we continue to retain our established and experienced employees - some of whom have received 20 years' service within this team.

2. About 30% of our production operative workforce are nationals of EU counties. In two of our plants the % is over 50%. Whilst we enjoy high levels of staff retention it is a concern should the consequences of Brexit disturb this workforce.

3. Very difficult to recruit production operatives at all sites across UK. Post Brexit decision, particularly difficult.

4. The largest challenge is recruiting reliable production operatives and drivers. We try to recruit from the local workforce as much as possible, but we are unable to fill the vacancies as they arise and we rely on EU migrants to fill the gaps (~20%).

The Arboricultural Association

Government Survey - Shortage Occupation List Review		
Q1. Please indicate which of these job titles your organisation has currently experienced difficulties in recruiting suitable workers for (these are based on Office for National Statistics occupation codes):		
Answer Choices	Response Percent	Responses
Arboriculturist	43.14%	22
Manager - Arboricultural	17.65%	9
Consultant - Arboricultural	21.57%	11
Amenity Arboriculture Contractor - Worker	19.61%	10
Team Supervisor - Arboricultural	21.57%	11
Technician - Arboricultural	21.57%	11
Officer - Arboricultural	11.76%	6
Other (please specify)	15.69%	8
	Answered	51
	Skipped	6

Q2. We are interested in hearing from organisations/businesses of all sizes, please tell us the number of individuals your organisation/business currently employ?		
Answer Choices	Response Percent	Responses
1-9 employees	56.14%	32
10-49 employees	21.05%	12
50-249 employees	8.77%	5
250 + employees	14.04%	8
	Answered	57
	Skipped	0

Q3. For each job title provided please state the pay per period (annual, monthly, fortnightly, weekly or hourly). If you, for any job title, provide a pay per hour figure please also provide the hours per week you would expect to advertise for a vacancy with this job title.
Please see annexed matrix

Q4. What prior relevant work experience is required for each job in shortage? *if specified in question 1							
Answer Choices	**Entry level - no prior experience**	**0-6 months experience**	**6-12 months experience**	**1-3 years experience**	**3 years and over**	Total	Weighted Average
Arboriculturist	5.56%	16.67%	16.67%	33.33%	27.78%	18	3.61
Manager	0	0	0	27.27%	72.73%	11	4.73
Consultant	0	0	0	42.86%	57.14%	14	4.57
Technician	0	8.33%	16.67%	75%	0	12	3.67
Officer	0	0	0	50%	50%	10	4.5
Worker	60%	26.67%	0	6.67%	6.67%	15	1.73
Supervisor	0	0	15.38%	38.46%	46.15%	13	4.31
Other (please specify)						1	
						Answered	24
						Skipped	33

Q5. What is the minimum qualification requirement for someone applying for the job title(s) you have identified as in shortage?									
Answer Choices	**Degree level qualification, or higher**	**Higher qualification, below degree level**	**A-level/ vocational A-level or equivalent**	**AS-level/ vocational AS-level or equivalent**	**GCSE/Vocational GCSE or equivalent**	**Other work-related or professional qualification**	None	Total	Weighted Average
Arboriculturist	7.14%	14.29%	14.29%	0	7.14%	50%	1	14	5.57
Manager	0	12.50%	25%	12.50%	0	50%	0	8	5.5
Consultant	50%	30%	10%	0	0	10%	0	10	2.5
Officer	40%	40%	20%	0	0	0	0	5	2.4
Worker	0	9.09%	0	9.09%	9.09%	45.45%	3	11	6.64
Supervisor	0	0	11.11%	11.11%	11.11%	55.56%	1	9	6.44
Technician	0	0	0	25%	25%	50%	0	8	6.25

Other (please specify)								1	
								Answered	17
								Skipped	40

Q6. What do you think are the main reasons for the recruitment difficulties? (Please select all that apply).									
Answer Choices	Arboriculturist	Manager	Consultant	Officer	Worker	Supervisor	Technician	Total	Weighted Average
Too much competition from other employers	14.29%	14.29%	0	0	28.57%	42.86%	0	7	1
Low number of applicants with the required skills	50%	7.14%	7.14%	0	21.43%	7.14%	7.14%	14	1
Low number of applicants generally	41.67%	0	16.67%	0	33.30%	8.33%	0	12	1
Low number of applicants with required motivation, personality or attitude	50%	0	0	0	33.33%	8.33%	8.33%	12	1
Low number of applicants with qualifications that are required	15.38%	7.69%	23.08%	0	23.08%	7.69%	23.08%	13	1
Job entails shift work and or unsociable hours	0	50%	0	0	50%	0	0	2	1
Seasonal work	0	0	0	0	75%	0	25%	4	1
Remote location/transport	33.33%	0	33.33%	0	33.33%	0	0	3	1
Don't know	1	0	0	0	0	0	1	2	1
Other (please specify)								2	

Government Survey - Shortage Occupation List Review								Answered	17

Q7. If known, for a previously advertised job (in shortage), how long did it take to fill that job? (Not to exceed 500 words).		
Respondents	Responses	Tags
1	Ongoing advertising, very few applicants.	
2	About 6 months	
3	I constantly have adverts on specialist websites - I've been below headcount for the entire 2018 period	
4	1 year	
5	6 months	
6	6 months	

Q8. Thinking about the previous question, in the last 12 months has the length of time to fill that job changed?		
Answer Choices	Response Percent	Responses
Increased a lot	25.00%	4
Increased a little	31.25%	5
Stayed the same	25.00%	4
Decreased a little	0.00%	0
Decreased a lot	6.25%	1
Don't know	12.50%	2
	Answered	16
	Skipped	41

Q9. What is being done to reduce recruitment difficulties? (Please select all that apply.)		
Answer Choices	Response Percent	Responses
Increase wages to attract candidates.	53.33%	8
Increase spending/investment on recruitment.	20.0%	3
Increase spending/investment on training of existing staff	66.67%	10
Using different methods/channels for advertising vacancies	40.0%	6
Improve conditions such as the inclusion of holiday allowances and bonuses	26.67%	4
The use of different labour pools such as temporary/contract workers, job sharing	20.0%	3
Other (please specify)	20.0%	3
	Answered	15
	Skipped	42

Q10. Thinking about the measures you have taken to reduce recruitment difficulties, can you provide any further information about how these measures have been used? (Not to exceed 500 words)		
Respondents	Responses	Tags
1	Increased wage bands for each grade in line with local competitors	
2	Developing relationships with colleges and increasing the profile of the company	
3	I've been more willing to accept poor work from incumbents; I've employed people who are not of the quality of I require...	
4	Invest in equipment that make current staff more efficient	

Q11. How long have the above measures been applied? (Not to exceed 500 words).		
Respondents	Responses	Tags
1	Since Dec 2018	
2	5yrs	
3	2 years	
4	For as long as I can remember	
5	last two years	
6	12 months	

Q12. Have the above measures worked in reducing some of the difficulties in recruiting, if not why? (Not to exceed 500 word		
Respondents	Responses	Tags
1	Not noticeably as yet	
2	Yes	
3	Somewhat	
4	Yes & no. It leaves me with much more management time occupation to remedy poor performance than is optimal. It leaves clients with less than optimal service	
5	remained the same	
6	No - don't really affect recruitment	

Q13. What impacts are these job shortages having on your business/organisation? (Not to exceed 500 words).		
Respondents	Responses	Tags
1	Reduced turnover as less production staff	
2	Consistently short staffed	
3	None	
4	Hampering growth	
5	I am below capacity by a fifth, so I am missing the opportunity to make a fifth more revenue/profit	
6	Reducing growth potential.	
7	Lack of skilled workers reduces capability to take on new work and long term contracts	
8	Reduced efficiency, reduced margin, reduced ability to grow business	

Q14. Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?		
Answer Choices	Response Percent	Responses
Yes	10.0%	1
No	10.0%	1
Don't Know	80.0%	8
Other (please specify)	0.0%	0
	Answered	10
	Skipped	47

The Association for Interactive Entertainment

Response to MAC consultation on the Shortage Occupation List

About UK Interactive Entertainment (Ukie)

Ukie is the trade body for the UK's games and interactive entertainment industry. It represents over 400 games businesses of all sizes from small start-ups to large multinational developers, publishers and service companies, working across online, mobile apps, consoles, PC, esports, virtual reality and augmented reality.

We aim to support, grow and promote member businesses and the wider UK games and interactive entertainment industry by optimising the economic, cultural, political and social environment needed for UK businesses to thrive. Our core goal is for the UK to be the best place in the world to make and play video games.

The UK Games Industry

The games industry is a forward-facing sector built on innovation, with highly technical and newly emerging skills in fierce demand. The UK immigration system, especially in the wake of Brexit, needs to reflect the reality of an ever-changing skills environment – not only for the benefit of the games industry, but for the UK overall as it seeks out new opportunities once it formally leaves the European Union. The Shortage Occupation List ("SOL"), therefore, needs to be future-proof and accurately reflect which skills are in demand.

Future of the sector

The government's latest economic figures[262] demonstrate the strength of the UK's games industry, showing that the sector grew 148.9% since 2010. The games industry figure was part of the bigger creative industries sector that broke the £100 billion mark for the first time, moving from £94.8bn in 2016 to £101.5bn in 2017, accounting for 5.5% of total UK gross value add (GVA).

The growth shown in these latest government figures mirrors the conclusions from the Screen Business report[263] that Ukie contributed to. This study showed that UK development and publishing alone contributed over £1.35bn in direct GVA in 2016, with the overall games industry contributing £2.87bn in GVA.

As it stands, the workforce of the UK interactive entertainment industry fits the profile of being the best and brightest around. 63% of workers in the video games industry are educated to degree level, with 68% of them under the age of 35[264]. Furthermore, these individuals contribute effectively to the overall health of the country – adding

[262] https://www.gov.uk/government/statistics/dcms-sectors-economic-estimates-2017-gva
[263] https://www.bfi.org.uk/sites/bfi.org.uk/files/downloads/screen-business-appendices-4-and-5-2018-10-08.pdf
[264] Creative Skillset, 2015

£83.8k per head in GVA to the overall economy[265]. But this success is in large part owing to the diversity of our workforce; two thirds of our businesses employ overseas talent and EU talent typically makes up a third of their workforce.

Our annual survey of games businesses[266] most recently indicates continued optimism in the growth of the sector with 85% of games companies predicting growth and 83% looking to add more staff to their payroll, 23% of which predicting significant expansion. Whilst this optimism is welcomed, particularly considering the potential impact of Brexit, pressure on access to talent will continue to grow. For companies employing over 50 people, 71% reported a negative trend in their ability to attract and retain talent from within the European Union and 50% from outside the EU.

There remains a long-standing and broad skills shortage for the sector, and the tech sector more generally, which is set to become more acute once the free movement of labour ends following our departure from the European Union. As a sector we are investing significantly in our future talent, from school level to University to professional development, but this alone will not solve our skills gap. We are a global sector, making content that appeals to a global audience; overseas talent is a significant part of the success of the UK games industry and ready access to that talent is vital if we are to keep competing on the world stage.

8. Proposed Shortage Occupation List roles

There are currently 16 roles relevant to games and interactive entertainment on the shortage occupation list. We ask that in addition to these roles remaining on the list, a further 11 roles are added.

We anticipate that the impact of Brexit and the cessation of free movement of labour will only serve to exacerbate the current situation so we further ask that the MAC continue to work with industry to review this list on a more frequent schedule.

Job Title	ONS job title	ONS SOC	SOL Status
Programmers	Programmers and software development professionals	2136	Current
Server Developer	Programmers and software development professionals	2136	Current
UX Designer	IT business analysts, architects and systems designers	2135	Requested
Systems Engineer	IT business analysts, architects and systems designers	2135	Current
Data Scientist	IT business analyst, architects and systems designers	2135	Current
DevOps	Programmers and software developer professionals	2136	Requested
Technical Artist	Artists	3411	Requested

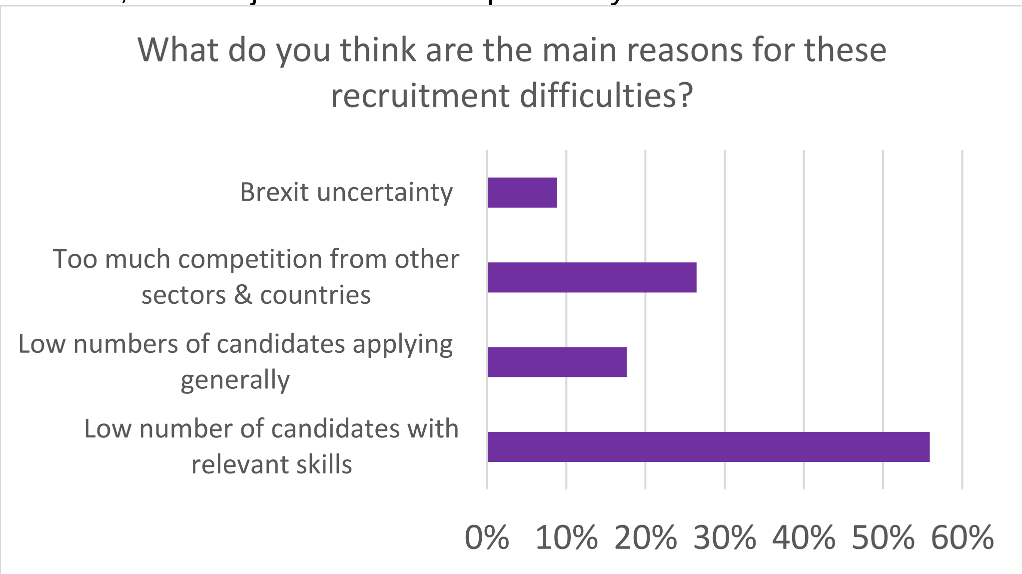
[265] British Film Institute, “Screen Business”, Oct 2018
[266] Ukie annual member survey

Graphic Designer	Graphic Designers	3421	Current
Character artist	Artists	3411	Requested
Animator	Artists	3411	Current
VFX Artist	Artists	3411	Requested
UI Artist	Artists	3411	Requested
Level designer	Graphic designer	3421	Requested
Community managers	IT operations technician or Customer Service Managers and Supervisors	3131 or 7220	Requested
Technical Director	Arts officers producers and directors	3416	Current
Producers	Arts officers producers and directors	3416	Current
Software developer	Programmers and software developer professionals	2136	Current
Shader writer	Programmers and software developer professionals	2136	Current
games designer	Programmers and software developer professionals	2136	Current
2D supervisor	Arts officers, producers and directors	3416	Current
3D supervisor	Arts officers, producers and directors	3416	Current
computer graphics supervisor	Arts officers, producers and directors	3416	Current
production manager	Arts officers, producers and directors	3416	Current
visual effects supervisor	Arts officers, producers and directors	3416	Current
Foreign Marketing Specialist	Marketing Associate Professionals	3543	Requested
Lighting Artist	Artists or Programmers and software developer professionals	3411 or 2136	Requested
Audio/Sound Designer	Photographers, audio-visual and broadcasting equipment operators	3417	Requested

9. What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)?

Access to talent

The games industry is inherently international and access to talent is one of the biggest issues affecting the UK sector today. Recruiting people who can provide the level of expertise and technical talent required in the games industry can be difficult: the games industry often requires very specialised, often niche skillsets which drastically narrow the candidate pool. Research by the European Commission in 2015 suggested that the digital skills gap is larger in the UK than anywhere else in Europe, with 250,000 ICT job vacancies expected by 2020[267].



In our survey for this consultation, 56% of respondents said that they were struggling to fill their listed vacancies due to a low number of candidates in the UK with relevant skills whilst 18% stated it was due to a low number of candidates in general. Together, that means 76% of respondents found the skills or candidate pool in the UK lacking. Competition from other countries (such as the US, Canada and Europe more generally) or sectors was the second biggest concern, with 26% of respondents mentioning this in their answers as places talent was being lost to. Brexit uncertainty discouraging applicants from abroad was also raised as a concern.

"Low number of applicants with the relevant skills plus a downturn in European applicants means that the pool of candidates is smaller and there is often a number of competing offers in other countries."

- Survey responder

With such skills shortages in the UK, often games companies will turn to the world stage to fill their vacancies. Whilst in the long-term, we strongly believe in improving the digital skills of the domestic workforce, this isn't enough to plug the skills gap in the short to medium term. However, our respondents found it hard to compete globally for the best talent. We believe having an accessible flow of international talent is critical if the UK wishes to remain a global leader in video games. It is also important to note that our sector makes global content and to do so successfully requires a workforce with the diversity to match the audience. Games companies around the world are competing fiercely to recruit the best talent internationally for roles which are highly specialised and forward-facing. Additionally, as a relatively young industry which relies on cutting-edge technical talent, games businesses often compete not only with themselves but with the wider technology industry – like the financial technologies sector who are often able to provide higher salaries - to secure top candidates with highly sought-after skills in emerging fields like machine learning and artificial intelligence.

[267] http://coadec.com/news/life-after-brexit-from-the-coadec-community/

> "Both supply and demand i.e. a shortage of homegrown skills combined with massive competition in the market."
>
> - Survey responder

In 2017, our *State of Play*[268] report found that 61% of games businesses relied on non-UK nationals[269]. Our evidence suggests that EU employees typically make up 34% of these companies' headcount with 38% of these businesses employing from outside of the EU[270] and on average these international employees making up 17% of the headcount. It is therefore crucial for businesses to continue to have access to both EEA and international candidates from outside of the EEA to fill roles where there are proven skill shortages. Having a SOL which accurately reflects the needs of the games industry can help with this greatly.

10. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.
Industry skills initiatives

With the support of the industry we are delivering a series of initiatives to address the domestic skills gap although it could take another generation before the industry is able to benefit. For example, the games industry is working to address the skills shortages domestically to help mitigate the skills shortage. Initiatives such as the NextGen Skills campaign alongside reports such as Shut Down or Restart [271] identified failings in the curriculum. Our own research has consistently found that whilst the industry does engage with universities and training providers by offering industry placements and curriculum advice, the rapidly-evolving nature of the sector and the roles available in it can often prove challenging to reconcile with universities' planning frameworks and timelines.

In schools, the teaching of computing is improving and initiatives like Ukie's Digital Schoolhouse[272] have helped increase access to effective computer science education. However, the industry has a wider need for talent across the creative arts and in overspill areas such as marketing and PR. This hasn't been communicated to schools as effectively as it could, inadvertently narrowing the talent pool.

Furthermore, at university level, video games businesses report that the quality of graduates emerging from specialist video game development courses is inconsistent. In comparison to traditional maths, computer science and physics graduates, there was a perception that graduates from video games design courses were less flexible in their skills and unprepared for the work place[273].

The Creative Industries Federation, ScreenSkills and Creative & Cultural Skills - with support from government - will launch an industry-led Creative Careers Programme in

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[268] www.ukie.org.uk/brexit
[269] https://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf
[270] https://ukie.org.uk/sites/default/files/cms/docs/Ukie%20State%20of%20Play%20-%20March%202017_0.pdf
[271] https://royalsociety.org/topics-policy/projects/computing-in-schools/report/
[272] http://www.digitalschoolhouse.org.uk/
[273] Creative Assembly, "Creative Chronicles: Industry Education", Jan 2018. https://www.creative-assembly.com/blog/creative-chronicles-industry-education

2019. £2 million of grant funding has been made available by DCMS to kick-start the programme through to March 2020, with industry providing in-kind commitments and ensuring its sustainability long beyond this time.

The overarching outcome of the programme is to cultivate a workforce that is fit for the future by driving a stronger and more diverse supply of talent into the creative industries and wider creative economy. It aims to achieve this by helping young people and their influencers to understand the range of opportunities open to them across the creative economy, and the skills and qualifications they need to succeed when they leave school. It also aims to equip employers to diversify their workforce and plug skills shortages by developing the most urgently needed apprenticeship standards.

Industry response measures

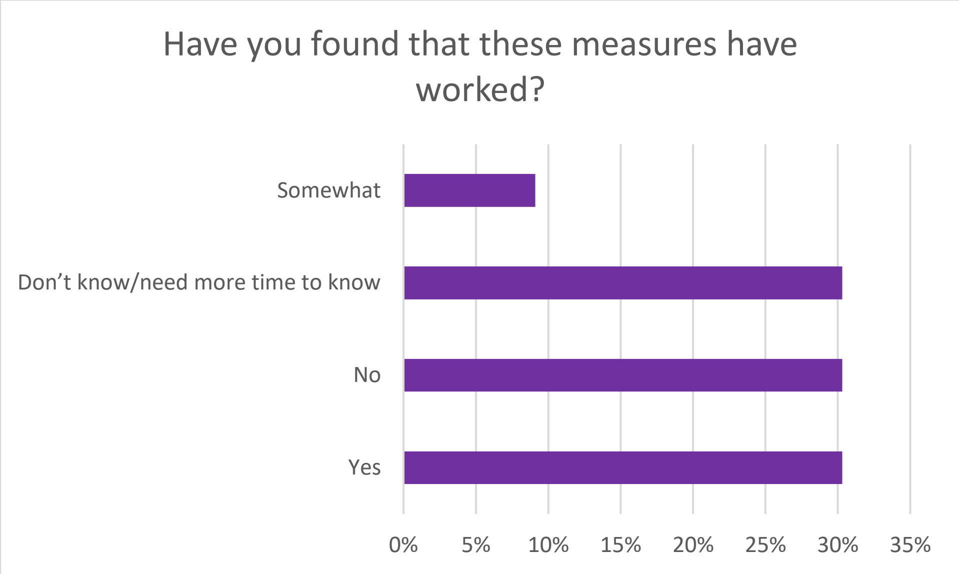
Our survey found that our members and other games companies in the industry embarked on a wide range of measures to alleviate recruitment difficulties. These included:

1. Up-skilling existing staff
2. Engaging directly with education establishments
3. Engaging recruitment agencies
4. Engaging directly with government
5. Seeking to re-hire previous staff
6. Increasing salaries
7. Recruiting from abroad
8. Recruiting less qualified or experienced candidates
9. Attend networking events
10. Offer help to relocate candidates from other parts of the UK

However, many of these were time-consuming or incurred high costs and exerted further pressure on the businesses. For example, one respondent said that "all staff [are now] wearing multiple hats… to fill in the gaps", with another stating that training up the junior employees was placing "more strain on our already stretched leads". Of course, training up junior employees would require more seniors/mentors in the first place, causing a difficult cycle for games companies to solve.

The use of recruitment agencies was not a "cost effective approach" for some. A number of respondents stated that they were actively engaging with educational institutions such as universities and schools to help foster the development of relevant skills, which itself implies that the domestic workforce is lacking in the relevant skills to begin with. As a result, many mentioned they simply had to look further afield for suitable candidates. One resorted to "hiring foreign students on a temporary basis", whilst another was interviewing candidates from East Asia and the Americas.

11. Have these measures worked, if not why?



There was a mixed response on whether these measures were successful. Whilst nearly a third said that these measures did help, others said that they only partially worked to solve the problem of skills shortages. One said that: "every little helps [to] bring a couple more applicants in, but not nearly enough of a high standard to let us recruit as we'd hope". Another said that they had "never been in a position" to "pick between multiple different candidates". One respondent, who previously stated their measure was to recruit foreign students, found that this would only work in the extreme short term as they would leave upon graduation. Another stated that though their measures on securing hires from abroad (providing relocation support for international hires), had worked "very effectively" with a huge increase in senior hires internationally, the costs were "enormous" and not sustainable.

> "Not really, we are now a company of a few experienced leads trying to teach a number of unexperienced juniors. If one of those leaves we will be in dire straits."
>
> - Survey responder

More than one stated that the measures were mixed, especially in regards to upskilling staff – there was simply too much strain on the few senior staff that they had. Some mentioned that the uncertainty of Brexit was actively putting off candidates. Others stated they were recruiting non-UK expatriate Europeans from countries such as the United States. One said that as much as "on third" of their team consisted of non-European nationals.

Tier 2

Our last consultation to the Migration Advisory Committee on the Tier 2 Visa system in 2017 highlighted how games companies were recruiting for positions which did not exist even just three years previously, and how they struggled to match the specific listings on the SOL to their rapidly changing needs. We continue to recommend that the current review into the SOL should be conducted with an open mind and a market awareness of how forward-facing the games and wider technology industry is and therefore how the nature of job roles will continuously change and evolve. Game development job titles should be forward-facing and future-proof, just like the sector.

Data Science is one of the new jobs / skill sets and demand for these skills is ever increasing with the volume of data companies have access to. Data Science should be on the SOL.

13. If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles.
We heard from 35 games businesses, from small developers to large, multinational companies and between them 93 workers were hired through this system for roles in programming, marketing, animation, and artistry. However, this only reflects those who responded to our survey so is difficult to draw accurate conclusions from in this context. Many were discouraged by the high visa costs and could not afford to hire the talent they desperately needed.
Regarding how many fell on the current SOL list, some said that most of who they recruited did, which is a fantastic first step to helping the UK games industry thrive. There simply needs to be more awareness of newly emerging positions.
Our survey also asked if there were any issues with the current SOL. For those that found issues with it, the overall opinion was that some did not fit the games industry. One said that the current list did not allow for "specific new as yet required skills". Another said that it "doesn't represent all roles within the games industry that have a skills shortage in the UK/EU". We heard that the requirement of five years' experience for some roles such as data scientists was inappropriate, as this had little relation to the job being hired for. One responder said that the fact that there were no SOC codes for Design, Marketing or Publishing was a "major issue". One respondent simply that that the definitions of video games jobs were "incorrect". A number found it difficult to use and that it directly conflicted with itself on whether a job qualified or not.

"0. We cannot afford the Visa system costs."

- Survey responder

Tier 2 salary threshold

The initial recommendation by the MAC to maintain the salary threshold for tier 2 visas following our withdrawal from the EU could prove problematic for the games and interactive entertainment sector. EU employees primarily fill mid-tier roles where there is a shortage of UK candidates while non-EU candidates are primarily sought to fill highly specific and more senior roles.
Our research found that 87% of games businesses hired international talent as UK candidates lacked the skills or experience required. We also found that up to 64% of

EU workers and up to 34% of rest of World workers could be sitting under the £30k threshold.[274]

Skills and immigration charges

As stated elsewhere, the UK games industry is part of an extremely strong global sector and competition for talent is fierce. As stated in our response to the Tier 2 consultation[275] the recent introduction of the Immigration Skills Charge to the non-EEA migration system and the Conservative Party Manifesto's pledge to double it, both fundamentally fail to recognise the value – particularly in terms of this knowledge exchange - of international workforces to the games and wider creative and technology industries. In addition, skills and immigration charges put the cost of hiring in the UK for international businesses significantly higher than other parts of Europe. This puts the UK at a competitive disadvantage compared to other nations. An immigration system fit for a truly "Global Britain" must acknowledge this value and be built to ensure that we remain a top global hub for diverse international talent.

A games business recently reported to us that If EEA hires were included in Tier 2, "our visa costs this year would have more than doubled" and that the costs are "disproportionate compared to the European countries with which the UK will be competing for talent". They went on to say that

" To bring non-European talent into Germany or Spain costs around £2,000. In Sweden the cost is just £1,000. It currently costs over £6,000 to bring talent into the UK, once the visa, Immigration Skills Charge and NHS surcharge are included. Nothing the government have indicated they are considering would reduce these costs."

"Once European hires are included in this system, the UK will become a significantly less attractive place to build skilled teams than any other major centre in Europe. It will

[274] www.ukie.org.uk/brexit

[275] https://ukie.org.uk/sites/default/files/cms/docs/Ukie%20response%20to%20the%20Migration%20Advisory%20Committee%E2%80%99s%20call%20for%20evidence.pdf

be three times more expensive to bring in new talent than its nearest competitors (and up to six times more expensive than some leading countries), with none of the free access to top European talent that other countries will enjoy. “

One games business stated that for 2018, visa costs, legal support and relocation support cost £215,852 for 13 hires. This is unfeasible for small games companies, which make up the majority of the UK games industry.

Specific Job titles struggling to fill

In our consultation we have identified many sub-specialisms within the category of ‘programmer’. An over-arching term ‘programmer’ or ‘games programmer’ would suffice on the SOL, as in small teams, many of the sub-specialisms will be linked and the entire programming requirements covered in that small team.

Occupations in Shortage
Programmers: general
Programmers: Engine
Programmers: Mobile Engine
Programmers: Graphics
Programmers: Network
Programmers: physics
Programmer: Audio
Programmers: AI
Programmers: deep learning
Programmers: UI
Network Architect
Server Developer
Game developer
Client-side engineer
Client-side developer
Server Engineer
Server side developer
Software development
UX Designer
Unreal developer (Engine)
Unity developer (Engine)
Multiplayer Designer
DevOps
Compression engineer
Principal Programmer
Principal Designer
Software engineer
Artists

Occupations in Shortage
Lead Artist
Technical Arist
Concept Artist
Storyboarding Artist
Environment Artist
Character artist
Animator
Special effects
VFX Artist
Graphic Artist
UI Artist
3D Artist
Level designer
Feature designer
Character Animator
Principal animator
Lighting Artist
Story & Actors
Story & Scriptwriters
Voice Actors
Non-development
Project Managers
PR Managers
Community Managers
Data analyst
Brand Manager
Senior
Producers
Game Directors
Creative director
Head of Ops
Head of Strategy
Lead Tester
Brand Manager
Technical Director
Head of Global Business development
Head of esports
Language
Translators
Localisation QA

Occupations in Shortage
Foreign Language PR Manager
Foreign Language PR Executive

Additional Comments from the Survey

Are there issues with the Shortage Occupation List:

- For some roles on the SOL, there is a requirement to have 5 years' experience and have led a team, which will often be irrelevant to the role in question. For example, data scientists in particular will be individual contributors and even the senior Data Scientists wouldn't necessarily need to lead a team – at that point they will no longer really be working as a data scientist.

- The tech industry is quite fluid, the skills that are required / in shortage change quickly and at the moment the SOL doesn't necessarily keep up with this.

- There should be a broader Tech sector, allowing for more clarity on the actual skills the economy needs. As an example, the job code "2136 programmers – software developers for 2D/3D computer animation" feels unnecessarily specific.

- The issue with the current SOL is that it does not allow for specific new as yet required skills. For example, the Community manager is a relatively new addition to the video games list.

- Are there current problems with the SOL? Yes - in particular that it assumes lack of experience relates to how much we may need them. We have a shortage of graduate / juniors as much as experienced, yet the SOL puts weighting on number of years experience. This is completely irrelevant and extremely harmful to our ability to recruit.

- Our industry is made up of so many small companies that we will suffer even more due to the visa process itself being unviable for small companies. there should be as little friction as possible to employ people from overseas, or our companies will suffer - or move overseas.

- The low number of technical applicants is partly due to computer science being removed from the curriculum in the 1990s. And from the shortage of Artist skills the current emphasis on STEM that excludes the Arts.

What are the reasons for shortages and recruitment difficulties

- The low number of technical applicants is partly due to computer science being removed from the curriculum in the 1990s and from the shortage of artist skills resulting from the current emphasis on STEM that excludes the Arts.

- Reason for shortage of talent: Less talent applying from abroad due to Brexit.

- Increasing demand from all other sectors i.e. competing with banks, health, telecoms etc.

- Fast pace of industry evolution and growth, so low availability in job market

- Other industries with similar skills requirements to grow the digital part of more traditional businesses

How can conditions be improved:

- More internship programmes instead of an apprenticeship levy

- While there appears to be a growing interest in game development I see this only in front-end roles. Back-end roles and QA should be viable career choices for graduates but do not seem to be due to lack of focus on these areas in degree programs.

- Many candidates with a Game Development or similar degree lack deep programming skills compared to those with Computer Science. These more applied degrees should maintain some of the training provided by a CS degree.

- Education is key but encouraging diversity is king. Making people aware you can work in the industry even if you are not a coder or a rich kid.

- In order to be a global leader, I believe that it is vital for the UK to be able to recruit the best in the world where ever they may be. Brexit is of enormous concern and will impose a greater strain in our ability to recruit.

- You can't plug every skills shortage with more education. UK leads in startups and games because it attracts talent from beyond its borders. This is a good thing and should be encouraged, diversity is an important factor in growing the most successful teams. Shortages in the sector can be improved by encouraging freedom of movement and improving processes for outreach across our local talent pool, i.e. Europe.

- Make it easier to employ foreign students who complete a degree or post-grad at a UK university

The Clinical Pharmacology Skills Alliance

2. Case study: Christine Cole, Specialty Registrar, Clinical Pharmacology and Therapeutics, Royal Liverpool University Hospital, UK

Christine Cole received her Bachelor of Medicine and Bachelor of Pharmacy from the College of Medicine and Allied Health Sciences, University of Sierra Leone. While working in Sierra Leone during the Ebola outbreak in 2014, Christine met Dr Janet Scott, a Clinical Lecturer in Clinical Pharmacology and Infectious Disease at the University of Liverpool, UK. Through Dr Scott, Christine developed an interest in clinical pharmacology and decided she would like to specialise in this discipline. Due to the lack of post-graduate medical education in Sierra Leone, in 2016, Christine applied to do a core medical training post in Clinical Pharmacology at Hull Royal Infirmary, Hull and East Yorkshire NHS trust, UK. In January 2018, Christine became a Member of the Royal College of Physicians of the UK (MRCP). The same month, she accepted a job offer from the Royal Liverpool University Hospital as a Specialty Registrar; the paperwork was verified and approved by the RCP, with a start date of March 2018. However, her first application for a tier 2 visa was rejected. She returned to Sierra Leone and worked in a hospital and re-applied; however, this second application was also rejected. The third application, which was sent after doctors were exempted from tier 2 visa caps, was granted. Christine started in her Specialty Registrar position in September 2018; the post had therefore remained unfilled for 7 months. During that time, the hospital had to get in locums and fill in rota gaps, which neither helped patient throughput, nor the need for NHS Trusts to maintain prudent financial plans.

The British Pharmacological Society (BPS) has identified clinical pharmacology within the NHS as an area of critical skills shortages. In 2014 there were only 77 Clinical Pharmacology and Therapeutics (CPT) consultants in the UK[276]. This compares to a Royal Colleges of Physicians (London) recommendation of a workforce of 440[277]. The same report shows that there is about one consultant in clinical pharmacology to 500 undergraduates, compared to one cardiology consultant to only 40 undergraduates. Further, in 2012 the overall UK consultant workforce had increased by 62% (representing 4,636 extra consultants), but with only a 4% increase for clinical pharmacology (equivalent to only 3 extra consultants)[2].

Professor Sir Munir Pirmohamed, President-Elect BPS, who recruited Christine, says:

"Over the last 20 years there has been a failure to plan appropriately for the development of the clinical pharmacology workforce. Workforce planning strategy has focused on acute trusts and the delivery of service, including the delivery of acute and general medicine. The strategy has not taken into account the skills of clinical pharmacologists, and the benefits they could bring to the NHS, academia, industry

[276] British Pharmacological Society. (2014) A Prescription for the NHS: Recognising the value of clinical pharmacology and therapeutics. Available from: https://www.bps.ac.uk/BPSMemberPortal/media/BPSWebsite/BPS_A_prescription_for_the_NHS_FINAL_SP%281%29.pdf

[277] The Royal Colleges of Physicians. (2013, update). Available from: https://www.rcplondon.ac.uk/file/1578/download?token=TH8kJh7r

and regulation, both in the short and long-term. For example, partnership working with pharmacists and GPs is likely to bring major benefits to the NHS in terms of optimising drug therapies with a consequent reduction in drug costs, drug wastage and iatrogenic disease."

One of the consequences of the lack of growth in consultant posts is that it has been challenging to fill trainee posts – because those trainees who are aware of the specialty can't necessarily see a secure career pathway in the NHS. Therefore, the solution will be two-fold: a bottom-up approach to filling trainee posts (critically, including overseas recruitment) and a strategic approach to communicate the value of the specialty and grow the number of consultant posts.

The Federation of Small Businesses (FSB)

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Professor Alan Manning
Migration Advisory Committee
2nd Floor
Peel Building
2 Marsham Street London SW1P 4DF
11 January 2019
Dear Professor Manning,

Shortage Occupation List Review

The Federation of Small Businesses (FSB) welcomes the opportunity to contribute to the Migration Advisory Committee's review of the Shortage Occupation List (SOL). As Scotland's leading business organisation, we have focused our comments on the need for the SOL itself to change – rather than comment upon the technical aspects of the review. This is because we have fundamental concerns about how such an approach will work for small businesses in Scotland and felt it was important to highlight these concerns to the MAC.

In summary, we argue that the MAC should be open-minded about the prospect of expanding the Scottish Shortage Occupation List to include a sub-national, regional skills shortage model. Further, the MAC should appoint a Scottish representative to be directly responsible for monitoring the labour and skills implications which emerge in Scotland as a result of Brexit.

Since the UK's vote to leave the EU, the key Brexit issue facing small businesses across Scotland has centred on people: specifically, how they access non-UK labour and skills beyond the transition period in a post-Brexit immigration system. As a result, FSB has continuously argued for a system which facilitates business growth, is easy-to-use and is affordable for employers – most notably in parliamentary inquiries undertaken by Holyrood and Westminster.

This is an especially important issue for the small business community – and is critical context for the MAC's deliberations – due to their increased reliance on EU-27 labour, in comparison to their counterparts elsewhere in the UK (5% higher than levels for the UK as a whole). Indeed, according to survey work with FSB members, 45% of smaller businesses in the tourism and hospitality sector have at least one EU worker[278].

Crucially, almost all small employers have never made use of the UK's points-based immigration system (95%), as the majority have recruited EU workers from Scottish and UK labour markets (85%). In short, access to non-UK labour and skills is a make-or-break issue for many businesses and, as things stand, the recently published White Paper is likely to result in significant harm to business growth in Scotland.

The review of the SOL, then, arrives at an important juncture for small businesses. While we are not in a position to provide evidence of shortages from tens of thousands of FSB members, we would like to make a few points about how the SOL could help businesses adapt to an uncertain and tumultuous post-Brexit environment.

The first point we would like to make is that the conclusion of this review should not be the final word on the SOL and the Scotland-only SOL. To do so prior to our departure from the EU, when the impact on the labour market is unknown and the operating environment for firms is unknown, would be a mistake. Instead, the MAC should operate an evidence-based approach and continuously review the SOL and Scotland-only SOL. Building in this flexibility, however labour intensive it may be, will be of critical importance.

The MAC should not perform this task alone, however. In taking on an enhanced role and a greater interest in labour market developments in Scotland and the rest of the UK, it should utilise the expertise that resides outside of Westminster. In keeping with the spirit of devolution, the MAC should appoint a Scottish representative to be directly responsible for the Scotland-only SOL and monitor the labour and skills implications that emerge from Brexit. There is expertise within the government, parliament, business and academia which should be accessed.

Lastly, we believe that a fundamental restructuring of the Scotland-only SOL may be required following the proposed end of freedom of movement. The need for the MAC to identify a national skills shortage for the SOL is, in our view, a weakness of the current scheme and is particularly ill-suited for a country as geographically diverse as Scotland. The recruitment experiences of an FSB member in the hospitality sector in Kylesku, one of the most remote places in mainland UK, are manifestly differently from a hotelier in Glasgow. Indeed, Scotland is home to a variety of local labour markets where unemployment, employment, self-employment and inactivity rates differ markedly. Therefore, we would recommend that the MAC underpin the Scotland-only SOL with a sub-national, regional skills shortage model for Scotland.

I do hope these comments are useful. As always, please do not hesitate to get in touch if you would like to discuss any aspect in more detail.

The Federation of the Royal Colleges of Physicians

Response to call for evidence from the Federation of the Royal Colleges of Physicians

The Federation of the Royal Colleges of Physicians is a partnership between the Royal College of Physicians of London, the Royal College of Physicians of Edinburgh and the Royal College of Physicians and Surgeons of Glasgow. The three Colleges are the professional membership bodies representing physicians across the UK, in addition the three Colleges are involved in the vast majority of consultant appointments in physician specialties across the UK.

Workforce context:

The physician workforce across the UK is facing significant challenges with vacant posts across the NHS. There are a number of reasons for this: an ageing population, an increase in patients with complex combinations of health problems, a swathe of doctors nearing retirement, and a different approach to work among their successors.

Between 2007 and 2017 the number of consultants increased by over 70%, from 9,092 to 15,727. But 10 years ago, 80% of advertised consultant posts were successfully filled; by 2017 that had dropped to 55%.

These are fully funded posts that NHS trusts and providers are unable to fill because of a lack of suitably trained applicants. And there are no quick fixes: the journey from medical student to consultant takes at least 13 years. This alone demonstrates that international recruitment will have to play a significant role at all stages from foundation year 1 through to consultant roles for at least the next 10 years.

The three Royal Colleges would specifically ask the MAC to consider the following recommendations:

● The MAC should consider the case for adding all physician posts to the SOL for a defined period of time, which would provide a period of stability for the NHS during a potentially turbulent time for international and EU recruitment into the NHS. This could then be subject to a review moving forward.

● The MAC should recognise the case that Acute Internal Medicine and Geriatric Medicine physician posts should be added to the SOL in their own right based on the significant evidence (included in appendices) that these specialties are in national shortage.

● The MAC should consider the role it could play in making a recommendation that Junior doctor foundation year 1 and year 2 posts are added to the SOL.

● The MAC should consider the skilled roles undertaken across the health and social care professions that currently are not included on the SOL and are unlikely to meet the MACs recommendation for the skilled workers salary threshold of £30,000. If these roles remain in shortage the workload for physician's increases which further exacerbates workforce shortages.

Appendix 1:

Tables 1-3 are drawn from appointment advisory committees (AAC's) which are legally constituted interview panels established by an employing body when appointing consultants as set out in The National Health Service (Appointment of Consultants) Regulations. Tables 4-6 are drawn from Assessment Panel data as set out in The National Health Service (Appointment of Consultants) (Scotland) Regulations 2009. The full dataset is available on request.

Table 1: Specialties with the lowest % of successful appointment rates between 2012-2017 in England

Specialty	Total advertised posts	% of new posts	% vacant posts	Successful posts	% unsuccessful
Immunology	3	33%	0%	1	66%
Metabolic medicine	5	40%	60%	2	60%
Geriatric medicine	**1,192**	**40%**	**19%**	**480**	**60%**
Stroke medicine	**302**	**31%**	**18%**	**132**	**56%**
General internal medicine	**50**	**38%**	**8%**	**23**	**54%**
Acute internal medicine	**1,107**	**43%**	**11%**	**520**	**53%**

Table 2: Specialties with the lowest % of successful appointment rates between 2012-2017 in England, Wales and Northern Ireland

Specialty	Total advertised posts	% of new posts	% vacant posts	Successful posts	% unsuccessful
Immunology	3	33%	0%	1	66%

Metabolic medicine	5	40%	60%	2	60%
Geriatric medicine	**1,278**	**41%**	**19%**	**527**	**59%**
Stroke medicine	**315**	**32%**	**18%**	**140**	**56%**
General internal medicine	**54**	**41%**	**7%**	**26**	**52%**
Acute internal medicine	**1,190**	**43%**	**12%**	**581**	**51%**

NB: Immunology and metabolic medicine: in 2017 the total number of immunologists in the UK was 93, of metabolic specialists the total was 27. Compared to the specialty with the next highest number of unsuccessful posts, geriatric medicine, with a total number of 1,556 specialists, this data should be considered in the context of the size of the specialty.

Table 3: Regions in England, Wales and Northern Ireland by highest rate of unsuccessful % appointments 2012-2017

Region: Sub-region	Advertised posts	Successful	% unsuccessful
South: Kent, Surrey and Sussex	**792**	**363**	**54%**
NI And Wales: Wales (North)	**83**	**40**	**52%**
North: Northern	**251**	**121**	**52%**
Midlands and East: West Midlands	**978**	**495**	**49%**
North: North West	**1,017**	**554**	**46%**

Table 4: Specialties with the highest % of assessment panels cancelled in 2017 in Scotland **(data from the Academy of Medical Royal Colleges and Faculties in Scotland)**

Specialty	Completed	Total Panels	Appts	% Panels cancelled	Cancelled
Acute Medicine	4	15	4	73.33%	11
Endocrinology & Diabetes Mellitus	2	6	3	66.67%	4
Geriatric Medicine	9	23	12	60.87%	14
Gastroenterology	8	16	10	50.00%	8
Palliative Medicine	1	2	2	50.00%	1
Rheumatology	6	12	7	50.00%	6
Totals	**30**	**74**	**38**	**59.46%**	**44**

Table 5: Reasons given for the cancellation of assessment panels in Scotland (data from the Academy of Medical Royal Colleges and Faculties in Scotland).

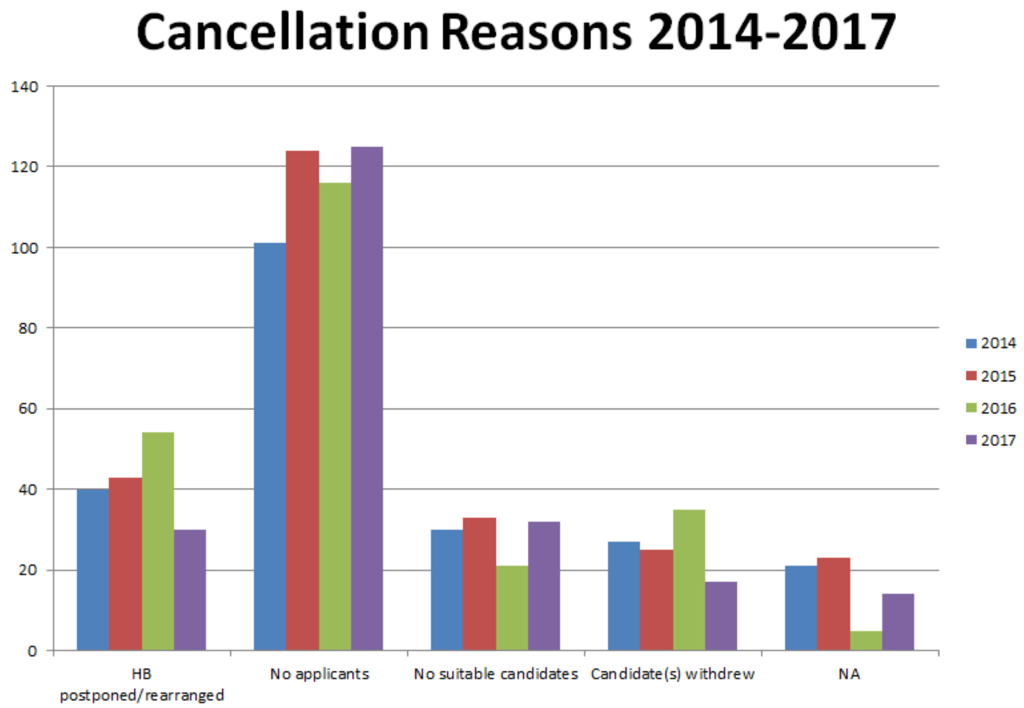
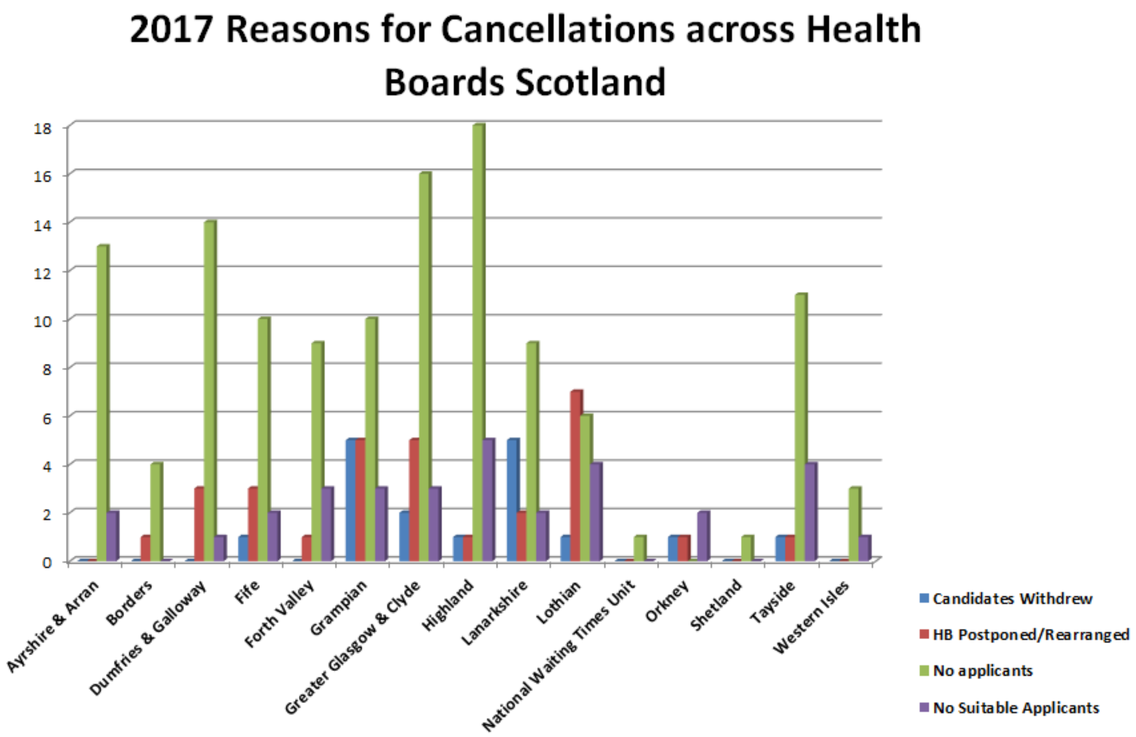


Table 6: Reasons given for the cancellation of assessment panels in Scotland by Health Board (data from the Academy of Medical Royal Colleges and Faculties in Scotland).



Appendix 2: Geriatric medicine and acute internal medicine

Tables 1-3 are drawn from appointment advisory committees (AAC's) which are legally constituted interview panels established by an employing body when appointing consultants as set out in The National Health Service (Appointment of Consultants) Regulations. Tables 4-6 are drawn from Assessment Panel data as set out in The National Health Service (Appointment of Consultants) (Scotland) Regulations 2009. The full dataset is available on request.

Table 1 Overall Appointment trends across all specialties in England, Wales and Northern Ireland 2012-2017

Table 2: Success of appointments in acute internal medicine in England, Wales and Northern Ireland 2012-2017

Table 3 Success of appointments in geriatric medicine in England, Wales and Northern Ireland 2012-2017

Table 4: % of assessment panels cancelled in Scotland in acute medicine 2014 -2017

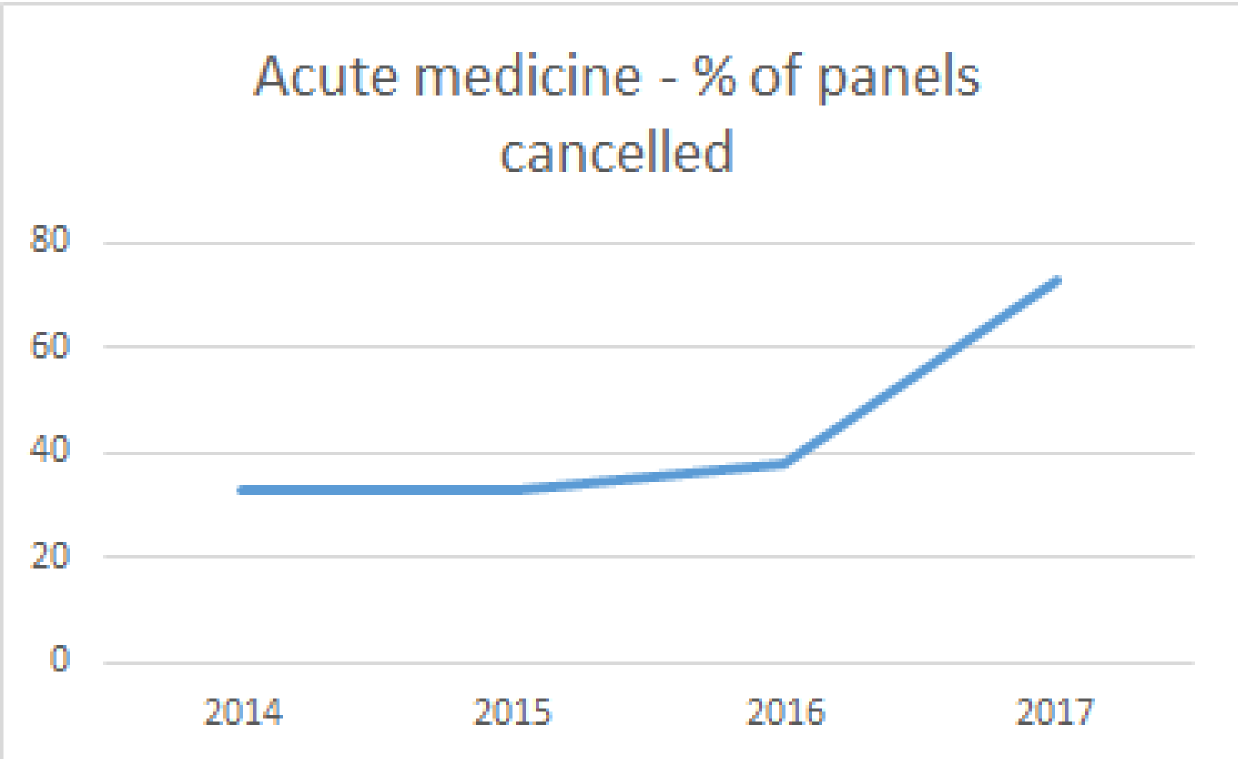
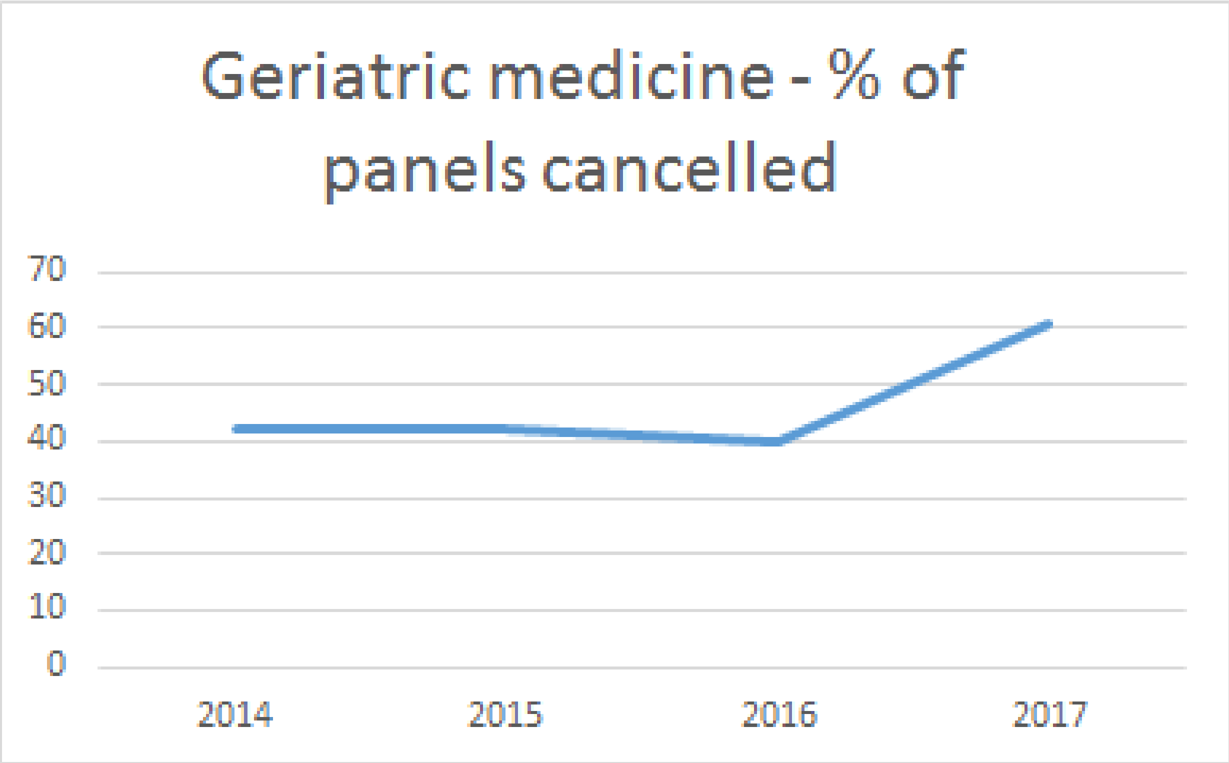


Table 5: % of assessment panels cancelled in Scotland in geriatric medicine 2014 -2017



The General Teaching Council for Scotland

Chord UK Ltd

General Teaching Council for Scotland

Lapsed Teacher Research Enhanced Report

18th April 2017

1. Introduction

The General Teaching Council for Scotland (GTCS) membership renewal date is 1st April, after which unpaid registrants are granted a grace period up until the end of August, before lapsing. During this time emails are sent to encourage them to renew. This method has been somewhat unsuccessful to date, with only 50% of lapsed teachers responding to the email and around 700 to 800 teachers lapsing each year. GTCS understands that a number of those lapsing will be due to retirement and other unavoidable circumstances. However, it is unclear why most teachers lapse, especially across the younger age groups.

Chord were commissioned to carry out a research exercise to gain a greater understanding of the reasons why teachers have not continued their registration, if they intend to return to teaching in Scotland in the future and if GTCS could have done anything to keep them registered.
In order to monitor the project effectively, GTCS selected data according to age range. Chord were issued with a sample of data ranging from the ages of 21-45.

2. Project Outcomes

Presented below are the outcomes and results of the survey achieved over the course of the Project. In total, there were 752 records available to call and throughout the entirety of the project, the team achieved the following:

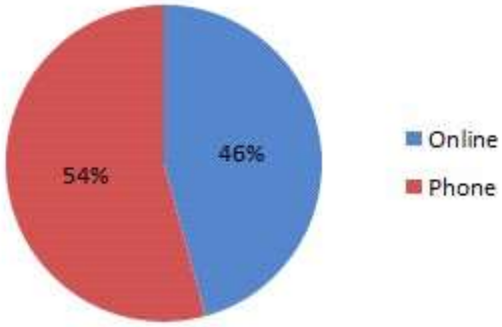
- 1989 calls
- 215 teachers spoken to
- 720 emails sent
- 305 voicemails left

All records received at least 3 call attempts, before closing and the table below denotes the number of records available to contact at each call attempt over the course of the project:

No. of records needing a 1st Call	No. of records needing a 2nd Call	No. of records needing a 3rd Call
752	387	282
100%	51%	37.5%

The following graphs highlight the 317 positive outcomes:

Positive Outcomes	
Survey completed - Online	Survey completed - Telephone
145	172



The remaining 435 records were closed as follows:

Negative Outcomes							
Refused Survey	Unaware registration had Lapsed	Already registered with GTCS	Intends to register	Request removal from database	Unobtainable	No contact made	C/TPS
3	8	5	5	3	170	159	82

Surveys were either completed over the telephone, or an email was sent with the link to complete the survey online, if we were unable to reach them, or they were too busy to speak at the time of the call.

2. Project Outcomes Continued…

Of the 752 records provided to call, 283 changes were made to the data supplied. This is to be expected as the audience are lapsed teachers and are likely to have out of date contact information.

In the following report, the results shown for the open ended question are just a selection of responses, for full results, see the excel data file.

Over the course of the campaign, of those records received, the final conversation rate to a positive outcome ie – Survey Completed is 42%. However, when removing the records flagged as invalid (CTPS, Unobtainable etc); the conversation rate to a positive outcome is 66%.

Question 1 - *What is the main reason for you no longer continuing your Registration as a teacher with GTC Scotland?*

In total, **317 responses** were recorded and below are a selection of responses to this question:

"Staying at home to look after the children"

"It was an oversight on my part. I missed my annual payment by 2 months due to a move to the U.S. I was unable to have the membership reinstated. Now I have to go through a full FBI check before I can reapply"

"Teacher has moved away from Scotland with her husband's work"

"I couldn't cope with the class I was given. It was an extremely challenging class and I did not have enough experience or support to continue"

"During my probation year, I was placed in a school which was undergoing a re-inspection after having failed 2 years previously. The general atmosphere at the school was of very high stress and as a result I was given very little mentor support. I had several children in my class with additional support needs which I did not feel were met with the support of the management team in the school.

Unfortunately, this led to severe stress on my part and I ended up getting signed off by my doctor for stress and depression. After 3 months I decided it was best for my health and for the school if I did not return to finish my provisional year"

"Teacher would have liked to teach Spanish but the GTCS would not give him registration for this even though he had a Masters in teaching in Spanish and a Masters in secondary teaching"

"Teacher has left the profession due to personal circumstances though he is now re-training to teach in further education"

"Teacher has had a change of career and is now an air traffic controller"

"I left the teaching after 10 years and I do not see myself ever returning"

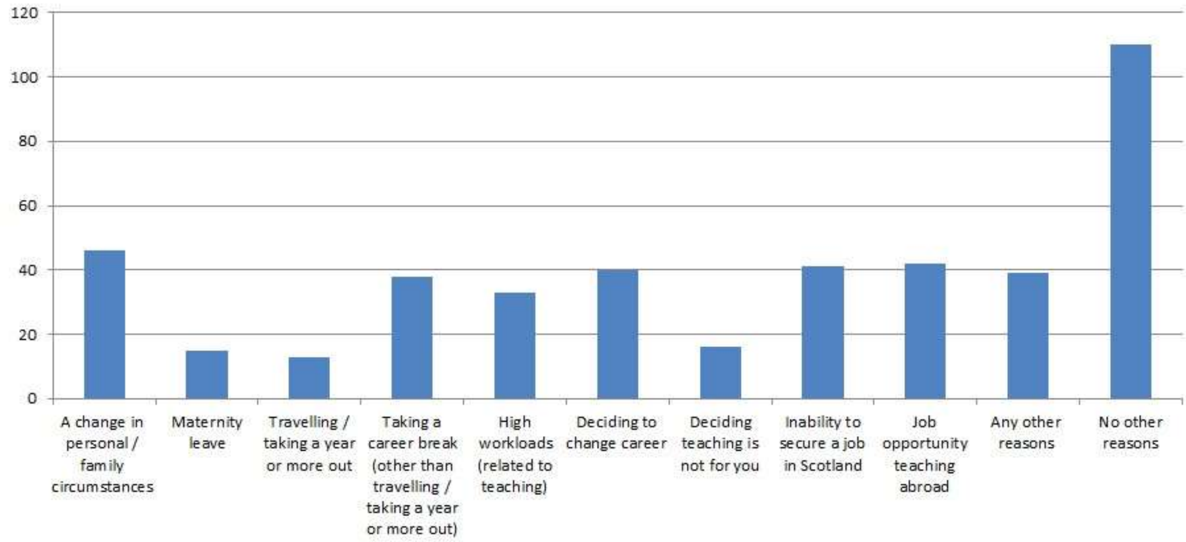
"I did not get a job"

"I have moved abroad from Scotland"

Question 2 - *Were any of the following also reasons for you no longer continuing your Registration?*

Lapsed teachers were asked to select which of the following were also reasons for no longer reregistering. Please note, this question was set up to enable teachers to record multiple answers if required. This meant, in some instances more than one reason was chosen, resulting in **433 responses** being recorded.

A change in personal / family circumstances	46	14.5%
Maternity leave	15	4.7%
Travelling / taking a year or more out	13	4.1%
Taking a career break (other than travelling / taking a year or more out)	38	12.0%
High workloads (related to teaching)	33	10.4%
Deciding to change career	40	12.6%
Deciding teaching is not for you	16	5.0%
Inability to secure a job in Scotland	41	12.9%
Job opportunity teaching abroad	42	13.2%
Any other reasons	39	12.3%
No other reasons	110	34.7%
Total	433	



Question 2 Continued - *Were any of the following also reasons for you no longer continuing your Registration?*

Of the **433 responses,** ‘any other reasons’ was selected **39 times**. Further to this, teachers were asked to expand on this and a selection of feedback is as follows:

Please give details of any other reasons.

“Teacher believes that teachers in Scotland are oppressed by the GTCS and not allowed to use their own abilities in the classroom”
“Teacher is not sure whether teaching is for him at the moment so he will be thinking about whether to return or follow a different career path”
“Probation was severely underpaid and workload very high considering the amount of time allocated to job. I had a family to feed and being on probation with such a workload and low pay for one year

was financially and personally unsustainable for me, so I have to switch to another job. The job was not personally rewarding"

"I do not live in Scotland"

"Registered with the GTC and did some volunteering at a secondary school to get familiarised with the curriculum for excellence. Then, I got a temporary vacancy as MFL teacher. After that, I applied to different jobs. I was invited to several interviews for a support for learning position. I was successful at one of the interviews which meant that I could secure a job (for a year at least). Two days later, I got a call from the HT saying that my job offer was withdrawn due to a bad job reference (from my last school). Unfortunately, I tried to find out the reason of such a bad reference letter as I was never told that I was doing anything wrong. I got some help from the citizen bureau officers and wrote letters to both, last school and the one I got the position in first place. They were avoiding responsibility and never got a clear answer of what happened. Finally, I was recommended to forget it and try to apply for supply teaching. I never got a job after that so, what is the point of being a member of GTC Scotland if they do not want me to get a position as a teacher? No answer needed"

"Teacher is no longer teaching as she is looking after her children, she doesn't think she'll return to teaching in the future"

Question 3 ***You said you decided to change career, why was this and what is your current role?***

Of the **40 responses** selected as 'Career Change'; below is a sample of the feedback teachers have provided.

"Teacher has gone back into university administration which was a career path she was on before she started teaching"

"Moved back into Engineering for a £5k salary increase and a 'clock-in/clock-out' situation > no work home and actually able to socialise and relax after a long day"

"I decided to change career because I felt my job was not safe. I was an ASN teacher and due to cuts I was told I may have to go back to class teaching which I felt would not be using my skills to the full and my 20 years experience. I went back to university part time (while still teaching) to do an MSc in Psychological Counselling and am now managing a school counselling service"

"I am a full time soccer coach, this is a dream role for me" *"No support and workload"*

Question 4 - ***You said you were unable to secure a job in Scotland, what kind of job were you looking for and was it in a particular area? If so where?***

In total, **41 responses** were selected as ‘unable to secure a job in Scotland’ and a selection of comments are below.

“Teacher was looking for jobs in Secondary schools teaching Design Technology and Art”

“Teacher was looking to teach Secondary Geography in the Edinburgh area”

“Teacher was looking for any job teaching physics in the Stirling area”

“Teacher was looking for teaching jobs in Primary schools in the Glasgow area”

“In any area around Ayrshire. Full or part-time”

Question 5 *You said you have a job opportunity teaching abroad, in which country and why did you decide to take it?*

In total, ‘a job opportunity teaching abroad’, was selected **42 times** and a selection of responses is as follows:

“UAE, Dubai. I was looking for a better work life balance”

“Canada - my family is here”

“Netherlands, as i got offered a teaching job and i didn't get a job offer in Scotland”

“I teach in Switzerland, the pay is better, the clientele is generally easier and the country is more stable I.e not about to go through a pointless political upheaval”

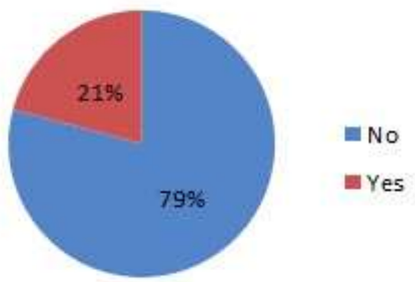
“Milan, Italy. I took this position as it offered me opportunities to work with the PYP curriculum, an international programme like Scotland's. It allowed me to travel within Europe, learn a new language and work within a school that uses technology to enrich learning”

On initial glance at the data, a number of teachers appear to have moved to Ireland. This is reflected in the responses received to this question, as well as the area code records for the telephone numbers.

Question 6 - *Were you encouraged to continue your Registration with GTC Scotland?*

All lapsed teachers were asked whether they were encouraged to continue with their GTCS Registration. The table and graph below highlight the fact 251 advised they did not receive any encouragement and 66, felt they did.

No	251
Yes	66
Total	317



Question 7 ***What, if anything would have made you continue your Registration?***

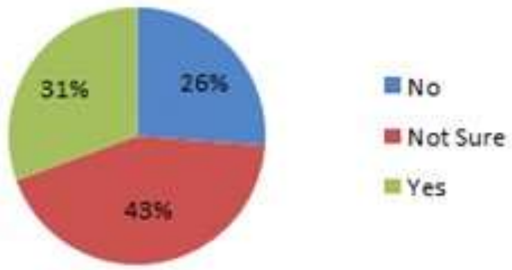
Lapsed teachers were asked if they were able to provide a suggestion as to what may have encouraged them to continue with their Registration. A selection of responses is as follows:

“If had a part-time permanent role would have continued”
“Reassurances that change is on the way in terms of teacher workload”
“If the registration had an international validity/equivalences with other registrations”
“Being able to get full time employment out of the PGDE”
“If had been offered some more access to courses to keep the her professional training up to date”

Question 8 - ***Do you intend to re-apply for Registration in the future?***

All lapsed teachers were asked if they intended to re-apply in the future. The graph and table below indicate the responses received:

No	83
Not Sure	137
Yes	97
Total	317



Question 9 ***When do you intend to re-apply for Registration?***

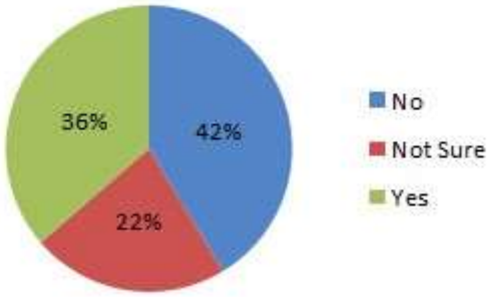
Further to the question regarding whether they intended to re-register; 97 lapsed teachers responded ‘yes’ and were asked whether they were able to provide a timescale, as to when they think they would look to re-register. Please see below a selection of responses:

“As soon as I can however I am hindered by now having to have a full FBI check done as this can take some time”
“2-4 years”
“No specific time frame, it would depend on GTCS costs and ease of re-registration”
“Next year, 2018”
“Depends on job opportunities”

Question 10 - ***Would you be more inclined to re-register if GTC Scotland waived the reregistration fee for one year?***

Further to the question regarding whether they intended to re-register; 220 lapsed teachers responded either ‘no’ or ‘not sure’ and were asked whether they would be more inclined to reregister if the fee were to be waived. The graph and table below highlight the responses recieved:

No	91
Not Sure	49
Yes	80
Total	220



The table shows the majority of respondents would not be inclined to re-register if the fee were waived.

Question 11 - ***Are there any further comments that you would like to add?***

As the project progressed, additional feedback was given, that would not fit the initial structure of the survey. Therefore, a question was added in order to capture this valuable information. As a result of this, the following are a sample of the **57 responses** received:

“I feel it is very unfair that I was taken off the register due to missing payment, when it was noted I was living abroad so not contactable by mail or phone”

“Teacher is a registered teacher in England and she has found it very difficult to register in Scotland and she feels that this shouldn't be the case. Teacher would like to do some supply work but cannot find suitable hours for her and suggested that a more centralised supply register would benefit schools in Scotland”

“I approached this opportunity with a great deal of energy, enthusiasm and determination. I'm hugely disappointed that the demands of the role seemed to be weighed in favour of administration and documentation as opposed to putting the child's learning first. I was quickly exhausted after only a short time in the position affecting my health and social life. I felt with even a small amount of encouragement or constructive feedback I could've met the demands of the role. My learning style wasn't considered, I felt there was only one way to complete the workload. I have an extensive background in people management and have an acute understanding of the skills required when

assisting people who are new to a role. Fundamentally this requires flexibility, input from myself on how I can achieve my objectives and a support network throughout the early stages of my career. I wasn't given this"

"Teacher advised that he would love to re-apply but the process is far too difficult and time consuming"

"I have re registered once, but nothing came of it. Although I passed my probationary year, I was left feeling inadequate and had my confidence crushed by the school I was in"

4. Chord Feedback and Findings

In addition to the information and findings reported above, Chord have gathered additional feedback that may be useful to note moving forward. These points are summarised as follows:

- Lapsed teachers have advised if they work within a State School, the GTCS registration fee is automatically deducted from their salary, however, when moving to Private Schools or FE, this facility is not available. It was felt by teachers this would be something they would find beneficial in the future.

- General feedback of the re-registration process is that it can be timely and in some instances, very complex. Lapsed teachers have fedback they would find a revised, easy to use process much more helpful.

- Lapsed teachers advised that having one registration to cover Primary and Secondary Education would be useful. Or failing that, they would prefer to be able to transfer their registration over, if they choose to change from P1-7 to S1-6.

The Northern Ireland Food and Drinks Association

The Northern Ireland Food and Drink Association welcomes the opportunity to feed in our members' views into the consultation on the FDF Draft Response – Migration Advisory Committee (MAC) – Call for Evidence: Shortage Occupation List (SOL) Review 2018.
The Northern Ireland Food and Drink Association (NIFDA) was founded in 1996 and is an independent, non-party political organisation funded entirely by its members in industry and commerce. NIFDA speaks for over 100 businesses in the food and drink and associated industries. NIFDA is the principal representative organisation for food and drink manufacturing in Northern Ireland representing over 80% of the sector by turnover. NIFDA also has sister organisations which are sector specific, in full membership including the Northern Ireland Meat Exporters' Association, the Northern Ireland Grain Trade Association. Taken together with our colleagues in the farming community our members support over 100,000 jobs. This is approximately 20% of the entire N I private sector employment. Those jobs are non-urban with NIFDA members in all counties.

Consultation Questions:

If you wish, you can provide details of individual jobs titles you/your members have found hard to fill in the boxes below (maximum of 10).
Own staff
Packaging/Electrical/Mechanical Engineers
Drivers
Forklift Truck Drivers
Food Technologists
Food Scientists
Production Operatives
Shift Managers/Supervisors
Butchers
Supply chain and support staff
Carpenters
Plumbers
Herdsmen
Milkers
Animal/Dairy Product Transport Specialists

What do you think are the main reasons for job shortages, and or wider shortages in the sector(s)?
Food and Drink manufacturers require employees from across the whole skills spectrum in order to operate. Importantly many higher skilled jobs are supported by lower skilled operatives. Therefore, we encourage an ecosystem view. Members identified a wide range of factors that were leading to job shortages in the sector. Some of the these were more applicable to low-skill roles, others to mid- and high-skill roles, and some were applicable across the skill spectrum.
At the lower-skill end (i.e. RQF/NQF Level 2 and below), members suggested an ageing workforce combined with a shift in aspirations among the younger British workforce. People who used to do manual, repetitive roles are retiring and younger British workers have different aspirations to their older counterparts.
These shortages are being exacerbated by the decline in net EU migration. EU citizens have been more willing to take on manual roles but fewer are available for work since the recent decline in net migration levels. Food and Drink manufacturers are already aware of

this change exacerbating shortages significantly in their supply chain, both in farm roles and in logistics. The decline in net migration is also already impacting seasonal agency labour.

At the mid- and high- skill end of the skills spectrum (i.e. RQF/NQF Level 3 and above), members identified the quality of STEM education in the UK exacerbating skills shortages among engineers and amongst food scientists in particular. With very little provision for food science specialisms in the UK, members often turn to Europe to recruit where there is greater provision for these subjects.

Members also highlighted a shortage of vets as a significant problem for their suppliers in the food chain. As well as there being a shortage of UK trained vets, UK vets were seen to prefer working with pets as opposed to livestock. Indeed, 90% of Official Veterinarians working in the UK are EU citizens. The protein industries in Northern Ireland comprise more than 50% of entire industry turnover. Industry finds the Government based veterinary inspection system to be extremely valuable, particularly as it is independent of industry. It is highly regarded by third countries. The supply of skilled vets is critical to ensuring this trade.

Looking across the skills spectrum, members felt the industry suffered from an undeservedly poor image. This was seen as partly due to careers advice in schools promoting office jobs over jobs in manufacturing, driven by a poor understanding of what 21st century high-tech Food and Drink Manufacturing looks like. Members also noted that British engineers were more likely to aspire to work in the automotive or aerospace sector than the food and drink sector, despite the fact that in some instances food and drink manufacturers were using the very same robots in their sites as automotive manufacturers. Crucially, members noted that non-UK engineers were less likely to see food and drink manufacturing as a poor relation, particularly amongst Eastern European engineers where the food and drink industry was held in higher esteem.

A final issue raised was the lack of public transport available to transport workers to Food and Drink Manufacturing sites that are often located away from major urban centres. This could be particularly challenging when combined with a need to work shift patterns.

Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research.

NIFDA created a new collaborative network to tackle the skills shortage within the food and drink sector and drive future growth across the industry.

Harvesting Tomorrow's Skills (HTS), which received funding by the local Government body Invest Northern Ireland, was a two-year programme which supported the targets of specifically recruiting an additional 15,000 people to the sector by 2020.

This initiative stemmed from a six-month consultation with the sector which clearly identified skills gaps, a lack of training, and negative perceptions of the food and drink sector as major stumbling blocks.

The local labour market has changed dramatically, and the pace of change is accelerating. The HTS network is focussed on improving knowledge, addressing the skills gap and enhancing the sector's career appeal to young people. Businesses participating in the network include Dunbia, Thompsons, Linden Foods, Mash Direct and Moy Park.

There has been specific targeting of SMEs from the network to encourage engagement with stakeholders such as schools, colleges, local councils and business support organisations to collaboratively tackle the skills deficit.

With an increase in job vacancies currently available across NI's food and drink companies, and the number of applications steadily decreasing, a key focus has been on developing a well-trained skills pipeline. To ensure a strong talent pool, we have been working to dispel the myths and promote the benefits of the sector and the positive career opportunities it presents. We recognise that this starts at school-age and extends to those already working in the sector who can be upskilled and retrained, adding more value through career progression.

HTS and NIFDA have been promoting the opportunities for a rewarding career in the food and drink sector. By playing to our strengths and harnessing the wealth of talent available on our doorstep, we aim to help the food and drink sector meet its full potential.

Have these measures worked, if not why?

Members highlighted apprenticeships as one route that had some success in recruiting new staff. However, a number of problems with the apprenticeship scheme were noted (beyond the well-reported problems with the apprenticeship levy).

A significant problem was sourcing high quality apprenticeship training specifically aimed at the Food and Drink industry. Members identified the nationwide geographic spread of the Food and Drink industry as a challenge for high quality apprenticeship provision. Whereas apprenticeship providers specialising in STEM for the automotive industry could locate in the Midlands where the majority of the UK automotive industry is located, it was harder for specialist Food and Drink manufacturing apprenticeship providers to benefit from the same economies of scale. This led to non-specialist providers being used, with members often having to upskill the trainers on the Food and Drink Industry before they were then able to provide apprenticeship training. Moreover, a lack of regulation of Apprenticeship providers led to a lack of reliability and quality, with members experiencing providers suddenly closing down unexpectedly.

Members also felt that the government's move away from supporting Level 2 apprenticeships was damaging to efforts to bring new recruits into the sector. Without this stepping stone qualification, many aspiring apprentices didn't have the capabilities to jump straight to a Level 3 apprenticeship.

Social expectations and norms were also seen as damaging to the Food and Drink industry's ability to attract sufficient candidates into STEM apprenticeships. As well as STEM subjects being typically regarded as 'male' subjects by society, opportunities in Aerospace or Automotive engineering were often prized over Food and Drink Manufacturing for those who did go into STEM. Members believe this is driven by a lack of understanding on the part of careers advisers, schools, universities, and society more widely about the opportunities available in modern Food and Drink manufacturing. In addition, members noted it was often difficult for engineers to transfer from other industries to Food and Drink Manufacturing where there were more rigorous controls on hygiene and cleanliness around the machinery used.

Where salaries have been increased, this has had a limited impact on solving staff shortages, with the main consequence being firms taking staff from each other rather than increasing the overall supply.

For Food Scientists and Engineers, shortages are being driven by a lack of STEM and Food Science education and training in the UK. For logistics drivers, there are a range of issues which have prevented salary increases leading to a significant increase in drivers, including the unsociable hours and working conditions inherent in being an LGV driver. Members also noted the limited capacity for training LGV drivers in the UK and the 25-year-old age limit for an LGV license as barriers to recruiting further the staff.

Members also noted that whilst some companies had been able to automate more than others, a mass move to automation was only likely to exacerbate skills shortages in different areas in the future if the UK didn't improve its STEM education and training capacity.

The Royal College of Radiologists

Migration Advisory Committee
Shortage Occupation List – consultation December 2018

Evidence summary
The work of clinical radiologists is essential for the effective diagnosis of disease and injury. However, the workforce is unable keep up with the scanning workload: the UK is currently short of more than 1,000 consultant radiologists, and this is forecast to increase to 1,600 within five years. Demand for imaging services is also increasing as a result of factors such as a growing and aging population, a greater emphasis on early diagnosis and screening programmes and a rising demand for interventional radiology procedures. In particular, demand has grown for complex imaging, which takes longer to interpret and report. In this context, workforce shortages pose risks to patient safety and have forced stretched NHS services to spend £116m on outsourcing and insourcing in the financial year 2016/17[1]. As such, there is little doubt that the radiology workforce must be expanded.

Cancer Research UK's report 'Full Team Ahead' highlights the importance of having an adequate UK oncology workforce. There are more than 360,000 new cancer cases in the UK every year – a figure projected to increase to 422,000 by 2022. In addition, cancer treatment is increasingly personalised and complex, and more people than ever are living with cancer[2]. However, the workforce has not been growing at the same rate as demand for treatment, and without significant change to the supply or the demand of delivery of cancer services, shortfalls across the clinical oncology workforce with continue[3]. Staff shortages have been identified as a barrier to providing effective cancer treatments and excellent patient care, and can result in issues such as insufficient capacity to undertake clinical research, worse patient experience and missed opportunities for service improvement[4]. If the UK is to deliver cancer outcomes that are among the best in the world then the oncology workforce must increase accordingly.
In order to address these challenges, the following job titles must remain on the United Kingdom Shortage Occupation List (SOL):

- consultants in clinical radiology (2211)
- health and care professions council registered diagnostic radiographer (2217)
- nuclear medicine practitioner (2217)
- radiotherapy physics practitioner (2217)
- radiotherapy physics scientist (2217)
- sonographer (2217)
- nurses (2231)

In addition, the following job titles should be added to the United Kingdom SOL:
- consultants in clinical oncology (2211)
- non-consultant, non-training, medical staff post in clinical radiology (2211)
- non-consultant, non-training, medical staff post in clinical oncology (2211)
- medical physicists for imaging (2117)
- medical oncologists (2211)
- pharmacists (2213)
- health and care professions council registered therapeutic radiographer (2217)

Definitions
Clinical radiologists are specialist doctors who can interpret all types of medical images in order to detect and diagnose disease and injury. **Interventional radiologists** use image-

guided, minimally invasive techniques to target therapy. Interventional radiology is a sub-specialty of clinical radiology, and as such falls within the wider category of ‘radiologist’ in the context of the SOL.

A **clinical oncologist** is the only medical specialist trained in prescribing radiotherapy in addition to systemic anti-cancer therapies (SACT) (chemotherapy, hormone therapy, biological therapy, immunotherapy) and the use of radioactive isotopes. The clinical oncologist is often the only doctor, together with the general practitioner, to manage the patient through the whole course of their therapeutic pathway.

Clinical oncology key facts (taken from the Royal College of Radiologists (RCR) Clinical radiology UK workforce census 2017 unless otherwise indicated)[5]

- 60 full-time consultant clinical oncologists are needed now to fill vacant posts, and one in three of these posts have been vacant for a year or more.
- The CRUK ‘Full Team Ahead’ report made a compelling case for significant clinical oncologist expansion, even with the new models of care already adopted[6].
- The number of vacant posts in 2017 exceeds the number of trainees estimated to enter the UK consultant workforce every year for the next five years.
- There is estimated to be a shortfall of approximately 250 full-time consultant clinical oncologists by 2022.
- In the last five years, the whole-time equivalent (WTE) consultant clinical oncologist workforce has grown at an average of 4% per annum, however, the growth rate halved in the 12 months to October 2017 to just under 2%.
- In 2017, 23% of consultant clinical oncologists working in UK cancer centres undertook their primary medical qualification abroad (this is used as a reasonable proxy for nationality). This was split between 6% from the EEA and 17% from the rest of the world.
- Mean age at retirement of consultants fell below 60 for the first time in 2018.
- 28% of all consultants work less than full time (LTFT), and LTFT working becomes much more common as consultant age increases. There has also been an increase in LTFT training and out-of-programme activities. Therefore, although the oncology workforce has been growing, this has not equated to significant growth in WTEs. In 2018 all clinical oncology training posts were filled. As such, encouraging more trainees to apply for the specialty would not help to address workforce shortages.

Clinical radiology key facts (taken from the RCR Clinical radiology UK workforce census 2017 unless otherwise indicated)[7]

- The demand for radiology services has increased rapidly over recent years, particularly for more complex imaging which takes longer to interpret and report. This has resulted in an estimated increase of 30% in the overall diagnostic reporting workload in the last five years.
- In 2017, there was an estimated shortfall of 1,004 whole time equivalent (WTE) consultant clinical radiologists. It is estimated that this shortfall will increase to approximately 1,600 consultant radiologists (WTE) by 2022.
- Increased demand means that almost all radiology departments are struggling with workload. In the RCR’s 2017 census, only 3% of radiology departments stated that they were able to meet all their reporting requirements within staff contracted hours.
- In order to manage workload, radiology departments have significantly increased the use of insourcing and outsourcing, resulting in an estimated expenditure of £116m on these services in the financial year 2016/17. This is double the estimated expenditure three years previously, and the equivalent of the combined salaries of approximately 1,300 full-time consultant clinical radiologists.
- The vacancy rate in radiology departments has increased from 8.5% in 2016 to 10.3% in 2017.

There are currently almost four applicants for every radiology training place,[8] and training places are consistently filled. Therefore, expansion of the workforce will require additional funded training posts.
In 2017, 30% of consultant clinical radiologists working in the UK undertook their primary medical qualification abroad. This was split between 9% from the EEA and 22% from the rest of world.

Measures in place to reduce shortages
Current measures in place to try and reduce shortages of clinical radiologists include:

- The RCR-Health Education England (HEE) 'Earn, learn and return' initiativeoverseas qualified radiologists will be appointed to newly-created specialty doctor grade posts. [9] which began in 2018. Under this initiative,
- The removal of the Tier 2 visa cap for doctors.
- The RCR has consistently lobbied for an increase in the radiology workforce.
- The Cancer Workforce Plan pledged HEE investment in 300 reporting radiographers by 2021[10]. However, this will primarily involve training existing radiographers, not expanding the core radiographer workforce. Since there is also a shortage of radiographers - as evidenced below – this will merely redistribute the workload within radiology departments, not reduce it. Furthermore, this measure will have minimal impact on demand for reports on increasingly complex imaging studies, which must be undertaken by a radiologist.

However, in light of the scale of shortage of radiologists, these measures are likely to be insufficient to address the workforce crisis in clinical radiology.
Clinical oncologists will also benefit from the removal of the Tier 2 visa cap for doctors. In addition, the RCR have been actively lobbying for an increase in the oncology workforce for several years[11], although the impacts of this work are unclear, and will remain so until the release of the NHS Long Term Plan.

The importance of multi-disciplinary teams
Crucial to our further suggestions for the SOL, is the reality that doctors in both specialties work in multidisciplinary teams. Radiologists routinely work in teams with radiographers, sonographers, radiology nurses and medical physicists. However, there are shortages in all of these professions – in the case of radiographers and sonographers the 2016/17 Radiology Benchmarking Project found that 15% of sonographer posts and 10% of radiographer posts were vacant[12]. We also know from the experience of our members that there is a shortage of medical physicists. These shortages impact on image acquisition and service delivery. In order for radiology teams to work effectively, there must be a sufficient workforce and an adequate skill mix.

The use of 'non-consultant, non-training, medical staff post in clinical radiology' posts – specifically, specialty and associate specialist (SAS) radiologists – is increasing. There are currently 80 doctors at this grade working across the UK[13] and several trusts are looking to recruit more[14]. The RCR Clinical Radiology UK workforce census 2017 showed a vacancy rate of 7% for SAS-grade radiologists. These posts require at least four years of postgraduate training, two of those being in a relevant specialty. SAS doctors are usually more focused on meeting NHS service requirements, compared to trainee or consultant roles. Encouraging the expansion of this aspect of the workforce via inclusion on the UK SOL could provide a cost-effective and more immediate method of addressing the radiology workforce crisis through providing an easier route for overseas doctors with equivalent experience to work in the NHS.
The work of clinical oncologists is also heavily integrated with the wider multiprofessional nonsurgical oncology team, including nurses and pharmacists as well as therapy radiographers and physics technologists. As demand for cancer treatment rises (courses of systemic anticancer therapy are increasing at a rate of 8% per annum[15]), therapy becomes more complex and technology continues to advance, the need for a sufficient workforce for

each role in these teams becomes ever more important. Radiotherapy, for instance, which is growing at a rate of 2% per annum,[16] can only be delivered safely via a co-ordinated, integrated multi-professional team effort. The other professionals in these teams - therapeutic radiographers and medical physicists - are also both currently facing workforce shortages.
The team-based nature of clinical oncology and clinical radiology roles means that ensuring an adequate wider workforce so that departments can work effectively is crucial. However, shortages in many related professions undermine this effectiveness. As such, the inclusion of all of these wider team roles in the UK SOL is vital. It is also important to note that many of the roles that make up the wider radiology and oncology workforce - such as radiographers or less than full-time SAS-grade

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1 The Royal College of Radiologists, 2018, 'Clinical radiology UK workforce census 2017 report'. Available at: https://www.rcr.ac.uk/system/files/publication/field_publication_files/bfcr185_cr_census_2017.pdf

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13 The RCR, 2018, 'Clinical radiology UK workforce census 2017'.

14 Two job descriptions available at: https://www.indeed.co.uk/viewjob?jk=e99d07b541b03778&tk=1cv11546816p3003&from=serp&vjs=3 https://www.simplyhired.co.uk/job/N2zcxIFToYBOFTnCxnpY6xCzLVtT2amMZAdGoCaitWiI_a_YNBLUDQ?isp=0&q=trust+specialty+doctor+-+radiology

15 Systemic Anti-Cancer Therapy Chemotherapy Dataset: http://www.chemodataset.nhs.uk/home

16 Systemic Anti-Cancer Therapy Chemotherapy Dataset: http://www.chemodataset.nhs.uk/homeradiologists – can fall below the current £30,000 threshold for the Tier 2 visa. We strongly urge that this salary threshold is abolished. If a threshold is maintained, then it should either be based on skillset rather than salary, or should exclude healthcare workers. The importance of wider supporting team members to the day-to-day running of radiology and oncology departments cannot be overstated. Without sufficient staffing these departments will be unable to function effectively, with severe implications for patient care and the wider NHS.

The Royal Society of Edinburgh

The Royal Society of Edinburgh
KNOWLEDGE MADE USEFUL

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10 January 2019

Shortage Occupation List – Migration in Scotland

Dear Professor Manning,

The Royal Society of Edinburgh (RSE) welcomes the Call for Evidence by the Migration Advisory Committee (MAC) into developing a new Shortage Occupation List (SOL). Given the specific nature of the questions within both Annex A and B in the Call for Evidence the Society feel that we are not best placed to provide a direct response; we would hope that the detailed responses you require will be supplied by the Scottish business community. However, due to our work over the past few years on migration in Scotland we are keen to provide a broader response covering our concerns and considerations on migration in Scotland. It is aim of the Society to provide a response to the new Immigration Bill, once published.

Background
Migration and Brexit are intimately connected. It is expected that Brexit will have a significant influence on the UK labour market over the coming years. After the Referendum on Membership of the European Union, the RSE launched an EU Strategy Group. This group oversees the work of 5 separate subgroups including: Constitutional Law and Government; Economy and Public Finance; Research & Innovation; Migration & Rights; and Environment. Each of these groups produced position papers that highlighted the Society's key concerns and considerations from Brexit and the future relationship with the EU. The migration position paper presented the immediate and long-term effects and consequences for Scotland of immigration and integration in the UK after the Brexit vote[1]. The paper encouraged the development of a new immigration system which would consider both the immediate labour market needs and the longer term economic and demographic impacts. Of the approaches available, the RSE recommended that a differentiated points-based system would be the most effective in responding to Scotland's demographic and economic needs. The response indicated that there is scope to make short-term adjustments within the existing system to address shortages in Scotland. Among those suggested were reducing the salary threshold and lowering the skills requirements of migrants to better meet the labour demand of Scottish employers (many of the vacancies which migrants fill in Scotland have salary and skill levels which fall below those currently recommended by the MAC); or expanding the Scottish SOL.

Since then these groups have helped facilitate numerous responses to Government, and Parliamentary consultations, inquiries and calls for evidence. These include responses to MAC inquiries and consultations; as you will be aware the Society has responded twice to the MAC, last year to the inquiry

[1] RSE, (2017). 'Brexit: Challenges and Opportunities – Migration and Diversity'

on EEA workers in the UK Labour Market[2] and last year to the inquiry on international students[3] . In our response on EEA workers, the RSE made clear that the Scottish economy has significantly benefited from EEA migration. Scottish employers have benefited from EEA migration, specifically those in sectors where there are labour shortages and/or a mismatch of skills. Employers in Scotland in sectors such as social care, healthcare, food processing, agriculture and hospitality have all benefited from the ability to easily recruit EEA migrants. Moreover the Scottish economy is more heavily dependent on these sectors than is the UK economy as a whole. In addition, highly skilled migration from the EEA has also boosted research and innovation in Scotland. EEA migrants make a valuable contribution and any reductions in current migration levels through restrictions would damage these sectors, at least in the short run.

The response made last year to the inquiry on international students illustrated the importance of international students to Scotland and its Higher Education Institutions (HEIs). The inclusion of international students in Scottish universities enriches the learning and cultural experiences of students and helps to provide economic benefit either from direct or indirect spending by international students. In this response the RSE reiterated our support for the removal of overseas students from the net migration target and for the reintroduction of the post-study work visa, which would make clear the UK's wish to welcome talented students coming to its HEIs.

In addition, the RSE has also produced responses on the 'Future Immigration Policy for Science and Innovation'[4] to the House of Commons Science and Technology Committee, and more recently on 'EU Student Exchanges and Funding for University Research'[5] to the House of Lords EU Home Affairs Sub-Committee. Both these responses reiterated the importance to the UK of attracting global talent to its HEIs, whether they be students or staff. The UK has experienced a competitive advantage in research and innovation, particularly due to its world class universities. However, changes in immigration rules as a consequence of Brexit may put this pre-eminence at risk. The RSE recommended that the UK must be viewed as 'open for business', to make clear the demand for skilled migration. Substantially increasing barriers to entry for EEA migrants may send the wrong message to a group of individuals who are likely to have other attractive options open to them.

The several responses itemised above have emphasised and illustrated the Scottish demographic context and how it is different from the rest of the UK. In Scotland, migration assumes particular importance in mitigating risk from demographic issues; Scotland will need to experience a significant increase from current levels of migration to see a notable effect on demographics. The RSE have continually recommended that the demographic context in Scotland must be accounted for when a new migration system is developed and implemented. Currently, the Scottish SOL is the only element within the UK immigration system where it is possible to consider the needs of Scotland relative to the rest of the UK. Therefore, the Society would recommend that any new Scottish SOL will need to fully take account of Scotland's demographic circumstances and projected labour market needs as well as current shortages. In order for the Scottish SOL to be reflective and responsive to Scotland's needs, consideration should be given to strengthening the Scottish representation on the Committee.

Impact on Productivity

The RSE would express concern at the introduction of significant restrictions on migration. It will result in migration being heavily dominated by those who meet the requirements of a new Shortage Occupation List. If future migration is concentrated within jobs detailed on the Shortage Occupation List this may reduce productivity enhancing opportunities in the Scottish economy. The latest report by the Committee on EEA Migration[6] illustrated the positive impact of EEA migration, particularly of the highly skilled, on

[2] RSE, (2017). 'RSE Response to Migration Advisory Committee Inquiry on EEA Workers in the UK Labour Market'
[3] RSE, (2018). 'The Impacts of International Students in the UK'
[4] RSE, (2018). 'Future Immigration Policy for Science and Innovation'.
[5] RSE, (2018). 'EU Research Funding and Student Exchange'
[6] Migration Advisory Committee, (2018). 'EEA Migration in the UK: Final Report'

productivity. However, there is a case for continuing to monitor the impact on productivity of lower skilled migration.

The 'productivity puzzle' is the most pressing long-term economic policy issue facing the UK. On the available evidence, migration can play a significant role in addressing this. "Low skilled" migrants may increase productivity by, for example, raising the quality of native-born apprentices. And Germany has been successful in training refugees themselves. Figures released by Federal Office for Labour illustrate that around 300,000 refugees have been absorbed into the German workforce with the majority of these being apprentices[78].

Quality of Data

The report by the Committee[9] on identifying shortage occupations, demonstrates how difficult it is to obtain good evidence on this. It seems likely that business and stakeholders in Scotland will be unable to provide clear evidence on job shortages. We would encourage the MAC to make very clear to business their interest in improving the quality of the available data on shortage occupations.

ONS data on job vacancies does not provide sufficient detail at either the industry or geographical level to allow robust evidence on shortage occupations in Scotland to be produced. Therefore, we believe it important that the MAC work with the ONS and with the Scottish Government, its agencies, and key stakeholders to develop the statistical base required to provide more comprehensive evidence of shortage occupations.

Yours sincerely

Alison Elliot

Dr Alison Elliot
General Secretary, RSE

cc. Professor Bob Elliot

cc. Professor David Bell

[7] Reuters, (2018). 'More Refugees Find Jobs in Germany'

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The Society and College of Radiographers

If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

The College of Radiographers contacted all imaging centres across the United Kingdom, covering both independent and public sectors, to participate in Diagnostic Radiography Workforce Census and the Radiotherapy Radiographic Workforce Census. The surveys were open from 14 November 2018 to 19 December 2018 and asked centres to provide workforce figures as of the 1 November 2018. There were 88 centres responding to the Diagnostic Census and 63 centres responding to the Radiotherapy Census. Reports detailing workforce figures in depth will be published by end of Spring 2019 on the Society and College of Radiographers website.

Vacancies for Therapeutic Radiographers and Diagnostic Radiographers were 6% and 9% respectively across the UK.

Table 1. Workforce vacancy rate as a percentage of whole time equivalent posts by country and job title as reported in the 2018 Diagnostic Census and 2018 Radiotherapy Census

	Therapeutic Radiographer	Diagnostic Radiographer
Overall	6%	9%
England	6%	9%
Northern Ireland	12%	5%
Scotland	4%	5%
Wales	8%	2%

Table 2. Percentage of Band 5 and Band 6 Diagnostic Radiographers trained outside the EU/EEA as reported in the 2018 Diagnostic Census

Country	Staff trained outside EU/EEA
Overall	1.5%
England	2%
Northern Ireland	0%
Scotland	1%
Wales	1%

The Society of Motor Manufactures and Traders

SMMT RESPONSE TO THE MIGRATION ADVISORY COMMITTEE CALL FOR EVIDENCE: SHORTAGE OCCUPATION LIST REVIEW 14 JANUARY 2018

Introduction

1. The Society of Motor Manufacturers and Traders (SMMT) is one of the largest and most influential trade associations in the UK. It supports the interests of the UK automotive industry at home and abroad, promoting a united position to Government, stakeholders and the media. The automotive industry is a vital part of the UK economy accounting for some £82 billion turnover and £20.2 billion value added. 856,000 people – 2.6% of UK employment[1] – work both directly and indirectly within the sector. Automotive accounts for 13% of total UK exports with over 160 countries importing UK produced vehicles. 30 manufacturers build in excess of 70 models of vehicle in the UK supported by more than 2,500 component providers and some of the world's most skilled engineers.

[1]https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/august2018

The importance of a skilled labour force to the UK automotive industry

2. SMMT estimates automotive manufacturing to have 10-11% EU27 migrants in the workforce, UK automotive has benefitted from all aspects of membership of the European Union, access to the Single Market and the principle of free movement.

3. Global skills and talent are utilised in all aspects of automotive business in the UK as companies seek the best available talent to fill a role. Companies do not directly target EU27 workers for particular roles or positions, the same recruitment processes apply, and as a diverse industry, UK automotive employs global talent in a breadth of roles: senior executive/leadership, finance, customer service, HR, engineers, technicians, IT and manufacturing/production workers. These are at all skill levels. Automotive businesses employ a greater proportion of permanent workers than agency. However, a number of businesses employ temporary workforces that tend to have a greater proportion of EU27 workers. This may be due to their willingness to work on flexible contracts.

4. To some automotive companies the UK is home to their Global or European Headquarters eaning the ability to move global talent into the UK is essential to their operations and is required to remain globally competitive.

5. The long-term success of the industry relies on attracting the best talent. The UK automotive industry benefits from access to the skills and experience of EU and global employees. A productive, flexible and moveable workforce is key to winning new product allocation, maintaining competitiveness and growth. As a fully integrated global industry, we also benefit from UK staff being easily mobile and accessible within the EU. UK automotive seeks:

a. An immigration system which includes the flexibility for automotive workers to move between European plants at short-notice with no or minimal cost and administrative burdens. Any time delays or costs introduced by a visa system will harm competeveness.

b. An immigration system that maintains access to EU workers as required for automotive needs with no or minimal administrative or cost burdens, and no complexity.

c. Continuity in the UK's competitive advantage of a skilled and flexible workforce.

6. We welcome steps being taken to improve the current non-EU immigration routes into the UK. Careful consideration needs to be given to the effect increased restrictions, cost and administrative procedures will have on the UK's ability to remain an international competitive place to build vehicles. Many of the roles we discuss below would not meet all of the requirements the MAC set out for a new UK immigration system in their previous report.

7. Given it is unclear what the new UK immigration system will look like it is extremely challenging to predict what this would mean in terms of relevance and benefit of a new Shortage Occupation List. It is therefore important, if the UK has a restrictive, costly, administration heavy, lengthy approval process system that a new Shortage Occupation List allows the automotive industry to access the skills it requires, many of which are covered in this submission.

8. Moreover the timing of any new immigration system needs to be well planned and communicated. Businesses will require a period to test and implement new processes. In order for this to be a seamless transition, a clear timeline from government on when the new framework will be implemented is a must.

1. Please indicate from which of these industries are you providing evidence? (Please select all that apply).

Manufacturing

2. If you wish, you can provide details of individual jobs titles you/your members have found hard to fill in the boxes below (maximum of 10).

9. The following table details some of the current and future skills needed by the industry.

Current	**Future**
Lean Manufacturing	Lean Manufacturing
Computer Aided Engineering	Manufacturing Process Knowledge
Quality Core Tools Training	Leadership Training
Mechatronics	Basic Engineering
Leadership Training	Advanced Problem Solving
Programmable Logic Control (PLC)	Quality Core Tools Training
Advanced Problem Solving	Programme Logic Control (PLC)
Manufacturing Process Knowledge	Robotics
Robotics	Welding
Programme Management	Computer Aided Engineering

Additional manufacturing, and increasingly technology based roles the industry requires and finds challenging to recruit are:

Job Title/Role	**ONS Code**
Logistics Planner	1162
Electrical Engineers	2123
Controls & Electronics Engineer	2124
Electrical Component Engineer	2124
Specialist Electronics Engineers	2124
Hybrid Engineer	2126
Research Engineer	2126
Artificial Intelligence Developer / Expert	2126
Machine Learning Developer / Expert	2126
Human Science Engineer	2126
ACE Technology (Autonomous, Connectivity, Electrification) Engineer	2126
Autonomous Vehicle Engineer	2126
Autonomous Driver Assistance System (ADAS) Engineer	2126
Component and Systems Hardware/Software	2126
Design and Development Engineers	2126
Integrated Production Systems	2127
Technical Lead Associates	2127
Production Integration Engineers	2127
Control Engineering Engineers	2127
Production & Process Engineers	2127
Modelling Engineer	2129

Patent and Intellectual Property	2129
IT Service Delivery Manager	2133
ADAS Manager/ADAS Systems Engineer	2135
Electrical Distribution System Engineer	2135
Infotainment Engineer/ Infotainment Manager	2135
Networks Design Engineer	2135
Software Architect	2135
Software Engineer/ Software Manager	2135
Data Scientist/ Data scientist manager	2135
Cloud Software Architect	2135
Cloud Developer / Software Engineer	2135
Full Stack Developer / Software engineer (multi-languages)	2135
App Developer (Android / iOS / HTML5)	2135
Data Analysis and Architecture	2135
Simulation Engineer	2136
System Engineer/ Systems Engineering Manager	2136
Virtual Engineer	2136
Cyber Security Engineer/ Cyber Security Manager	2139
Specialists in SAP	2139
Controls and Calibration	2461
Certification and Homologation	2461
Parts Quality Engineers	2461
Quality Control & Planning Engineers	2461
Colour and Materials Developer	3113
Computer Aided Design Engineer	3122
Computer Aided Engineer Analyst	3122
Creative Designer	3122
Specialists in Customs and Excise	3535
Machine Technicians	5223
Machine Controllers	5223
Machine Associates	5223
Machine Technician Mechanic	5223
Test and Finish Associate	5232
Lacquer Sprayer	5234
Electronics Hardware Design Engineer	5249
Leathershop Associate Machinist	5413
Clay Modelling	5441
Woodshop Associate Machinist	8121
Milling Associate Machinist	8121
Battery System Engineer	8131
Assembly Associates	8132
Functional Safety Engineer	8133
Ultrasonic Tester Engineer	8133
Leather Specialists	8134
Pattern Development Manager	N/A

10. Lean manufacturing is the top priority over the next three to five years with the industry keen to optimise efficiency to aid output and growth. Other skills are also clearly linked to driving higher quality standards of output and optimisation, such as the need for advanced problem solving and quality core tools training. Leadership development is also a major requirement across a multitude of multi-disciplinary supervisory and managerial roles to manage current and expanding workforces.

11. There are also a number of specialist skills required due to technological advancements in areas such as engineering, mechatronics, robotics, programmable logic control, etc. This need is also borne out of the lack of currently qualified and experienced resource available in the market place to carry out these roles. A number of additional skills/job roles which are critical to developing the

advancements and innovations the industry is currently seeing in both manufacturing production process and in vehicle technology are:

- Skills related to Artificial Intelligence/Augmented Reality/Virtual Reality Machine Learning
- Digital scientists
- Digital engineers
- Digital architects
- Software Development
- Cyber Security Engineers
- Controls and Calibration Engineers
- Research and development Engineers
- Systems Engineers

3. What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)? (Not to exceed 500 words).

12. Business growth, lack of available skills in the job market and competition for scarce resources have all contributed to job shortages. Some of the skills can simply not be found in the UK labour market therefore companies have broadened their search campaigns. In addition, many automotive manufacturers find local competition from businesses in other industries who are prepared to pay more, making it hard to attract them to the industry.

13. Due to the disruption and upheaval in traditional automotive manufacturing industry is struggling to keep up with the pace of change. The industry requires support with complex skills development in areas such as Digital, Industry 4.0, Connectivity and Electrification. Where there is an existing mechanism or support the industry does look to utilise it.

4. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research. (Not to exceed 500 words).

14. Our industry has championed, among other routes, apprenticeships for many years, from piloting trailblazer programmes through to the creation of the automotive matching service[2]. In the last 4 years, the major UK OEM’s alone have taken on almost 3,000 new apprentices, whose technical skills contribute to the overall workforce competitiveness, proving unequivocal support for apprenticeships and recognising the important role they play to the success of the industry. We view apprenticeships as a way to bring bright new talent into the business, for the long-term, whilst providing high quality on and off the job training.

[2]https://www.automotiveapprenticeships.co.uk/

15. Already the industry liaises with local colleges, universities and training providers to create specific tailored programmes to ensure employees of all ages and levels have the necessary skills to complete their work. Good, local, quality training providers can be hard to come by meaning the necessary courses/qualifications many manufacturers require are not available. As a whole the industry finds regional variation in both the quality of training provider and the availability of skilled labour. Some regions have extremely high employment rates which make it challenging for some to hire, whilst other areas have a lower employment rate yet the skills required are harder to source.

16. There is a strong focus on upskilling and developing the existing workforce, combined with the creation of more graduate and apprenticeship training programmes to continue to meet the ongoing and longer term demands. In order to do this, increased spending/investment on training of the existing workforce has taken place. There are however skills required now, due to technological advancements, that have never been required before (as detailed in Question 2.) which mean new talent needs to be brought in from outside the industry. Where possible, to compete with other local

industries automotive companies have increased wages to attract candidates. In addition companies are spending more on recruitment and using different channels for advertising vacancies.

17. The UK automotive industry welcomed its Industrial Strategy Sector Deal in January 2018. The *People* strand of this deal required additional time in order to produce a quality piece of work. We plan to publish the *People* annex to the sector deal later on in 2019. This piece of work will look at how to address the current skills challenges facing the industry. It should be noted however even once this piece of work is finalised it will not negate the need for skilled immigrants from abroad to complement the existing UK automotive workforce.

5. Have these measures worked, if not why? (Not to exceed 500 words).

18. The industry continuously looks for ways to develop the existing workforce to maintain high levels of productivity and global competitiveness. However, there are skills that simply cannot be found in the UK, therefore the industry must look further afield. Over the past few years UK manufacturing volumes have shown strong growth, arguably proving that measures to strengthen the skills base have worked, but there is more to do, especially at a time when the industry is going through a technological evolution both in the vehicles and the manufacturing techniques used to produce these vehicles.

19. The addition of the *People* annex to the Automotive Industrial Strategy will help provide direction and look to overcome some challenges however as already mentioned employees from outside of the UK bring valuable knowledge, skills and competencies that benefit the overall UK workforce and ensure the UK is an attractive place to invest. The future UK immigration system must support the needs of the automotive industry in order for it to be a globally recognised country in which to produce vehicles.

6. Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system? Yes

20. Some of our members Tier 2 (General) sponsored employees are occupants of roles qualifying under the Shortage Occupation List. However, the Shortage Occupation List is outdated and reflective of economic conditions whereby the UK had free access to the talent pool of the EU. We strongly recommend, the capabilities we have identified be factored into an updated Shortage Occupation List.

7. If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles. (Not to exceed 500 words).

21. Some of our members have hired and sponsored hundreds of employees through the Tier 2 General visa route over the last 12 months, substantially more than in previous years.

22. SMMT estimates that 10% of the UK automotive workforce are EU nationals representing a large proportion of the workforce being employed outside of the current Tier 2 route.

8. If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

https://www.automotivecouncil.co.uk/wp-content/uploads/sites/13/2016/02/REPORT-UK-Automotive-Industry-Jobs-and-Skills-Report-February-20162.pdf
https://www.automotivecouncil.co.uk/wp-content/uploads/sites/13/2016/02/National-Current-Future-Skills-pdf.pdf
https://www.smmt.co.uk/wp-content/uploads/sites/2/smmt_the-digitalisation-of-the-uk-auto-industry_kpmg-apr-2017.pdf

TIGA

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January 14th 2019

Call for Evidence: Shortage Occupation List Review 2018

About TIGA

TIGA is the network for games developers and digital publishers, and the trade association representing the video games industry. Our core purpose is to strengthen the games development and digital publishing sector. We achieve this by campaigning for the industry in the corridors of power, championing the industry in the media and helping our members commercially. Our vision is to make the UK the best place in the world for games development, games education and games service providers.

About the UK Video Games Industry

The UK video games industry is important economically and culturally. The UK video games sector is the largest in Europe. Games development contributed £1.5 billion towards GDP in the year to November 2017, as well as an estimated £613m in direct and indirect tax revenues to the Exchequer.

The gaming market has more than doubled in market value since 2007, and now accounts for more than half of the UK entertainment market.[279] 37,536 work in the games industry/are in jobs indirectly supported by studios, including 13,277 in games development.[280]

Introduction and Summary

[279] See: https://eraltd.org/news-events/press-releases/2019/streaming-drives-entertainment-sales-94-higher-in-2018-to-sixth-consecutive-year-of-growth/
[280] Gibson, R., and Wilson, R., Making Games in the UK 2018 (TIGA, 2018).

TIGA's vision is to make the UK the best place in the world for games development, games education and games service providers. The UK video games industry already contributes £1.5 billion to UK GDP.[281] This contribution will increase if we can create a favourable business environment, which includes continuing the development of a highly skilled domestic workforce while enabling employers to hire the most talented personnel from around the world.

TIGA research shows that the UK video games industry is growing strongly, with headcount increasing by 7 per cent per annum since 2014.[282] The UK video games industry suffers from skills shortages.[283] There are three principal reasons for job shortages in the UK video games industry: an undersupply of highly skilled graduates; an undersupply of experienced specialists in a rapidly expanding digital sector; and technological and commercial change. Skills shortages could be exacerbated once we leave the EU and no longer have free movement of talent. It is imperative, therefore, that the Shortage Occupation List (SOL) is regularly updated and that the Tier 2 visa system provides an effective way for games businesses to recruit highly skilled people.

Skills shortages in the video games industry are not the result of an image problem – our work is very attractive and our pay is good, even in non-degree roles. Our pay can be evidenced in the annual TIGA salary survey.

UK games developers and digital publishers have taken steps to reduce skills shortages and to keep skills gaps to a minimum. To give three examples, studios have invested in training; games businesses have developed relationships with universities to ensure that courses are industry relevant; and TIGA has developed a higher education accreditation programme. These measures are helping to minimise skills gaps (i.e. existing employees inside a business lacking the right skills), but have not eliminated skills shortages (i.e. a shortage of skills or experience the employer is looking for outside of a business).[284] Skills shortages persist because of an undersupply of highly skilled graduates; an undersupply of experienced specialists in a rapidly expanding digital sector; and technological and commercial change.

TIGA research indicates that approximately 15 per cent of the games development workforce originates from other EU countries and 5 per cent come from other countries outside the EU.

The games sector requires ready access to non-UK workers to fill high and medium skilled roles. If we cannot access them via the SOL, then this would exacerbate skills shortages, which in turn would result in the loss of jobs and investment.

Conversely, the import of skilled labour via the SOL can enhance the skills and knowledge of UK employees and stimulate growth of teams and allow new specialisms to be developed in the UK, which can in turn bring more work from international

[281] Ibid.
[282] Ibid.
[283] Wilson, R., Skills, Training and Education (TIGA, 2016); Wilson, R., TIGA Business Opinion Survey 2018-19 (TIGA, 2019).
[284] https://ukces.blog.gov.uk/2014/06/04/skills-shortage-vacancies-ukces-explains/

companies who see the UK as an attractive place to set up their businesses and grow their capacity.
TIGA proposes that the MAC and the Government should consider the following options:

1. Add roles (e.g. Audio roles/Sound Designer and Community Management) to the SOL where there is a specific skills shortage so that employers can recruit the employees they need without undue delay (currently games businesses report that Audio and Community roles cannot be filled via Tier 2 visas).

2. Consider introducing broader categories to the SOL to encompass a wider range of roles. For example, 'Games Developer' could be added to the SOL, covering roles in programming, art and animation, games design, digital marketing, etc. This would ensure that the SOL stays relevant and enable our industry to act with agility when recruiting.

3. Introduce a fast track (14 days process) visa programme for roles on the SOL.[285] This would enable UK employers to recruit quickly and signal to foreign skilled workers that they are welcome in the UK.

4. Language skills should qualify as essential criteria in roles where native language skills and cultural country knowledge are crucial. Only native speakers in specific languages can carry out some jobs in Community Management and Player Interaction, because they require deep cultural knowledge. Unfortunately, these roles are classed as 'low-skilled' jobs under the current migration framework and so would not fit the requirements of the current Tier 2 system or any other current visa programme (though would fall into 'medium skilled jobs under the proposed new skills-based immigration system).

5. It should be made easier for small and medium-sized enterprises (SMEs) to recruit workers via the Tier 2 points based system. At present, SMEs report that the application process to become a Tier 2 sponsor is complex, lengthy and expensive.[286]

6. The Tier 2 salary threshold should be not be increased from circa £24,000 (e.g. 2136 Programmers and software development professional) to £30,000. Many overseas workers in the UK video games industry are in medium skill roles and so could be adversely affected by this proposal.

Responses to Specific MAC Questions

1. Please indicate from which of these industries are you providing evidence? (Please select all that apply).

Other: UK video games development and digital publishing sector.

[285] See: https://official-canada-eta.com/canada-eta-resources/fast-track-visa-to-boost-canadas-global-skills-strategy/

[286] House of Commons Library, *The UK's points-based system for immigration* (2018), page 11.

2. If you wish, you can provide details of individual jobs titles you/your members have found hard to fill in the boxes below (maximum of 10). Please help us by matching the job titles you have provided with the closest standardised ONS job title and associated 4-digit occupation (SOC) code using the Office for National Statistics (ONS) Occupation Tool –https://onsdigital.github.io/dp-classification- tools/standard-occupational-classification/ONS_SOC_occupation_coding_tool.html. There is also space to list the sector(s) where shortages of candidates to fill these job titles has been most acute. If providing this information, please refer to the list in question 24.

Table 1 indicates the job titles that games businesses have found hard to fill over the last year.

It is difficult to prioritise the job titles that are hard to fill because different companies will have different views. However, it would be reasonable to assume that 'Games Programmer' (all levels), is the job title that most games businesses would identify as being hard to fill.

Table 1		
Job Titles That Are Hard To Fill	Number of Companies Reporting These Roles As Hard to Fill	Closest SOC Code
Games Programmer (all levels)	8	2136
Animator (all levels)	2	3411
UI Artist (all levels)	2	2137
Game Designer (all levels/specialisms)	3	2136/3422
Technical Animator (all levels)	4	3411/2136
UX Designer	2	2137
Technical Artist (all levels)	6	3411
Character Artist	3	3411
Concept Artist	2	3411
VFX Artist (all levels)	2	3411
VFX (all levels)	2	3411
Lighting Art (all levels)	2	3411
Senior and Executive Producers	3	3416
Network Programmer (all levels)	3	2136
Physics Programmer	3	2136
Graphics Programmer	4	2136
Gameplay Programmer	1	2136
Car Handling Programmer	2	2136/3422

Game Engine Programmer	2	2136
Graphics Rendering Programmer	3	2136
Technology Director	1	2136/3416
Data Scientist	2	2135
Analyst	1	2135
Digital Marketeer	2	3543
Lead Marketing Artist	1	3411
Player Interaction Specialist/Digital Community Manager	4	3131/7230
Audio/Sound Designer	3	2136

There are currently 16 roles relevant to the video games industry on the SOL. These should remain on the SOL to enable the games industry to manage skill shortages. Moreover, additional roles should be added to the SOL (see Table 2). The insufficient supply of highly skilled graduates; an undersupply of experienced specialists in a rapidly expanding digital sector; technological and commercial change; Brexit and the end of free movement of labour will result in skills shortages persisting.

Please note that Table 2 shows the many sub-specialisms within the category of ‘programmer’. An over-arching term ‘programmer’ or ‘games programmer’ would suffice on the SOL, as in small teams, many of the sub-specialisms will be linked and the entire programming requirements covered in that small team.

Table 2			
Job Title	ONS job title	ONS SOC	SOL Status
Programmers	Programmers and software development professionals	2136	Current
Server Developer	Programmers and software development professionals	2136	Current
Network Programmer (all levels)	Programmers and software development professionals	2136	Requested
Physics Programmer	Programmers and software development professionals	2136	Requested
Graphics Programmer	Programmers and software development professionals	2136	Requested
Gameplay Programmer	Programmers and software development professionals	2136	Requested
Game Engine Programmer	Programmers and software development professionals	2136	Requested
Graphics Rendering Programmer	Programmers and software development professionals	2136	Requested

Car Handling Programmer	Programmers and software development professionals	2136/3422	Requested
Backend Developer/Server Programmer	Programmers and software development professionals	2136	Requested
UX Designer	IT business analysts, architects and systems designers	2135	Requested
Systems Engineer	IT business analysts, architects and systems designers	2135	Current
Data Scientist	IT business analyst, architects and systems designers	2135	Current
Technical Artist	Artists	3411	Requested
Graphic Designer	Graphic Designers	3421	Current
Character Artist	Artists	3411	Requested
Concept Artist	Artist	3411	Requested
VFX Artist	Artist	3411	Requested
Animator	Artists	3411	Current
VFX Artist	Artists	3411	Requested
UI Artist	Artists	3411	Requested
Lead Marketing Artist	Artists	3411	Requested
Player Interaction Specialist/Digital Community Manager	IT operations technician or Customer Service Managers and Supervisors	3131 or 7230	Requested
Technical Director	Arts officers producers and directors	3416	Current
Producers	Arts officers producers and directors	3416	Current
Software Developer	Programmers and software developer professionals	2136	Current
Shader Writer	Programmers and software developer professionals	2136	Current
Games Designer	Programmers and software developer professionals	2136	Current
2D Supervisor	Arts officers, producers and directors	3416	Current
3D Supervisor	Arts officers, producers and directors	3416	Current
Computer Graphics Supervisor	Arts officers, producers and directors	3416	Current
Production manager	Arts officers, producers and directors	3416	Current
Visual Effects Supervisor	Arts officers, producers and directors	3416	Current
Digital Marketeer	Marketing Associate Professionals	3543	Requested

Lighting Artist	Artists or Programmers and software developer professionals	3411 or 2136	Requested
Audio/Sound Designer	Photographers, audio-visual and broadcasting equipment operators	3417 Or 2136	Requested

3. What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)? (Not to exceed 500 words).

There are three principal reasons for job shortages in the UK video games industry: an undersupply of highly skilled graduates; an undersupply of experienced specialists in a rapidly expanding digital sector; and technological and commercial change.

The UK video games industry relies on highly creative, technical people with skills and qualifications in areas such as programming, artificial intelligence, animation, mathematics, physics, animation, games design, games art, user interface, audio as well as technical production, direction and international digital marketing skills. These people will typically be graduates: TIGA research shows that 83 per cent of UK games businesses typically recruit personnel qualified to at least degree level, and 35 per cent also recruit people qualified to MA, MSc, MEng and PhD level.[287]

While UK higher education generally provides well-educated and trainable graduates, supply is insufficient to meet demand.[288] Our sector competes with many other industries which also seek to recruit highly-skilled graduates in technical, biotechnology/life sciences[289], creative areas, banking, insurance, web development, advertising, architecture and construction. 'Digital' is not an isolated sector – it now cuts across all sectors and this has seriously diminished the pool of suitably qualified people in the UK as a broader demand has emerged.

Specifically within the video game sector, global competition is fierce for specialist and newly emerging skills and for people who have worked on successful video games titles. When looking for candidates that have a proven track record of success, there is often only a small number of people globally with the experience required, for example in mobile games that have only existed themselves for a few years.

Video games development is a high-technology sector. As technology advances and innovative commercial models develops, new roles are created. Inevitably, only a minority of people will be able to fill these new roles. Education and training programmes lag behind the creation of new roles; they take time to develop and provide a supply of educated and trainable people. For example, community

[287] Wilson, R., Skills, Training and Education (TIGA, 2016). Respondents to our survey could select more than one option, hence percentages exceed 100 per cent.
[288] See for example CBI/Pearson, Helping the UK Thrive: CBI/Pearson Education and Skills Survey (2017), page 58.
[289] For example, a new endoscopy device needs to be programmed.

management is a relatively new role in the video games industry, supported by few qualifications.[290]

An undersupply of skilled graduates, an undersupply of experienced specialists and the creation of new roles driven by technological and commercial developments for which relatively few people can fill, combine to create skills shortages in the UK games industry. For certain roles there is simply a shortage of applicants with the required skills, experience or qualifications.

4. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research. (Not to exceed 500 words).

UK games developers and digital publishers have taken steps to reduce skills shortages and to keep skills gaps to a minimum. To give three examples, studios have invested in training; games businesses have developed relationships with universities to ensure that courses are industry relevant; and TIGA has developed a higher education accreditation programme.

With respect to investment in training, TIGA research shows that 80 per cent of games businesses provide on the job training not leading to qualifications; 38 per cent provide formal training courses, both in-house and external, not leading to qualifications; and 5 per cent provide formal training leading to qualifications.[291] The same TIGA research shows that games studios spend on average 4 per cent of their turnover on training and provided an average of 14 days training (including on the job training) to members of their teams. [292] These figures compare well to the UK average.[293]

Turning to industry-education relationships, games studios are working closely with education providers to ensure that colleges and universities are providing students with the skills that they need to work in the industry. For example:

- Ubisoft is a sponsor member of North East Futures University Technical College,.
- Ubisoft has long-term relationships with Newcastle, Durham, Northumbria, Sunderland and Teesside Universities.

[290] A video games company in the TIGA network is currently developing Level 4 and Level 7 apprenticeship programmes for these workers, with one 'standard' now approved, but the fundamental requirement is to be a native speaker - from countries outside of the UK - to ensure cultural understanding of the consumer.

[291] Wilson, R., Skills, Training and Education (TIGA, 2016).
[292] Ibid.

[293] The total number of training days provided by UK employers over the last 12 months was 114m, equivalent to 6.4 days per annum per trainee and 4.0 days per employee (see Department for Education, *Employer skills survey 2017* (2018), page 104. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/746493/ESS_2017_UK_Report_Controlled_v06.00.pdf See also UK Commission for Employment and Skills, *UKCES's Employer Perspectives Survey* (2014), *UKCES's Employer Skills Survey* (2013), page 56 and http://www.cipd.co.uk/binaries/ learning-development_2015.pdf, pages 32 – 33.

- Sumo Digital has a strong relationship with Sheffield Hallam University;
- Climax has a close relationship with Portsmouth University.
- Many TIGA members participate in developing industry relevant qualifications via Next Gen Skills Academy's Employer Advisory Group.
- TIGA works with Screen Skills' Games Industry Skills Board.
- TIGA provides information and advice to a variety of education providers to enhance the content of their games courses.

TIGA introduced the TIGA Accreditation process in January 2015 to ensure that universities and colleges can produce graduates with industry relevant skills. The TIGA Accreditation system accredits the very best university courses, enabling both prospective students and game developers to identify those courses that are producing industry-ready graduates. With the supportive approach TIGA Accreditation takes, making recommendations to improve and further enhance courses, the quality of graduates is set to improve and better address the skills requirements of the ever-evolving games industry.[294]

Other steps taken by employers in our sector in response to skills shortages, include: the adoption of new recruitment methods; outsourcing of work; internal promotions; redefining existing job roles; increased expenditure on recruitment; increased training; and use of work permits.[295]

5. Have these measures worked, if not why? (Not to exceed 500 words).

These measures have minimised skills gaps (i.e. existing employees inside a business lacking the right skills), but have not eliminated skills shortages (i.e. a shortage of skills or experience the employer is looking for outside of a business). Our research shows that the UK video games industry suffers from skills shortages.[296] Some TIGA members operate with a vacancy rate of 5-10 per cent, depending on knowledge set and location. Skills shortages persist because of an undersupply of highly skilled graduates; an undersupply of experienced specialists in a rapidly expanding digital sector; and technological and commercial change.

Investment by games businesses in skills and training is helping to keep skills gaps relatively limited. On average, respondents to a TIGA survey stated that 83 per cent of their staff are fully proficient at their jobs. Indeed, 28 per cent of respondents reported that all of their staff are fully proficient in their roles and a further 20 per cent said that between 90 and 99 per cent of their team are fully proficient. This would seem to indicate that skills levels within the employed workforce are at a high degree of proficiency.[297]

Strengthening relationships between industry and academia is also having a positive effect. To give one example, Sheffield Hallam University and Sumo Digital have developed strong connections, which has helped to ensure that the latter is able to

[294] On TIGA University Accreditation, see: Eyles, M. and Wilson, R., *Achieving Success: TIGA Accreditation Report* (TIGA, September 2017) and http://tiga.org/education/tiga-university-accreditation
[295] Wilson, R., Skills, Training and Education (TIGA, 2016).
[296] Ibid.
[297] Ibid.

recruit high quality graduates from the former. In fact, 15 per cent of the entire Sumo Digital workforce are alumni of Sheffield Hallam.

TIGA University Accreditation is also helping to promote best practice in higher education. 25 games courses have now been TIGA Accredited. TIGA Accredited universities have a high proportion of students securing work in the video games industry. Unfortunately, there are also many unaccredited courses, some of which, according to some employers, are failing to provide students with the correct knowledge set and skills to work in today's video game industry.

These pro-active investments in developing relationships with education providers, as well as companies' in-house (or other) training programmes, have helped to minimise skills gaps and have ensured that UK higher education provision for the video games industry is improving. However, there is strong demand in a variety of economic sectors for highly skilled graduates, and most significantly, highly experienced (5+ years) games developers. Consequently, our industry continues to be affected by skills shortages. We expect this to increase if the creative and digital economy continues to grow successfully.

6. Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

YES (many are, but there are exceptions, for example, Audio Roles/Sound Designer and Community Management).

7. If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles. (Not to exceed 500 words).

Over the last 12 months, UK games studios have recruited workers using the Tier 2 points based system. Please see Table 3 for details.

Table 3	
Job Title	Number of Studios Recruiting These Workers via the Tier 2 Points Based System
Senior Producers	3
Senior Programmer	6
Lead Programmer	2
Lead Programmer (Gameplay)	1
Senior Tools Programmer	1
Gameplay Programmer	1
Senior Programmer (Graphics/3D/Rendering)	1
Graphics Programmer/Coder	1
Technical Animator	1
Senior Animator	1
Junior Technical Artist	1
Junior Programmer	1

Chief Operations Officer	1
Character Artist	1

8. If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

TIGA is currently working with E&Y to produce the *Games Software Developers' Salary Survey 2018-19* (TIGA and E&Y, 2019). A summary of this confidential and sensitive report will be available on request from March/April 2019.

The MAC and the Government should consider the following options:

1. Add roles (e.g. Audio roles/Sound Designer and Community Management) to the SOL where there is a specific skills shortage so that employers can recruit the employees they need without undue delay (currently Audio and Community roles cannot be filled via Tier 2 visas).

2. Consider introducing broader categories to the SOL to encompass a wider range of roles. For example, 'Games Developer' could be added to the SOL, covering roles in programming, art and animation, games design, digital marketing, etc. This would ensure that the SOL stays relevant and enable our industry to act with agility when recruiting. This function is specific to the highly-skilled creation and development of video games, as opposed to the more general roles such as distribution/publishing function where skills are more readily available.

3. Introduce a fast track (14 days process) visa programme for roles on the SOL.[298] This would enable UK employers to recruit quickly and signal to foreign skilled workers that they are welcome in the UK.

4. Language skills should qualify as essential criteria in roles where native language skills and cultural country knowledge are crucial. Only native speakers in specific languages can carry out some jobs in Community Management, because they require deep cultural knowledge. Unfortunately, these roles are classed as 'low-skilled' jobs under the current migration framework and so would not fit the requirements of the Tier 2 system or any other visa programme.

5. It should be made easier for small and medium-sized enterprises (SMEs) to recruit workers via the Tier 2 points based system. SMEs report that the current application process to become a Tier 2 sponsor is complex, lengthy and expensive.

6. The Tier 2 salary threshold should be not be increased from a range of £18,200 in code 3131 or £24,000 in code 2136 to £30,000. Many overseas workers in the UK video games industry are in medium skill roles and so could be adversely affected by this proposal.

[298] See: https://official-canada-eta.com/canada-eta-resources/fast-track-visa-to-boost-canadas-global-skills-strategy/

Trades Union Congress

The TUC welcomes the opportunity to respond to the Migration Advisory Committee's consultation on the Shortage Occupation List (SOL). The TUC believes in a right-based approach toward immigration where workers from all countries have their rights at work respected and are treated equally. Migrant workers play an essential role in keeping our public services running and working in key industries.

The TUC believes the consideration of the Shortage Occupation List needs to take place in the context of the future immigration system that will come after the UK leaves the EU

In its response to the MAC's call for evidence on EEA migration[299] the TUC highlighted that any future migration system must:

- Support a good Brexit deal that protects rights and jobs through frictionless tariff free trade. Single market and customs unions membership would deliver this, - although we would be open to other options.
- Ensure the right to remain for all EEA citizens in the UK
- Be underpinned by strong regulation of the labour market and support collective agreements to prevent exploitation and the use of migrant workers to undercut other workers.
- Provide significantly increased investment in public services and training, particularly in areas where austerity cuts have hit hardest, so that everyone has access to the services they need and has the opportunity to progress

The TUC has expressed concern that the proposals in the government's white paper on immigration would increase exploitation by tying EU workers to restrictive visas. This would particularly be the case with the proposed time limited visas for low skilled occupations where workers would be at risk of losing their immigration status in the country and thus their rights at work. The TUC is also concerned that the proposals would undermine the UK's ability to get a Brexit deal with the EU that delivers the barrier free trade we need to defend decent jobs as any restrictions on EU labour will restrict the UK's trade access in a future trade deal.[300]

The TUC looks forward to engaging with the MAC in considerations of the UK's future immigration policy.

In its response to the MAC's SOL consultation, the TUC endorses the submissions of our affiliated unions to the consultation which provide details of shortages in specific sectors. In addition TUC wishes to highlight the following points.

- Public sector shortages

The TUC is concerned that there are serious shortages of staff across the NHS as well in education and social care.

The data revealed the number of nursing posts vacant has increased by almost 17 per cent between quarter four of last year and quarter one of 2018-19. There are now

[299] https://www.tuc.org.uk/research-analysis/reports/national/tuc-submission-migration-advisory-committee-eea-workers-uk-labour
[300] https://www.tuc.org.uk/blogs/theresa-mays-post-brexit-immigration-plans-—-disaster-every-worker

41,722 nursing vacancies in total. Meanwhile in education, respondents to NAHT's 2018 survey of members reported they couldn't recruit to fourteen percent of posts while over three quarters were difficult to fill.

Major causes of these shortages include:

- Brexit

The TUC is concerned that the ongoing uncertainty around the legal status for EU citizens in the UK after Brexit has caused a shortfall in the number of workers coming to the county and choosing to stay. NMC raw data figures[301] show that the number of registrants joining the register fell from 10,178 in 2016 to 888 in 2018, a fall of over 92%. In addition to this, from October 2016 to September 2018, 7,628 nurses and midwives from the EEA left the register. As noted above, the TUC is calling for all EU citizens to be guaranteed the right to remain in the UK, regardless of the outcome of Brexit negotiations.

- Pay

Seven years of pay freezes and wage increases well below the cost of living in the public sector had a major impact on staffing. In education, meanwhile, low starting salaries relative to other graduate professions have made it mor difficult to recruit in the sector.

The abolition of bursaries for health and allied professions and the imposition of tuition fees.

This has made it more for those from lower income backgrounds to train for jobs in health and social care. The numbers being trained have fallen significantly

- Apprenticeship routes

Alternative routes to nursing qualifications promised by the government have failed to materialise in anything but tiny numbers. Despite evidence that staff qualifying through "grow your own" routes have very high retention rates, the apprenticeship route has not got off the ground because employers say it is too expensive without additional funding to cover salary and backfill costs. The government should also prioritise the reform of and substantial investment in nursing apprenticeships to ensure this becomes a viable route into nursing in the future.

- CPD

A recent report[302] has found that central investment in ongoing training and development for existing staff is a third of its 2014/15 value and that a significant uplift in investment is needed to meet needs. Staff also need to be given the time and space to develop new skills and new ways of working.

- Lack of flexible working or part-time opportunities

This makes it difficult for those with caring responsibilities to take up positions.

- Stress

[301] https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/

[302] https://www.nuffieldtrust.org.uk/files/2018-11/health-foundation-king-s-fund-and-nuffield-trust-the-health-care-workforce-in-england.pdf

Current workforce shortages inevitably take their toll on the health and well-being of workers

- Age profile of nursing and midwifery workforce

The NMC acknowledges that the proportion of people on their register who are aged 21–30 is slightly increasing year on year. The 56 and over group is increasing too, so the age profile of the register is becoming more polarised.[303] If this trend continues, this has will have implications for succession planning and mentorship.

[303] https://www.nmc.org.uk/globalassets/sitedocuments/other-publications/nmc-big-picture-september-18.pdf

TUV UK Ltd

Dear Migration Advisory Committee Secretariat,

As there is no space left, please would you pass on the following comments from me to the appropriate people.

Migration is and has always been the best way to increase the talent pool in a country. I was taught at a very early age to never stop learning as it is essential to stay in the game. Many people seem to ignore this and thus end up falling behind more industrious peers. They then blame the peers that pass them by and immigrants for their hard work, not themselves for their fecklessness. Education is key and it's lack the direct cause of brexit.

My company needs to recruit specialists in French Nuclear Mechanical manufacture and installation Law application in a mechanical engineering world called Rcc-M for the build at Hinkley Point. For the project, these French Laws are accepted as the design, source, make and install project rules for nuclear island and Items related to nuclear safety. As a UKAS accredited conformity assessment body for Rcc-M, one of the only 2 in the UK, we are desperately short of qualified Rcc-M capable staff. Please bear in mind that these are available in France mainly, instead of the UK, for obvious reasons. Also the code is in French with an English translation, ie the French original rules in cases of divergence, with the English version seen as just a guide. The market for this is vast, but the staff are unavailable outside France. How can I recruit into the unstable, brexiting UK, with draconian migration and employment restrictions due to be imposed by this brexit government.

Please help.

UK Research and Innovation

Question 14 - If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

UK Research and Innovation is a new body which brings together the seven Research Councils, Innovate UK and a new organisation, Research England to provide grant funding for researchers, work with businesses through competitive funding to support and de-risk innovation and fund research and knowledge exchange in universities.

UK Research and Innovation will play a fundamental role in ensuring the UK is able to meet the unprecedented industrial and societal challenges that we face, both locally and internationally.

We aim to maximise the contribution of each of our component parts, working individually and collectively. We work with our many partners to benefit everyone through knowledge, talent and ideas.

Operating across the whole of the UK, more than £6.8bn funding will flow through UKRI in both 2019/20 and 2020/21. We deliver cross cutting funds such as the Industrial Strategy Challenge Fund and the Strength in Places Fund which cover interdisciplinary areas of research and span across the innovation pipeline. People we fund work in the UK's universities, independent research organisations and in business.

Operating at the forefront of research and innovation means moving research on to areas that have not yet been explored and therefore relatively unique (combinations of) skills sets are the norm. The work of researchers and innovators is often rapidly evolving, job title nomenclature struggles to keep up with developments and standard classifications often do not do the complexity justice. Those providing underpinning technologies and methodologies must keep abreast of these research developments and bring cutting edge skills into more established disciplines. Other nations are equally interested in promising new research and innovation avenues and pressure on skills (in particular STEM skills) is a global issue.

Question 14 - If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

UKRI Councils report shortage/vulnerability in the following skills, across all research fields, throughout the UK research and innovation base:

1. **Quantitative**: mathematics, statistics, computation, data analytics and informatics, machine learning and Artificial Intelligence, developing digital and technology excellence.
    - **SOC Codes (at RQF6 and above)**: 2136, 2137, 2139, 2425
    - **SOC codes (at RQF8)**: 2111, 2112, 2113, 2114, 2119

2. **Engineering**: all engineering disciplines, from turbine engineers working in renewable energy research through to bioprocess/biochemical engineers in advanced therapeutics.
    - **SOC Codes (at RQF6 and above)**: 2121, 2122, 2123, 2124, 2126, 2127, 2129
    - **SOC Codes (at RQF8)**: 2111, 2112, 2113, 2119

3. **'Interdisciplinary'**: at all research interfaces, combining expertise in two or more different fields, having both 'breadth' and 'depth', e.g. in social science and medical research to address multi-faceted problems such as Anti-Microbial Resistance; or in natural and biological sciences to address food production; or in engineering working on medical imaging problems.
    - **SOC Codes (at RQF8)**: 2111, 2112, 2113, 2114, 2119, often in combination with SOC codes at 1 and 2 above.

And in **Domain specific** areas such as: languages; quantum technologies; marine biology; geophysics; hydrography; oceanography; physiology, pathology and pharmacology; agricultural science and food security; veterinary sciences.

- **SOC Codes (at RQF8): 2111, 2112, 2113, 2114, 2119**
- **SOC Codes (at RQF6 and above): 2216**

UNISON

Migration Advisory Committee Call for Evidence
Shortage occupation list review
UNISON submission
January 2019

Introduction

UNISON is the UK's largest union with 1.3 million members. Our members are people working in the public services, for private contracters providing public services and in the essential utilities. UNISON is the major trade union in health and social care. We represent more than 450,000 healthcare staff employed in the NHS, and by private contractors, the voluntary sector and general practitioners. UNISON represents over 300,000 members in social care and has a large retired membership of more than 165,000 with a particular interest in the future of health and social care. There is also a wider interest among our total membership who use, or have family members who use, health and care services.

As a trade union which represents migrant workers, and works to tackle exploitation, bad conditions of service and low pay for all, UNISON welcomes the opportunity to respond to this call for evidence on the shortage occupation list review. We believe that the MAC has a vital role to play in the creation of evidence based policy around migration, which will become critical to the health of public services and the whole UK economy in the year ahead.

UNISON welcomes the fact that the review is looking at evidence from all occupations and job titles at RQF 1 and above to understand what national shortages there are within the UK at present and would urge MAC not to limit their final recommendations to RQF level 6 and above; a more holistic approach is needed, particularly within the health and social care sector.

This response will focus on the health and social care sectors as well as make some wider points. UNISON is making its submission separately from the restrictive online form provided by MAC – it is not possible for the union to make its full response in that format. We will set out our views on the critical issues facing MAC, public services and migrant workers before responding to the consultation questions.

General Points

UNISON is deeply concerned that the Government's proposed immigration plans will prove devastating for public services and the economy more generally.
UNISON believes that the impact of current political developments around EU Exit and the possible end of Freedom of Movement will not just affect EU and EEA migrants but will have a major impact on the viability of current rules around non-EU migration.

Reports that supposedly ‘low-skilled’ workers would be given one year visas to plug the problems caused by the rigid immigration system we have now will simply create a highly vulnerable, easily exploitatable workforce at the mercy of the most unscrupulous of employers. This will create a race to the bottom in parts of the economy that will leave decent employers stranded and workers exposed. This creates even greater incoherence within government policy, given that much its current work on tackling exploitation has been distorted by a focus on immigration status rather than labour standards. MAC’s recommendation that pay and standards should rise in low paid sectors of the economy to tackle future shortages will be redundant if this policy goes ahead.

Tier 2 Cap/Salary Thresholds

UNISON welcomed MAC’s recommendation that the Tier 2 Cap be lifted and that the Tier 2 general visa route be extended to ‘medium’ skilled and not just ‘high’ skilled workers. It is deeply concerning that the government plans to have a threshold of £30,000 p.a for ‘medium skilled’ workers.

UNISON has consistently argued that Government policy around immigration uses ‘salary’ to mean ‘skill’ and that salary thresholds and language around high/low skill is deceptive. Low-status and badly paid work is not synonymous with low skill. Many important sectors such as social care and child care have been historically undervalued as women’s work and hence badly paid, but are not low skilled or dispensable. A debate around immigration that revolves around ‘high’ or ‘low’ skilled workers ignores the complexity of the UK labour market - it is instead a reflection and a response to a highly charged political debate.

UNISON therefore believes that an increasing number of workers are not paid at levels commensurate to their skill level which means pay is not a helpful proxy.

MAC responded in its report of September 2018 on EEA migration in the UK by saying:

“*There is often a claim for public-sector workers to be treated differently, most commonly on the grounds that the value of the work is not reflected in the salaries paid. The MAC does not think the public sector should be treated differently: it would be better to pay public sector workers salaries that reflect the value of the work*.”

UNISON welcomes the support from MAC for our long running campaign against austerity, low and frozen pay for public sector workers. However, employers, public services, migrant workers have been forced to comply with a byzantine immigration system, one which grows in complexity and unwieldiness year by year due to political decisions rather than evidence based policy. UNISON has had to campaign for better pay, better training and better resourcing for UK workers from a Government that is both reluctant to invest in these, and also to operate a fair and dignified immigration policy. MAC has a public interest duty to advise the Government to reform immigration policy, their main area of expertise. This is particularly acute given the distorting effect the immigration debate is having on UK politics.

Finally, the damage caused by the use of salaries as a proxy for skills is not just about public sector pay freezes, it is also about the historic and consistent devaluing of work associated with women workers. This should not be ignored by MAC as a significant factor, particularly given the crisis facing the social care sector. IPPR have found that **79% of current EEA migrants working in the social care sector would be ineligible to come to the UK under the current skills/salary threshold**.[304]

UNISON's experience as a union of over a million women workers is that roles across the public services team are often undervalued in monetary terms even though they have a strong social purpose and ethos. That public services are made up of a large majority of women workers and we still operate in gender segregated occupations and sectors cannot be ignored by MAC if they continue with high minimum salary levels for shortage occupations. Also, as the Prime Minister's recently published statistical audit of the UK by race showed, Black workers' continue to experience pay penalties and occupational segregation.

EU Exit

These are testing enough conditions for public services without the political and economic impact of EU Exit. Over the past year the punitive nature of the Government's policies towards non-EU migrant workers and anyone who resembles a non-EU migrant has been exposed. It is an unwelcoming, expensive, unfair and gruelling experience and it will soon apply to millions more migrant workers, who have been accustomed to a very different immigration process as EU citizens. Furthermore, freedom of movement has been used by smaller employers unable to comply with the bureaucratic process which applies to non-EU migrant workers. UNISON does not believe the shock of this change has been factored into UK policy thinking, even by MAC.

Social care

In September, MAC commented that "*We are seriously concerned about social care but this sector needs a policy wider than just migration policy to fix its many problems".* UNISON agrees and has been leading the campaign for improved funding, pay and conditions across the sector.

According to Skills for Care's 2018 report,' The state of the adult social care sector and workforce in England', vacancy rates in the care sector now stand at 8%, up from 6.6% in 2017 and equating to 110,000 jobs. There are already existing shortages across the social care sector but particularly for frontline care workers and for registered nurses. There is also a sizeable number of staff leaving the sector each year with currently 31% of staff leaving their job each year.

The poor terms and conditions that care workers are subjected to are the main drivers of the shortages in the sector. A survey by UNISON in summer 2018, which took in responses from 2,751 careworkers in England from across the sector found:

- Almost half *(*49%) of care workers said they are currently thinking of leaving their job;

[304] P15 https://www.ippr.org/files/2018-11/fair-care-a-workforce-strategy-november18.pdf

- Seven in ten (73%) said one of the reasons for this was low pay. Almost half (44%) also said that they could earn more money in other sectors;
- The second biggest factor was the lack of time they have to deliver care, with half (53%) reporting this as an issue;
- Two in five (39%) said that problems with their employer were making them consider leaving their job;
- One in ten (15%) said lack of training was a factor in them wanting to quit;
- Almost nine in ten (89%) said better levels of pay would help to address high turnover rates;
- Eight in ten (77%) said if care workers were listened to more they would be more likely to stay in their jobs.

The Government's long delayed social care green paper is due to help tackle the reasons for shortages in the sector alongside tackling the funding issue. We are not in a position to know whether what they eventually propose will have any effect on dealing with the long standing problems that have plagued the care sector.

Because of demographic changes in UK society we will require an extra 1 million care workers by 2025. It will be impossible to meet this target whilst care workers continue to be paid so poorly and treated so badly creating continuous churn and turnover of staff. This high rate of turnover is contributing to a decline in standards in the sector. Removing EEA care workers from the sector will clearly make the situation worse.

As MAC itself said, "The combination of rising demand, downward pressure on public spending leading to relatively low wages making many jobs relatively unattractive to resident workers and the absence of a non-EEA work-related route for the lower-skilled roles in the sector mean that this is a sector that could face even more serious problems if EEA migration was restricted."

New research by IPPR, 'Fair Care'[305] highlights the extent of the problem

While the proportion of EU workers in adult social care remains relatively modest, it has increased in recent years. Between 2012/13 and 2017/18, the proportion of EU workers rose from 4.9 per cent to 7.6 per cent. The increase of 38,700 EU nationals working in the sector over the last five years accounts for a third (34.1 per cent) of the increase in the workforce over that period (IPPR analysis of Skills for Care 2017). The social care sector in London is particularly dependent on migrant workers. Only 37 per cent of the adult social care sector workforce in London is UK born, with 12 per cent being from the EU and 51 per cent being non-EU migrants. Brexit and the proposed ending of freedom of movement could exacerbate the social care workforce crisis.

It is important to note that the MAC proposals in its September report would have a serious impact on the social care sector. Ending Freedom of Movement and extending

[305] https://www.ippr.org/files/2018-11/fair-care-a-workforce-strategy-november18.pdf

the Tier 2 system to EEA nationals would have a very damaging effect on the care sector. IPPR modelled the impact on EEA nationals currently living in the UK and working in social care and found that four in five (79%) of EEA employees working full-time in social care would have been ineligible to work in the UK under the skills and salary thresholds proposed by MAC (IPPR analysis of LFS 2016).

Social care would already be in crisis without the impact of EU exit on labour shortages, but UNISON believes that without a considered response from MAC, it will become unmanageable. We urge MAC to make full use of their advisory power to ameliorate a worsening crisis. Unless positive steps are taken, the care sector will continue to hover on the brink of collapse, and the people who rely on vital social care services will be the ones to suffer.

Consultation Questions

1. Please indicate from which of these industries are you providing evidence?

This response focuses primarily on the healthcare sector.

2. If you wish, you can provide details of individual jobs titles you/your members have found hard to fill in the boxes below (maximum of 10). Please help us by matching the job titles you have provided with the closest standardised ONS job title and associated 4-digit occupation (SOC) code using the Office for National Statistics (ONS) Occupation Tool – https://onsdigital.github.io/dp-classificationtools/standard-occupational-classification/ONS_SOC_occupation_coding_tool.html. There is also space to list the sector(s) where shortages of candidates to fill these job titles has been most acute. If providing this information, please refer to the list in question 24.

It is not possible to confine our response to 10 job titles as there is a well documented shortage of staff across the NHS. A recent joint think tank report notes that there is currently a shortage of 100,000 staff across the NHS and predicts that there could be a shortfall of 250,000 to 350,000 by 2030.[306]

NHS Improvement's quarterly performance report[307] revealed there were 108,000 whole time equivalent staff vacancies in the first quarter of 2018-19, with this trend predicted to worsen over the year.

The data revealed the number of nursing posts vacant has increased by almost 17 per cent between quarter four of last year and quarter one of 2018-19 – there are now 41,722 nursing vacancies in total. NMC data reveals that there are 5,690 fewer nurses on the NMC register now than in 2014/15 (see table 1 below) with shortages more acute in some areas such as adult and mental health nursing.

[306] https://www.nuffieldtrust.org.uk/files/2018-11/health-foundation-king-s-fund-and-nuffield-trust-the-health-care-workforce-in-england.pdf

[307] https://www.hsj.co.uk/workforce/high-staff-vacancies-push-up-nhs-pay-bill-/7023337.article

In addition to these vacancies, it is important to note that applications for vacant posts are falling (from 103,826 in 2015 to 91,189 by the end of 2017) and the number of candidates shortlisted are falling too (from 42,283 in 2017 to 22,359 in 2017).[308]

Category	2014/2015	2015/2016	2016/2017	2017/2018
Adult	529,200	532,469	528,818	524,891
Children	47,270	48,116	48,742	49,793
Learning disabilities	18,546	18,163	17,503	17,174
Mental health	90,953	90,068	88,741	88,421
Total	685,969	688,816	683,804	680,279

Table 1[309]

3. What do you think are the main reasons for job shortages (answered in the question above), and or wider shortages in the sector(s)? (Not to exceed 500 words).

- Bursary abolition and the imposition of tuition fees

  Since August 2017, no healthcare students have received the bursary. The impact has been felt in both falling applicant numbers for nursing degree courses in England and falling numbers of those eventually taking up the courses. In the current academic year, applications for nursing degrees plummeted by almost 5,000 compared to last year and by around a third in the two years since the bursary was scrapped.[310] Of those that applied, even once additional students entering through clearing was factored in, the number that began a nursing course in September was still down by 570 on last year.[311]

  The abolition of the bursary abolition and the imposition of tuition fees on healthcare students has affected the viability of some of the smaller, more specialist courses.The Commons Health and Social Care Committee also raised the alarm about the potential effect on the demographic of those choosing to go into nursing, with mature students in particular being put off.[312] There are further fears that the prospect of coping with a substantial debt burden will deter some groups of students: research shows that “those from low-income and disadvantaged backgrounds, black and minority ethnic groups, and young women [are] the most debt averse”.[313]

308 https://www.telegraph.co.uk/news/2018/07/27/nhs-increasingly-desperate-nurses-midwives-applications-continue/
309 https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics-tables/

310 “Nursing course applications have crashed by third in two years”, www.nursingtimes.net/7025246.article

311 “Number of nursing students in England down by 500 this year”, www.nursingtimes.net/7026080.article

312 https://publications.parliament.uk/pa/cm201719/cmselect/cmhealth/353/353.pdf
313 www.llakes.ac.uk/sites/default/files/58.%20Callender%20and%20Mason.pdf

A significant longer term impact of bursary abolition and the imposition of fees is the fact that it hinders the ability of the NHS to plan for future student numbers: the government no longer commissions training places directly, depending instead on universities in the free market creating extra places and recruiting the students to take them up. The government's draft health and care workforce strategy recently acknowledged that "the new funding system adds a challenge to planning for future numbers".[314] While there is this level of uncertainty it will be hard to guarantee the staffing numbers the NHS needs. The new system is also a self-defeating one for the Treasury: nursing and other healthcare students in England are incurring huge debt that on current projections they will never repay.

- Brexit

  NMC raw data figures[315] show that the number of registrants joining the register fell from 10,178 in 2016 to 888 in 2018, a fall of over 92%. In addition to this, from October 2016 to September 2018, 7,628 nurses and midwives from the EEA left the register.

- Stress

  Current workforce shortages inevitably take their toll on the health and well-being of existing staff. In addition to this there is also evidence of discrimination and inequalities in pay and career progression.

- Age profile of nursing and midwifery workforce

  The NMC acknowledges that the proportion of people on their register who are aged 21–30 is slightly increasing year on year. The 56 and over group is increasing too, so the age profile of the register is becoming more polarised.[316] If this trend continues, this has will have implications for succession planning and mentorship.

- Pay

  Seven years of pay freezes and wage increases well below the cost of living had a major impact on staffing. The welcome breakthrough on NHS pay only goes some way to restoring the value lost during the years of pay austerity. During this period the NHS struggled to hold onto experienced staff or recruit many of those needed to fill vacancies. In addition to this, there are parts of the UK where house prices and rental are disproportionatly high, this is an additional challenge to the recruitment and retention of staff.

- CPD

  A recent report[317] has found that central investment in ongoing training and development for existing staff is a third of its 2014/15 value and that a significant uplift in investment is needed to meet needs. On top of this, staff

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[314] Facing the Facts, Shaping the Future, www.hee.nhs.uk/our-work/workforce-strategy
[315] https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/
[316] https://www.nmc.org.uk/globalassets/sitedocuments/other-publications/nmc-big-picture-september-18.pdf
[317] https://www.nuffieldtrust.org.uk/files/2018-11/health-foundation-king-s-fund-and-nuffield-trust-the-health-care-workforce-in-england.pdf

need to be given the time and space to develop new skills and new ways of working.

- Apprenticeship routes

  Alternative routes to nursing qualifications promised by the government have failed to materialise in anything but tiny numbers. Despite evidence that staff qualifying through "grow your own" routes have very high retention rates, the apprenticeship route has not got off the ground because employers say it is too expensive without additional funding to cover salary and backfill costs. So the government should also prioritise the reform of and substantial investment in nursing apprenticeships to ensure this becomes a viable route into nursing in the future.

4. Please explain what measures have been taken to reduce shortages in the sector as informed by your members and or research. (Not to exceed 500 words).

UNISON led the NHS pay negotiations that led to the agreement of a new pay deal recently for England, Scotland and Wales.

The new deal delivers substantial pay rises for members not at the top of their pay bands over the three years and is a major step in dealing with low pay in the NHS which has been a priority of UNISON for many years. it also reduced the number of increments enabling staff to progress to the top of the band quicker.

5. Have these measures worked, if not why? (Not to exceed 500 words).

It is too early to assess what impact the new pay NHS deal has had. In any event, improved pay on its own is not enough to address the shortage. The government needs to begin to address the other issues identified.

6. Are the jobs that you have said are in shortage, open to eligible workers from the Tier 2 points-based visa system?

The main problems confronting the UK arise from the way the Tier 2 points based system operates and the issues that will confront UK employers when future EU and EEA migrants are moved into the points based immigration system. UNISON believes the whole points based immigration system will come under severe strain – along with a serious crisis in the health and social care sector in the future.

7. If known, how many workers from outside of the UK have been recruited using the Tier 2 points-based visa system in the past 12 months, stating the job titles. (Not to exceed 500 words).

n/a

8. If you have supporting evidence such as survey results from members please attach here. Please remember to omit sensitive details before attaching.

No other evidence available at this time.

9. If you have any other information that might be useful for our call for evidence please use the space below to explain (Not to exceed 500 words).

The government need a long term strategy that addresses workforce shortages in both the short and long term. A recent joint think tank report noted "...there needs to be a more coherent national system to develop and oversee workforce strategy and ensure its alignment with the changing models of delivery of health and social care. We cannot continue with siloed working between hospitals, primary care and social care, and an effective approach to the workforce needs to look at the requirements of all these sectors holistically."[318]

UNISON is also calling for the government to substantially increase spending on healthcare education and training as a matter of urgency.This should be used to pay for a living bursary for student nurses and other healthcare students, coupled with the wider abolition of tuition fees.

[318] https://www.nuffieldtrust.org.uk/files/2018-11/health-foundation-king-s-fund-and-nuffield-trust-the-health-care-workforce-in-england.pdf

West Sussex Growers' Association

West Sussex Growers' Association
(Specialist Branch of the National Farmers' Union)
Hollyacre, Newlands Nursery, Pagham Road, Lagness, Chichester,
West Sussex PO20 1LL

Migration Advisory Committee
2nd Floor
Peel Building
2 Marsham Street
London
SW1P 4DF
Brexit and the Labour Market
1st December 2018

Dear Chairman and Committee Members,

1.1 Our commercial Horticultural Business members in West Sussex, situated mainly in the Chichester & Arun Districts, West Sussex, have an annual turnover in excess of £1billion and employ more than 9,000 FTEs. The majority (70%) of these full time and seasonal workers are migrants from the EU; predominantly from Poland, the Baltic States and other Eastern European countries. They are an essential part of the workforce, engaged at many different levels, from basic harvesting and packing jobs to supervisory and management positions.

1.2 Growers, have a present and future need for large numbers of employees. It is no exaggeration to say that without this additional workforce; it will not be possible to grow, harvest or pack many crops that are currently grown in Britain. The idea that this vital workforce can suddenly be recruited from amongst our local communities is not possible, as unemployment in the area is at an all-time low and there is a desperate shortage of indigenous local people with the required skills and/or work ethic willing to be trained.

1.3 If the free movement of people across the EU cannot be retained; then alternative schemes need to be put in place without delay to satisfy the needs of businesses for additional workers. Options may include the return of the Seasonal Agricultural Workers Scheme (SAWS); however, as the Industry has a need for additional workers all year-round; there is a need for a scheme that allows work permits for a much longer period. The Industry urgently needs to be able to give assurances to the existing workforce and to customers that jobs are secure and that we can deliver the goods.

1.4 Clearly there will need to be even more focus on "the market place" and "food and plant security". Most commentators believe this to be a good thing; however, these aspirations can only be brought about if the economic climate is seen to be fair and relatively stable i.e. level playing fields and medium-term certainty. Most horticultural businesses in West Sussex already operate in the "free market", supply direct to supermarkets and retailers across the UK, receive no direct financial support from the EU Common Agricultural Policy or from the UK Government. WSGA member businesses have already invested heavily in automation to increase productivity.

1.5 In order for the Horticultural Industry to have confidence in investing for the future, it is imperative that far more clarity is given to the likely shape of future trade and labour agreements with the EU and the rest of the world post Brexit. There is a real risk that rural investment will be severely curtailed during this very uncertain interim period.

Email Submission 1

Migration Advisory Committee
2nd Floor · Peel Building
2 Marsham Street
London
SW1P 4DF

10 November 2018

Response to call for evidence:
Shortage occupation list review

Dear Sir/Madam,

Thank you for the opportunity to respond to your call for evidence. I am a member of the public with an interest in migration policy and I have some general comments which I hope may be helpful, although others will be able to add more detail.

I understand that Scotland has its own shortage occupation list (as outlined in Immigration Rules, Appendix K) and I would suggest that there is merit in Northern Ireland and Wales also having shortage occupation lists of this type to reflect any specific needs within their regional labour markets.

As immigration and nationality are non-devolved matters, a Northern Ireland list could be established by the Home Office – provided that local political parties, business and professional organisations, and trade unions are supportive. There are particularly urgent needs to fill professional roles in the health and social care services to help to reduce waiting lists and improve quality of life. This should be a priority. However, I would question whether there is a labour shortage in agriculture.

The October 2018 Labour Force Survey (in Northern Ireland) indicates that around 32,000 people (11% of working age adults who are economically inactive) may be available for work – i.e. they are not experiencing long-term sickness or disability, nor studying, in retirement or looking after their family or home. In addition, around 38,000 people are unemployed.

I would suggest that this group of 70,000 people is an open market for seasonal agricultural work – which can be done by people with almost any skill level. It may be necessary to seek and support a major increase in local employment in this area of work if EEA nationals currently employed in those roles return home as a result of Brexit.

Thank you for your time and all the best in your continuing work.

Email Submission 2

Though your consultation is closed I strongly suggest you include a provision in relation to social workers and health care staff.

In July last year the NHS in collusion with the Department of Health who have responsibility for social work (with children's social work being delegated to the Department of Education) re-issued a Code of Practice concerning the ethics and principles of international recruitment. In short, it is unethical to recruit from countries that need their social workers.

I am seeking clarification on the current list of countries and other matters. There will be issues concerning your list of occupations. Compliance with the Code should be mentioned in your publication. I am particularly concerned about the recruitment of social workers from Zimbabwe. Zim is the 17^{th} poorest country on the world with famine, poverty, child prostitution ($2 - 50 cents as young as 1), HIV, historical issues concerning gender and disability featuring in a country that has no money or currency (using the US$).

Please read the links in the attached document and the Code issued many years ago by the General Social Care Council which was closed down by the government and replaced by HCPC which will soon loose responsibility for social work once the new Social Work England is up and running.

Please refer to compliance with the Code on your list because it is a major caveat.

Email Submission 3

I work for CityFibre, the UK's leading independent builder of full fibre digital infrastructure networks. As part of its Future Telecoms Infrastructure Review, DCMS recently announced a target for the UK to have national full fibre coverage by 2033 (and 15m premises by 2025), up from 5% coverage today (in other words a major nationwide infrastructure build over the coming decades) as a key part of the Industrial Strategy. CityFibre is in the process of building full fibre to 5m premises – a third of the Government's midpoint target.

The potential shortage of workers to allow us to meet those targets – both from within the EEA and outside – is something we are concerned about, including the impact that a shortage would have on cost and timing of delivery. We are therefore keen to engage with Government about this, ideally alongside other industry players.

DCMS encouraged us to submit data to the MAC SOL consultation, which I am very conscious closed on Sunday.
We started collecting data towards the end of last year, but it has not been straight forward to collect and our data set is currently incomplete. Unfortunately the timing of the consultation meant key people have been on leave over Christmas, which made this more difficult. However, I wanted to stress that this is something we are actively working on and will be looking to get data together as part of wider discussions with DCMS about workforce issues and in light of the Home Office's recent Immigration White Paper.

Email Submission 4

Our skills needs are for:

1) experienced RF engineers
2) experienced semiconductor test development engineers
3) semiconductor equipment (assembly and test) process engineers
4) die sales and business development people
5) semiconductor application engineers

Starting level salary are at £30k - £40k (graduate with 2 -3 year experience). For seasoned professional salary levels can be £50k - 75k and above … however for some roles we are restricted from using non Europeans due to the defence work undertaken on site.

Email Submission 5

Further to our telephone conversation on 9th January, I am now writing to begin the process of making the case for removing classical dancers from the shortage list. I am deeply concerned that if classical dancers remain on the list at a time when EU nationals are incorporated into the list alongside 3rd country nationals, and UK citizens simultaneously lose Freedom of Movement in Europe, it will become impossible for British dancers to find work in a market where there is already a chronic shortage of jobs.

There is an over-supply of female classical dancers, in particular, at entry-level, in the UK. Graduates of Britain's leading vocational ballet schools, typically aged 18-23 , are highly-skilled artists and athletes, who have trained for at least 8 years for between 6-9 hours a day, to achieve international standards of employability. However, it is virtually impossible for them to gain apprenticeships or contracts in the c*orps de ballets* (rank and file chorus) of British ballet companies as a result of numbers of international and EU job-seekers who flock to the UK to train and to work. A current example of this over-supply is the response to a recent job advertisement by the leading British choreographer Christopher Wheeldon. Wheeldon is seeking 40 dancers (20 male and 20 female) to supplement the *corps de ballet* of English National Ballet's forthcoming performance of <u>Cinderella</u> at the Albert Hall. The contracts offered are short-term and will only last from 7 May-16 June. The pay offered is £385 per week, which is the Equity Agreement for Ballet and Dance. The audition administrators received almost 1,000 applications from dancers who claim that they have the right to work in the UK.

The <u>Cinderella</u> production is a one-off, which is why it attracted so many applicants. Job opportunities are exceedingly rare in British ballet companies, of which there are only five of international renown. Many years of cuts to Arts funding have taken their toll. *Corps de ballet* dancers who are fortunate enough to have jobs do not move on to allow younger dancers to get a foothold and begin their careers. Promotions to soloist level can take years to achieve**.**

Meanwhile, ballet schools produce a new cohort of graduates each year who need to find work. The Royal Ballet School and English National Ballet School, the feeder schools to the Royal Ballet Company and English National Ballet Company, are schools with high international reputations. Every year they receive hundreds of applicants from the around the world for a maximum of about 15 places for male and 15 places for female dancers. British dancers who gain entry are regarded as the most exceptional talents within the UK and are provided with means-tested financial support by the government to fund their fees. It is natural to assume that any publicly-funded British student with this level of potential would progress to a position in the c*orps de ballet* of a leading ballet company, as was the case in the UK certainly until the 1990s, when dancers such as Darcey Bussell were able to build spectacularly successful careers. However this is blatantly not the case as the figures below demonstrate.

<u>If there is a shortage of classical dancers to fill our corps de ballets, surely British graduates from top British ballet school should be regarded as an asset?</u>

Data gathered from The Royal Ballet School, The Royal Ballet Company, English National Ballet School, English National Ballet Company and Birmingham Royal Ballet, reveals that from a cohort of 44 students graduating from The Royal Ballet School and English National Ballet School in 2018, only 3 were able to get jobs in the UK's top 3 ballet companies. At the Royal Ballet Company there were 9 apprenticeships offered. Only 1 British male dancer gained one of these apprenticeships. All other apprenticeships went to students from China, Australia (3), Japan, Germany and Italy. Two apprenticeships went to students from schools outside the UK. At Birmingham Royal Ballet, there were 11 contracts offered, of which 1 went to a British female. All other contracts went to graduates from Japan (3), Australia (2), Canada, USA and Belgium. At English National Ballet it was worst of all for British graduates. There were nine contracts and none were offered to British dancers. Contracts were awarded to graduates from Spain (1), Mexico (2), Paraguay, Brazil, Japan and Australia (2), even though there were 6 British graduates in need of work. Four of the dancers awarded jobs were sourced from schools in Monaco, Brussels and Brazil. The Artistic Director of English National Ballet and its associate school, Tamara Rojo, is Spanish, and well-known for her liking for non-British dancers, especially dancers from Spain and South America. Four out of six of the teaching staff at her school, including the Headmaster are from Spain and South America alongside her Ballet Mistress, who is Cuban. This would be unthinkable in any other European country.

What then became of British graduate dancers? Male dancers, who are more in demand than female dancers because fewer boys pursue ballet as a career, were able to find work in other British companies: Scottish Ballet in Glasgow and Northern Ballet in Leeds. Female dancers however had to seek work in Europe.

Freedom of movement in Europe has provided British dancers with a plethora of opportunities, mostly in Eastern Europe. In 2018 British graduates from The Royal Ballet School and English National Ballet School found jobs in companies in Poland, Romania and LIthuania. In previous years they have found jobs in Hungary, Czech Republic, Estonia, Germany and Austria.

However, since the Referendum in 2016, contracts in European companies have declined, and in 2019, as this year's audition season gets under way, we are seeing British students, especially females, being turned down for invitations to audition for jobs in European companies. More companies in Europe are insisting that applicants must have EU passports to apply, and some companies, such as the Greek National

Ballet have stipulated that applicants must demonstrate that they are registered to pay tax in Greece. Although many companies advertise for dancers to apply from across the globe, the final composition of the companies indicates that the dancers are overwhelming citizens of the country in which the company is based. This is especially evident at The Paris Opera Ballet and in companies in Russia, Spain and Italy. This protectionism is most evident in the USA, where companies are overwhelming staffed by American citizens and foreigners are the exception. Artistic Directors of US ballet companies advise British dancers that they cannot employ them as they will not be able to acquire working papers. American dancers must be privileged over foreign workers.. Because dancers are listed on the SOL in the UK, and American dancers can acquire visas, there are many American dancers working in the UK. This lack of reciprocity is extremely frustrating for British dancers.

I have undertaken many months of research into this area as I am deeply concerned for the future of Britain's young talent in the field of dance. After Brexit, when Freedom of Movement ends, I cannot see how British dancers will be able to find employment and the chronic over-supply of female dancers in particular will become acute. Employers (Artistic Directors) of ballet companies have complained that there is a shortage of suitably-skilled dancers in the UK and that classical dancers must be on the SOL. However I believe that they have simply become accustomed to the prevailing aggressively open free-market approach which has permitted them to source whomsoever they wish from around the world, no matter what the cost to British a new generation of youth. At entry-level, at least, for dancers who need to enter our c*orps de ballet*s to begin their careers, classical dancers should be removed from the Shortage List and **Post-Brexit Artistic Directors should be compelled to employ British *corps de ballet* level dancers if they have graduated from a leading school and if they have completed work experience in a leading company** (as part of their training graduate level students perform alongside salaried *corps de ballet* dancers in major productions when additional dancers are needed, and sometimes tour internationally, but they are not paid. This proves that they have reached the necessary level to perform within the c*orps de ballet.)*

It will be a struggle, because Artistic Directors and private sponsors within the ballet establishment wish to protect their self interests. One Dance UK, the national body which represents the dance sector argues that a reduction in the numbers of overseas workers entering the UK will harm the dance sector. Unfortunately ballet dancers themselves have no voice because unlike musicians or actors who have the Musician's, the Orchestral Player's Union and Equity they have no specific dancers' union or agents. They are also usually very young. Dancers careers are short and like other elite athletes they must establish themselves when they are at their physical peak. Mental health and eating disorders are a growing problem among dancers who are thwarted in their career ambitions. They commonly lack academic qualifications and cannot easily retrain because in order to compete at international level they must give up their higher education post GCSE.

I realise that this is a lengthy and complicated subject which cannot be dealt with in one letter. Please respond with any questions. As the SOL is being revised in preparation for the post-Brexit job market, it is imperative that British dancers are not excessively disadvantaged in the workplace whilst many other individuals in other sectors benefit from greater job opportunities as a result of diminished overseas competition.

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