Health Education England

AN ASSESSMENT OF THE FOUR MEDICAL ASSOCIATE PROFESSIONS (MAPs)

Health Education England (HEE), through its MAPs Oversight Board, has worked in partnership with representatives of the devolved administrations, a number of Medical Royal Colleges[i] and their affiliated faculty representatives[ii], to collate information on the scope of practice for each MAP role, assessing the evidence of the degree of risk of harm to patients.

This informed the completion of risk profiles, based upon the Professional Standards Authority's (PSA) criteria for right touch assurance.[iii]

This document contains the completed risk profiles for the four MAP roles (press ctrl and click on each role name to be taken directly to the relevant section):

The HEE risk profiles have been completed in the templates © produced by the Professional Standards Authority.

Right-touch Assurance: assessing the level of oversight required for health and care occupations

Title of occupation: Physician Associate
UK countries the occupation is applicable: UK wide

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
1. Description of role	The Physician Associate (PA) is: *"a new healthcare professional who, while not a doctor, works to the medical model, with the attitudes, skills and knowledge base to deliver holistic care and treatment within the general medical and/or general practice team under defined levels of supervision."* PAs work within a defined scope of practice and limits of competence. They: • take medical histories from patients; • carry out physical examinations; • see patients with undifferentiated diagnoses; • see patients with long-term chronic conditions; • formulate differential diagnoses	**Department of Health competence and curriculum framework 2012:** http://static1.squarespace.com/static/544f552de4b0645de79fbe01/t/557f1c1ae4b0edab35dd92cf/1434393626361/CCF-27-03-12-for-PAMVR.pdf **Royal College of Physicians and Faculty of PAs leaflet on PA role:** http://static1.squarespace.com/static/544f552de4b0645de79fbe01/t/57289fa9b6aa60d865f5c6f1/1462280111195/PA+Leaflet+Final.pdf The majority of PAs are not previous nurses - most come from a science degree background. They are new to the NHS and help deliver high quality care to a growing population with increasing health care needs. Therefore individuals entering the profession are not regulated by their primary profession. https://www.rcplondon.ac.uk/news/joint-	The PA Managed Voluntary Register (PAMVR) has a Code of Conduct, Scope of Practice and a Fitness to Practice Procedure to ensure good standards of practice and public protection and safety: http://www.fparcp.co.uk/pamvr-home/

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	and management plans; • perform diagnostic and therapeutic procedures; • develop and deliver appropriate treatment and management plans; • request and interpret diagnostic studies; • provide health promotion and disease prevention advice for patients. Currently, PAs are not able to: • prescribe; • request ionising radiation (e.g. chest X-ray or computerised tomography (CT) scan). PAs work as part of the medical team. The PA role is to provide patients with medical care under the supervision of a doctor. PAs are dependent practitioners but can work and make independent decisions. They have a supportive and close working relationship with their medical consultant/general practitioner which enables them to practice in this way. This does not	statement-announcement-more-physician-associates	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	mean that every patient they see needs to be reviewed by a doctor, it means that there is always someone available to help if required. UK PAs are currently employed across a wide range of specialist areas, in over 35 different UK NHS acute hospital Trusts and approximately 35 primary care settings. PAs provide both generalist and specialist clinical services, across a wide range of primary, community and secondary care services as an integral part of the multi-professional clinical team. Following the 2015 launch of the Faculty of PAs (FPA) at the Royal College of Physicians (RCP), UK PA development is progressing at pace. Health Education England (HEE) is working with recognised experts in the field to commission PA courses that will result in 1000 PAs working in General Practice by 2020. The PA skills mix allows for practice across a range of medical specialties,		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	fulfilling clinical roles which would traditionally be filled by junior doctors and, freeing up senior doctors to deal with more complex cases. A key strength of the PA profession is that it is a stable, medical workforce, capable of addressing workforce challenges caused by medical rotations and medical under-recruitment and providing greater familiarity for patients and their carers. In a General Practitioner's (GP) surgery, PAs see patients of all ages for acute and chronic medical care. PAs can refer patients to consultants, the Emergency Assessment Unit (EAU) or to Accident and Emergency (A&E) when clinically appropriate. Other duties include home visits, prescription reauthorisation, review of incoming post and laboratory results. PAs are an additional healthcare team member to help the practice reach Quality Outcome Framework targets.		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
2. Complexity of intervention	The PA will perform interventions, some of which carry a potentially high risk. The following is a list of procedural skills which the PA should be able to perform on completion of the educational programme: **Cardiovascular system** • Perform and interpret a 12 lead electrocardiogram (ECG). • Participate in cardiopulmonary resuscitation to the level expected in Immediate Life Support Training including oxygen with mask, bag intubation and which medication to use and when depending upon ECG reading. **Respiratory system** • Undertake basic respiratory function tests, such as spirometry and including the performance of peak flow measurement. • Commence and manage nebulised therapy. • Commence and manage oxygen therapy. • Instruct patients in the use of	The PA is fundamental to service transformation to enable more and better care to be delivered in all clinical settings including primary care. PAs are a core part of the GP Forward View strategy published by NHS England, HEE and the Royal College of GPs. https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf **Deployment of PAs in Primary Care** Demand for GP appointments, and particularly their complexity, has increased beyond recognition. There has been a steady rise in patient expectations, a target driven culture and a growing requirement for GPs to accommodate work previously undertaken in hospitals or in social care. This has resulted in unprecedented pressure on practices which impacts on staff and patients. Small changes in general practice capacity have a big impact on demand for hospital care so the need to support general practice in underpinning the whole NHS has never been greater. Patient demand and GP shortages mean that GPs no longer have the time to use their	**The complex interventions described in Section 2 carry a high degree of risk of harm to patients. The following evidence supports the case for statutory regulation:** 1. The PA role and the level at which they practise in the UK varies depending upon the setting in which they are deployed. PAs have functioned up to the level of Specialty Training Year 3 (ST3). 2. In the UK they are not yet able to prescribe medicines, though the Scottish Government is keen that they should do so. http://www.gmc-uk.org/14___The_scope_of_medical_regulation___physician_associates.pdf_64608156.pdf

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	devices for inhaled medication. **Gastrointestinal system** • Insert a naso-gastric tube (tested in simulation). • Undertake nutritional assessment. **Musculoskeletal system** • Undertake appropriate strapping and splinting for common musculoskeletal injuries. **Eyes** • Perform fluorescein dye examination of the cornea. • Remove loose foreign bodies from under lids. **Female reproductive system** • Obtain a cervical smear, cultures for high vaginal swabs (HVS) etc. **Renal and genitourinary system** • Undertake male and female urinary catheterisation. • Perform a urine dipstick test. • Undertake simple skin suturing. • Be competent in the use of local	expertise on patient issues that can be safely and competently managed by others. Wider members of the practice-based team will play an increasing role in providing day-to-day coordination and delivery of care. Greater use of skill mix will be key to releasing capacity to offer patients with complex or multiple long-term conditions longer GP consultations. As such, HEE has committed to investing in the training of 1000 PAs to support general practice. https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf **Greater investment in primary care** By investing a further £2.4 billion a year by 2020/21 into general practice services. This means that investment will rise from £9.6 billion a year in 2015/16 to over £12 billion a year by 2020/21. https://www.england.nhs.uk/wp-content/uploads/2016/04/gpfv.pdf Care of people with long term conditions accounts for 70% of the money we spend on health and social care in England. https://www.gov.uk/government/publications/2010-to-2015-government-policy-long-term-health-conditions/2010-to-2015-government-policy-long-term-health-conditions	3. In 2015, the General Medical Council (GMC) stated that, *"Given the ambition that they should be able to prescribe, we have said publicly that PAs should be subject to statutory regulation."* http://www.gmc-uk.org/14___The_scope_of_medical_regulation__physician_associates.pdf_64608156.pdf 4. The Scottish Government have stated their view that this profession should become regulated but, to date, have stated their desire to ensure that the regulation of healthcare professionals is carried out on a UK basis. 5. Independent evaluation commissioned by the New Zealand Health

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	anaesthetics. **Diagnostics and therapeutics** • Interpret written prescriptions accurately, seeking confirmation when the drug, dose or route of administration are unclear, or where prescription as written is outside standard practice. • Under patient specific directives and through consultation with a qualified doctor, draw up and give intramuscular, subcutaneous, intra-dermal and intravenous injections. • Take a venous blood sample, using appropriate tubes for required tests. • Obtain an arterial blood gas (ABG) sample. • Undertake venous cannulation and set up an infusion and infusion pump. • Commence and manage a blood transfusion (measure body temperature / measure pulse rate/blood pressure. • Monitor oxygen saturation	NHS England has identified a set of key areas for action to support those with long term conditions: – Helping patients take charge of their care. – Enabling good primary care. – Ensuring continuity of care. – Ensuring a parity of esteem for mental health. – House of Care – a strategic framework for integrated care for people with long term conditions. The PA is trained specifically to work in medicine complementing the whole healthcare team and brings additional skills into the NHS rather than taking away from existing services. PAs can be safely trained in a shorter period of time therefore increasing the numbers of the medical workforce, adding to the skill mix within the teams and increasing access to quality care for patients. This helps to reduce the workload for the healthcare team and provide greater continuity of care.	Department in April 2015 6. The federated Australian state of Queensland launched a consultation on developing the PA role in June 2016 and invited views on whether the role should be statutorily regulated. They are yet to publish their response. 7. The Academy of Medical Royal Colleges (AoMRC) and PAs are looking for statutory regulation under the GMC. http://www.gmc-uk.org/14___The_scope_of_medical_regulation__physician_associates.pdf_64608156.pdf 8. The British Society for Rheumatology (BSR) suggests the role

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	transcutaneously. • Take nose, throat and skin swabs. • Calculate dosage of insulin using a pre-prescribed sliding scale and administer.		requires further development - such as statutory regulation and prescribing rights - as a prerequisite to its further implementation into the NHS. The BSR believes statutory regulation for the profession would further ensure patient safety and increase the chances of prescribing rights being extended to PAs. http://www.rheumatology.org.uk/includes/documents/cm_docs/2016/b/bsr_physician_associates.pdf 9. A petition with 10,000 signatures was submitted to Parliament on 14 February 2016 calling for PAs to be statutorily regulated to protect patients and the public from risk of harm. https://petition.parliament

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
			.uk/petitions/105948 10. The Royal College of General Practitioners (RCGP) is also supportive of PAs being statutorily regulated. http://www.rcgp.org.uk/membership/practice-teamresources/~/media/Files/Practice-teams/Physician-Assistants-Working-in-General-Practice.ashx

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
3. Context in which the practitioner is working	The PA will be employed as a member of the medical team in either primary or secondary care and will have a clinical supervisory relationship with a named doctor who will provide clinical guidance when appropriate. It is expected that over time the supervisory relationship will mature and that, although the doctor will always remain in overall control of the clinical management of patients, supervision of the PA will lessen.	The FPA's Annual Census 2015 provides information on the location and settings in which employed PAs work: http://static1.squarespace.com/static/544f552de4b0645de79fbe01/t/55db4d74e4b0bd802305b2c0/1440435572672/2015+UKAPA+Public+Census+Results.pdf The settings in which PAs work: (many PAs work in more than one setting for example, theatres and inpatient wards) include: • GP surgery • A&E • Hospital inpatient ward • Hospital intensive care unit • Hospital operating theatre • Hospital outpatient department • Medical assessment unit or acute medical unit • Rehabilitation facility • Specialist surgery – multiple doctors • Specialist surgery – solo doctor • Walk in centre / out of hours • Hospital based liaison psychiatry service • Other psychiatry service	PAs have not sat the applied knowledge test nor the clinical skills assessment. Both are essential (and expensive) components of the Membership of the Royal College of General Practitioners (MRCGP) exam which GP trainees have to pass to qualify. Some GPs argue that there is a risk of creating a two-tier system of working in general practice with additional training for doctors to practise in a GP surgery but PAs actively seeing patients after a two-year course. And when things go wrong, as they sometimes do in a high-pressured environment, it is the doctor who will take culpability.

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		Location: PAs are clustered in London and in the West Midlands around universities which have or have had PA courses with a growing contingent in Scotland. A PA's scope of practice is defined by their supervising doctor (and they work under the General Medical Council delegation clause),[6] so tasks performed by PAs vary hugely depending on local needs.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
4. Vulnerability of the patient or service user	PAs will often have direct contact and responsibility for patients with a range of needs They are required to formulate and document a detailed differential diagnosis having taken a history and completed a physical examination. They can work in hospital or primary care settings and, as such, the type of patient or service user needs are varied but the potential degree of vulnerability is high as PAs need to diagnose the illness or make assessments based on examinations. This carries a high degree risk of harm to patients with complicated medical problems.	Deployment of the PA role varies and they can work in different medical specialties. For example, Barts NHS Foundation Trust has advertised for a PA in renal failure and transplantation surgery where the PA will be exposed to all aspects of surgical and medical management of patients with end stage renal failure and kidney transplantation. Part of the job description requires them to: *"Distinguish between normal and abnormal findings to recognise early stages of serious medical, emotional or mental problems in the patient."* http://bartshealth.nhs.uk/work-with-us/current-vacancies/?jobsearch=Medical,Consultant#job-results Gloucestershire Hospital NHS Foundation Trust has advertised for a PA in gastroenterology and asks them to: • assess and examine gastroenterology patients, present them, initiate and interpret investigations and recommend treatment; • exercise a high degree of personal autonomy when assessing, managing and planning care for a caseload of specific gastroenterology patients; • manage a caseload of specific	The RCP says that the number of PAs in the UK has so far been limited owing to lack of regulation for those taking on these roles. The college has been pushing for regulation of PAs since 2005. In a joint statement, the RCP and the UK Association of Physician Associates (UKAPA) said that statutory regulation would allow PAs to make a *"more effective contribution to the health service and the health economy as well as offering better protection to the public*." The statement said: "*The RCP and the UKAPA are currently setting up a new Faculty of PAs, which would support and develop the role, including revalidation of PA courses, expanding the current programme of continuing*

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		gastroenterology patients as determined by the consultant gastroenterologist, exercising a high level of professional judgement and expertise when delivering care. This will include taking medical histories, undertaking physical examinations, diagnosing and explaining conditions during consultations; • work autonomously in physician assistant led gastroenterology clinics.”	*professional development and managing recertification*.” http://careers.bmj.com/careers/advice/view-article.html?id=20019162

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
5. Scale of risk Size of actual / potential practitioner group Size of actual / potential patient or service user group	**Size of actual / potential practitioner group** It is reported that there are approximately 400 PAs with 900 current students. The voluntary register includes approximately 75% of PAs in practice. It is estimated that there will be 33 qualifying programmes by the end of 2017 and 3500 PAs by 2020, with 1000 per year qualifying after 2020. (Source: Faculty of PAs) **Size of actual / potential patient or service user group** Most broadly, this equates with the population of England: 54,786,300 in mid-2015. The NHS deals with over 1 million patients every 36 hours. http://www.nhsconfed.org/resources/key-statistics-on-the-nhs Within this there are demographic cohorts that are more likely to receive health care.	The PA role is becoming embedded in the health system across all four UK countries, each with their own programmes and qualified PAs. Health Education England's 2016-17 workforce plan includes a 220% increase in commissions of places on PA courses. https://www.hee.nhs.uk/our-work/planning-commissioning/workforce-planning/commissioninginvestment-plan-england-2016-17 The RCGP described the current and future challenges faced by general practice in its report "2020: A vision for general practice". http://www.rcgp.org.uk/campaign-home/~/media/files/policy/a-z-policy/the-2022-gp-a-vision-for-general-practice-in-the-future-nhs.ashx In the report, RCGP states that every year, GPs provide over 300 million consultations in England alone and the vast majority of problems presented to GPs are managed entirely within the community. PAs will be a key support workforce in general practice to help deliver high quality care responsibly and responsively, helping to improve the patient experience.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	For instance **Growth of the elderly population** 'There are now 11.4 million people aged 65 or over in the UK. The number of people aged 65+ is projected to rise by over 40 per cent (40.77%) in the next 17 years to over 16 million. By 2040, nearly one in four people in the UK (24.2%) will be aged 65 or over.' http://www.ageuk.org.uk/Documents/ENGB/Factsheets/Later_Life_UK_factsheet.pdf?dtrk=true **Increase in long term and multiple conditions** '15.4 million people in England (over a quarter of the population) have a long term condition, and an increasing number of these have multiple conditions (the number with three or more is expected to increase from 1.9 million in 2008 to 2.9 million in 2018). People with long term conditions use a significant proportion of health care services (50% of all GP appointments and 70% of days spent	The RCGP argues that the patient experience in 2022 is likely to include: • easy access to health information and advice when needed; • flexibility to access registration, consultations, health records and treatments remotely; • assessment by an expert generalist clinician who has access to the full medical record and can draw on a wide range of skills, diagnostics and resources as needed; • provision of more support to improve health literacy and to enable shared decision-making; • longer consultation times to adequately address problems in the context of family, work and home; • excellent communication between the GP and specialist, with shorter waits to access specialist advice, and more coordinated care; • routinely being involved (with one's carer if wished) in all decisions about care; • a choice of being treated in a local environment by familiar staff with clear signposting of where to go with what problem;	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	in hospital beds), and their care absorbs 70% of hospital and primary care budgets in England.' https://www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk/dom-2/ **Mental health** 'Mental health problems are the largest single source of disability in the United Kingdom, accounting for 23 per cent of the total 'burden of disease'. Research evidence consistently demonstrates that people with long term conditions are two to three times more likely to experience mental health problems than the general population. These can lead to significantly poorer health outcomes and reduced quality of life.' http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/long-term-conditions-mental-health-cost-comorbidities-naylor-feb12.pdf	• improved resilience and self-sufficiency to manage one's own health and illness with appropriate support from a range of community resources; • assurance of the best possible care at the end of life, in the patient's place of choice.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
6. Means of assurance	PAs are not on a statutory register. As such they do not have a protected title and the UK training courses are not accredited. This is in direct contrast to the set-up in the US, where observers note the benefits gained from regulation and the ability of PAs to prescribe (Dalby, 2015). https://www.rcseng.ac.uk/surgeons/supporting-surgeons/regional/events/documents/rr-advanced-roles-and-workforce-planning-19-nov-2015). While there is no statutory regulation, a managed voluntary register for PAs (PAMVR)exists, which is administered by the FPA, a part of the RCP. The FPA was formed in July 2015 following a collaboration between the UK Association of PAs and the RCP. In order to maintain registration on the PAMVR, PAs must undertake 50 hours of continuing professional development every year (under strict criteria); self-declare	St George's University Hospitals NHS Foundation Trust is a large provider of acute and community services in South West London that has funded several PA posts. Until recently it employed the second highest number of PAs in the UK. PAs were chosen over other staff, such as specialist nurses, because there was less associated bureaucracy, giving the care group more autonomy and control over how they were employed. However, the trust has found the lack of statutory regulation frustrating, particularly due to the barriers it presents to prescribing and requesting ionising radiation (particularly important in neurology): http://www.nuffieldtrust.org.uk/sites/files/nuffield/publication/reshaping_the_workforce_web_0.pdf **Employer controls** PAs are employed in secondary and primary care and each sector has different clinical governance and risk approaches, with GP practices governed by their NHS England contract and assurance framework. Given that	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	good health to practice; have no criminal convictions and also successfully complete the PA national re-certification examination every 6 years. It is recommended that employers require PAs that they employ to be registered on the PAMVR; however, this policy is not universally adopted. A full, formal evaluation of the contribution of PAs to secondary care in England was commissioned in 2015, funded by the National Institute for Health Research (NIHR), and is due for publication in 2018.	PA job descriptions explicitly state they will be assessing autonomously and will deal with a caseload of patients with complex medical histories, employer controls are insufficient to mitigate against the risk of harm. Several GPs have previously raised this in articles in the Pulse magazine. http://www.pulsetoday.co.uk/views/letters/physician-associates-should-be-subject-to-mandatory-regulation/20010784.article	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
7. Sector impact	In a study by NIHR, PAs were found to be acceptable, effective and efficient in complementing the work of GPs. PAs can provide a flexible addition to the primary care workforce. They offer another labour pool to consider in health professional workforce and education planning at local, regional and national levels. However, the same study found that in order to maximise the contribution of PAs in primary care settings, consideration needs to be given to the appropriate level of regulation and the potential for authority to prescribe medicines. http://www.ncbi.nlm.nih.gov/pubmed/25642506 International evidence shows the increasing adoption of the PA role across many western countries and that they have made a significant contribution to care. As of May 2015, there were 98,470 PAs licensed to practice in the USA. The PA role also exists in other countries, including Canada, United Kingdom, The	**International Evidence** **USA:** The physician assistant (PA) is a widely recognised, fully integrated, licensed health provider working within the US health care system. The role has been in existence for about forty years and was developed both in response to a shortage of doctors in primary care in the 1960s and in an attempt to increase access to health care for people in underserved, particularly rural, areas. Many PAs have been recruited from other healthcare jobs, often as a second career, but recently there has been an increasing trend towards applications from younger life science graduates who are embarking on a first career. Several studies have looked at the impact of PAs on patient care and experience. The most significant found that:The PA saw younger patients with more acute conditions than the physician, and saw more patients and for longer than the physician. (*Gryzbicki DM, Sullivan PJ, Oppy JM, Bethke A-M, Raab SS: The economic benefit for family/general medicine practices employing physician assistants. Am J Manag Care. 2002, 8: 613-620.)* The delegation of resident and house staff	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	Netherlands, Germany and South Africa.	responsibilities to PAs in hospital settings will facilitate improved inpatient training experiences and more efficient physicians.*(Duffy K: Physician assistants: filling the gap in patient care in academic hospitals. Perspect Physician Assist Educ. 2003, 14: 158-167)* Reported patient satisfaction with PAs has been high, whether in their own right, or compared with physicians and/or Nurse Practitioners *(Hooker RS, Cipher DJ, Sekscenski E: Patient satisfaction with physician assistant, nurse practitioner, and physician care: a national survey of Medicare beneficiaries.)* **Australia**: There are approximately 40 Australian-trained PAs (2013 figure), with a small number employed in the public health care sector and the remaining in the private health care sector. Not all PAs working in the private health care sector are employed in that role. PAs are self-regulated. The PA role is designed to be adaptable and it has the potential to be used in a number of diverse clinical environments. In 2012, Health Workforce Australia report noted that the PA	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		role could make a significant contribution in Australia by: • reducing hospital emergency department waiting times by treating low-acuity patients; • reducing elective surgery waiting times by enhancing productivity of surgeons; • supporting and extending the career span of the rural and remote medical workforce; • providing services in regional, rural and remote areas, including indigenous communities; • increasing the productivity of medical practitioners by releasing them from routine tasks; and • providing a safe and cost effective workforce option. www.hwa.gov.au/news-and-events/news/24-08-2012/physician-assistants-report **New Zealand**: Physician Assistants (PAs) are an unregulated profession in New Zealand. They were initially trialled in New Zealand to explore their feasibility to help address workforce shortages in the health sector,	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		particularly an ageing workforce and a demand-supply gap. PAs were seen as an option that could potentially address supply issues and the cost of care. However, the workforce situation in New Zealand has since changed noticeably since the initial trial in 2011. From a situation of medical workforce supply shortages there has, in recent years, been a shift to a low vacancy environment where the workforce pressures are less generalised than previously. The challenge, and the potential role of PAs in this environment, becomes more one of addressing the distribution of the medical workforce rather than general supply. In New Zealand, there are two key potential contributions of the PA role. Firstly, in geographic areas where workforce shortages remain and are likely to continue to do so in the future; this is particularly relevant in many regional and remote areas in New Zealand. Secondly, value continues to be seen in PAs in contributing to a more financially sustainable health system. In terms of the impact on patient care in clinical settings, an evaluation of the role in April 2015 found that there was also a generally positive response from staff involved in the pilot evaluation of	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		phase 2 of the role who reported: • improved throughput of patients; • reduction in the workload of existing staff; • addition of something that is distinct from existing roles in the clinical setting. https://www.health.govt.nz/system/files/documents/publications/phase-ii-physician-assistant-demonstrations-evaluation-report-jul15.pdf	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
8. Risk perception: Impact on public confidence in the occupation Impact on employers' and other stakeholders' confidence in the occupation	**Public confidence** Current numbers of PAs are relatively small but given the numbers being trained in the pipeline and the national ambition to deploy more PAs in primary care, public confidence in the role will be crucial if PAs are to deliver expert generalist medical care in GP practices where supervision will be minimal. This is dangerous and risky without regulation and protection of title. Regulation also gives credibility to the profession and confidence to the general public and other healthcare professionals that the profession is here to stay and that standards of training and education are robust and will be maintained and improved. **Employer and stakeholder confidence** UK Physician Assistant Association (UKAPA) and the UK &Ireland Universities Board for PA Education (UKIUBPAE) suggest some form of registration or regulation is		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	compulsory for employment. http://www.kingsfund.org.uk/sites/files/kf/media/Simon_de_Lusignan_The_deployment_and_role_of_physician_assistants_in_practices.pdf The Chief Executive of the GMC has also called for PAs to be statutorily regulated. http://careers.bmj.com/careers/advice/Physician_associates_must_have_statutory_regulation,_says_GMC_head		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
9. Unintended consequences	Given the national drive to train more PAs, and the evolving NHS landscape, we expect demand for PA role to be high. It is foreseen that they will be deployed to deliver expert generalist medical care to support the increasing out of hospital workload as faced by GPs and the greater demand from service users for quality treatment and care. An absence of regulation will reduce public and employer confidence in the role and limit its ability to deliver the care that it is trained to do.		

Right-touch Assurance: assessing the level of oversight required for health and care occupations

Title of occupation: Physicians' Assistant (Anaesthesia)
UK countries the occupation is applicable: UK wide

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
1. Description of role	Physicians' Assistant (Anaesthesia) (PA(A)) were introduced in 2004 and are now established within many NHS hospitals. PA(A)s are independent, highly trained and skilled practitioners that work within an anaesthetic team under the direct or indirect supervision of a Consultant Anaesthetist. PA(A)s are fully trained professionals that have completed a Physicians' Assistant (Anaesthesia) Postgraduate Diploma. The postgraduate diploma prepares and trains PA(A)s in all aspects of general anaesthesia delivery. At qualification, PA(A)s perform duties agreed with their medical anaesthetic supervisor, including pre and post-operative patient assessment, maintenance of general anaesthesia (including the administration of	The role of PA(A), formerly known as Anaesthesia Practitioner, is a UK adaptation of the US Certified Anesthesiologist Assistant (CAA) which is itself a variant of the PA role specialising in anaesthesia but again at postgraduate level. The US CAA qualification is at masters level and all practitioners must be registered. Non-medical anaesthesia providers also work within the European Union (EU) and are all formally regulated via their primary nursing qualification. The national health services of both England and Scotland have employed United States-trained PA(A)s for a number of years but only the University of Birmingham currently offers the qualification in the UK. There is a single defined route of entry to the occupation, which is via the Postgraduate Diploma. Entrants are from an existing clinical role in the majority i.e. an Operating Department Practitioner (ODP), or non-clinical science graduates. Physicians'	Workforce predictions made in the year 2000 suggested that the UK would have too few medical anaesthetists to meet the expansion proposals of the then NHS Plan and the anticipated impacts of the 2004 and 2009 implementation of elements of the European Working Time Directive (EWTD) 2009. A joint evaluation was undertaken by the Changing Workforce Programme, the Department of Health (DH), and the RCoA, including visits to the USA, Sweden and Holland, which resulted in the report '*The Role of Non-medical Staff in the Delivery of Anaesthesia Services'*.

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	emergency medication according to local prescription policies) and management of induction and emergence from general anaesthesia under direct supervision. PA(A)s can also deputise for anaesthetists in a variety of situations where their advanced airway and venous cannulation skills will assist in patient care, and where medically qualified anaesthetists cannot be available. On completion of training, the scope of their practice is well defined by the Scope of Practice Guidance Document published in 2016. However, as highly skilled professionals, the majority of PA(A)s have extended the scope of their practice according to locally-defined competency assessment and governance procedures. For example, organisations have trained PA(A)s to perform central neuraxial, regional and local anaesthesia procedures. Others have developed independent PA(A)-led pathways for procedural sedation, and many have	Assistants (Anaesthesia) in the UK must have undertaken and successfully completed all modules and the final examination to gain the Postgraduate Diploma (Physicians' Assistants (Anaesthesia). The nationally agreed curriculum for PA(A)s leads to limits on the scope of practice of PA(A)s on qualification. The agreed scope of practice on qualification for PA(A)s was published by theRCoA, the Association of Anaesthetists in Great Britain and Ireland (AAGBI) and the Association of Physicians' Assistants Anaesthesia (APAA) in 2016. http://www.rcoa.ac.uk/system/files/Scope-of-Practice-PAA-2016.pdf On completion of training they are not qualified to undertake: • Regional anaesthesia/regional blocks; • Obstetric anaesthesia or analgesia; • Paediatric anaesthetic practice; Initial airway assessment and management of acutely ill or injured	(https://www.rcoa.ac.uk/system/files/PUB-role_of_non-medical_staff.pdf 2003) In summary, the report concluded that: • The ways in which anaesthetic services in the UK are currently delivered are not sufficient to maintain and increase future surgical throughput. • In other countries, non-medically qualified staff work well within the anaesthesia team. • The development of the role of non-medically qualified staff required major input from the RCoA.. As of February 2016, there are a total of 165 PA(A)s. The RCoA has established a Managed Voluntary Register of all PA(A)s in employment within the UK, and hopes to be able to provide accurate

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	trained PA(A)s to manage induction and emergence from general anaesthesia independently, including for complex patients with ASA scores ≥ 2. Where extended independent practices have been locally agreed, PA(A)s may work with indirect or distant supervision. Many PA(A)s work in a 2:1 model where one consultant anaesthetist simultaneously supervises two PA(A)s, or a trainee anaesthetist and a PA(A), in two operating theatres (see the PA(A) curriculum framework below). This model aims to reduce theatre downtime leading to increased list efficiency and theatre utilisation. However, due to the prevalence of extended practices, the supervision and deployment models in existing practice are more varied. PA(A)s can also work out of the managed theatre environment: in preoperative assessment clinics, exercise testing, provision of sedation for other specialist procedures, on cardiac arrest teams,	patients (except when the PA(A) is part ofa multidisciplinary hospital resuscitation team called to attend a patient and is first to arrive). The national curriculum for PA(A)'s can be accessed here: http://www.rcoa.ac.uk/system/files/TRG-PA%28A%29-CF.pdf	data regarding this workforce in due course. http://www.rcoa.ac.uk/system/files/CENSUS-REPORT-2015.pdf

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	and for regional and local anaesthesia and analgesia for patients in acute pain.		

Title of occupation: Physicians' Assistant (Anaesthesia) (PA(A))

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
2. Complexity of intervention	PA(A)s do not have a regulatory body and are therefore without national, statutory and thus compulsory standards of practice. PA(A)s carry out complex invasive procedures with significant potential for harm. Practitioners exercise autonomy in decision making as determined by a consultant anaesthetist **Invasive procedures: An inability to perform invasive procedures such as these incorrectly would lead to serious patient harm.** **Key examples of complex interventions:** • Intravenous cannulation to administer drugs. • Administration of drugs which cause unconsciousness, apnoea and/or muscle paralysis, as well as 'emergency' drugs in the context of rapid patient deterioration. • Arterial and central venous	Although at the point of graduation the supervising physician must be present at induction and emergence from anaesthesia, there is no necessity for their presence during the maintenance phase of anaesthesia during a procedure itself. Although on qualification it is stipulated that the supervising physician is available to return to the anaesthetised patient within two minutes of being called, PA(A)s must make numerous and frequent decisions about interventions relating to the immediate care of the patient, including at what point the condition of the patient has deteriorated to a level requiring the input of a physician. These immediate care decisions might include altering ventilator and gas-flow settings to maintain the oxygenation and ventilation of the patient; manipulation to maintain a patient's airway with advanced airway devices; adjusting levels of anaesthesia to prevent awareness without compromising cardiovascular stability; responding to sudden unexpected pathophysiological responses to surgery; and giving intravenous drugs and fluids using Patient Specific Directions (PSDs). The level of supervision for experienced PA(A)s undertaking extended practices in this context is not nationally standardised.	**The complex interventions described in Section 2 carry a high degree of risk of harm to patients. The following evidence supports the case for statutory regulation:** The Association of Physicians' Assistants (Anaesthesia) (APAA) is the representative body of PA(A)s in the UK. Currently there is no statutory regulatory body for PA(A)s to set professional standards. The RCoA manages a voluntary register of qualified PA(A)s. The APAA have previously applied to the Health and Care Professions Council (HCPC) for the regulation of the occupation of PA(A)s, which was supported by the RCoA on the basis that PA(A)s should be statutorily regulated.

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	cannulation for major surgery or the acutely unwell. • Inserting devices in order to maintain a patent airway for unconscious or sedated patients undergoing surgery or resuscitation. • Sedation outside the operating theatre complex for interventional radiology or cardiology. • Central neuraxial anaesthesia e.g. spinal injection and epidural injection. • Regional anaesthesia for acute pain e.g. hip fracture, or for elective surgery. The above procedures demonstrate a selection of clinical interventions performed by PA(A)s which have the potential for significant harm if performed incorrectly or outside of a regulated and safe framework. Due to the potential for rapid changes in clinical state, or unexpected deterioration of patients under anaesthesia, PA(A)s may also	There is no statutory framework to control PA(A)s' access to the drugs that they must administer to perform their role, which include muscle relaxants to facilitate surgery; volatile anaesthetic agents to maintain anaesthesia; opiates and other analgesics to control pain; induction agents to induce anaesthesia; resuscitation drugs given in the event of cardio-vascular collapse; and many others. These are currently given under PSDs agreed at local level. Mistakes in these interventions, or failure to exercise judgement correctly, would lead to catastrophic harm or death for the patient. **Other regulated professions which carry out similar procedures** There is some overlap of scope of practice with the existing regulated profession of ODPs, specifically in the areas of preparation of anaesthetic equipment, drugs and infusions. PA(A)s are, however, distinct from ODPs in their autonomy in that they plan and administer anaesthesia, within guidelines, rather than providing assistance to the medically trained anaesthetist, and also in their level of supervision as they manage anaesthetised or	http://www.hpc-uk.org/assets/documents/10000341DItem15enc11-PAAapplication.pdf In the joint statement on the scope of practice of PA(A)s by the RCoA and AAGBI published in April 2016, both parties updated their position on the role of the new profession: The AAGBI and RCoA (and PA(A)s themselves) agree that statutory registration and regulation are essential for the future of this group. The RCoA intends to administer the existing voluntary register as a prelude to achieving statutory regulation for PA(A)s by a national healthcare regulatory body. Until statutory registration and regulation are achieved, the AAGBI and RCoA will only recognise PA(A)s who have

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	exercise autonomy of judgement and intervention. This can substantially impact on patient health or welfare.	sedated patients independent of direct medical supervision. There is some overlap with the existing regulated profession of paramedic in the performance of some procedures such as intra-venous cannulation and the use of adjuncts to maintain a compromised airway, but the extended range of invasive procedures described earlier, in addition to the administration of medications with the potential for significant harm, is unique to this group. PA(A)s on qualification are trained to practice within elective anaesthesia., However, the 2013 APAA survey reveals that some occupy emergency roles (as first on call in-hours or for provision of regional analgesia for acute pain) where their skills may be required in more remote locations and where patients require immediate decisions and interventions to stabilise their condition.	qualified having completed the approved UK training programme and have subsequently been entered on the voluntary register. The AAGBI and RCoA recommend that only individuals who appear on the voluntary register should be employed in the PA(A) role. Both organisations would support a Member or Fellow who declined to supervise a PA(A) who was not on the voluntary register. https://www.aagbi.org/news/joint-statement-rcoa-and-aagbi-scope-practice-physicians-assistants-anaesthesia The APAA does not have the resources to undertake formal disciplinary proceedings against PA(A)s. The APAA asks any applicant to the Managed Voluntary Register to

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
			confirm that they have read and understood the standards of conduct, performance and ethics expected of them, which are those of the healthcare professional and that they agree that their name will be removed from the register should their employer find them in breach of those standards.

Title of occupation: Physicians' Assistant (Anaesthesia) (PA(A))

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
3. Context in which the practitioner is working	PA(A)s practice specifically in the secondary healthcare setting as deliverers of anaesthesia and critical care and the curriculum is therefore biased heavily towards that. Each PA(A) works within the boundaries of their job description and locally agreed guidelines. On qualification, PA(A)s work as part of the anaesthetic team in general theatres performing pre and postoperative assessment and intervention and providing anaesthesia in theatre as required by the supervising consultant anaesthetist. Past the point of qualification, PA(A)s may develop independent responsibility for patients e.g. for sedation of patients on interventional radiology lists. PA(A)s will also deputise for anaesthetists in a variety of situations where their airway and venous cannulation skills will assist in patient care and where medically qualified anaesthetists cannot be available.	The impact of PA(A)s at Heart of England NHS Foundation Trust. http://www.anaesthesiateam.com/wp-content/uploads/2015/02/RCoA-Article.pdf Recent research and evaluation reports exploring the development of new and extended roles in healthcare provide growing evidence of the importance and growth of this work in order to meet current and future demand. It identifies the barriers, complexities and risks of this approach. (Kings Fund 2016; Nuffield Trust 2016) By reconfiguring the number of medically trained anaesthetists required to meet the increasing demands on anaesthetic services, the aim is that consultant anaesthetists will be able to participate routinely in out-of-theatre activities that are at present usually attended by junior doctors. This development has the potential to improve both the staff experience and patient 'journey'. Proposed examples of the benefits of including PA(A)s in the anaesthetic team include: • Less waiting for a medical anaesthetic opinion in pre-admission clinics. • Faster resolution of problems in patients' post-operative pain.	Providers of secondary healthcare which could employ PA(A)s are as follows: - 154 acute trusts http://www.nhsconfed.org/resources/key-statistics-on-the-nhs NHS Five Year Forward View: https://www.england.nhs.uk/wp-content/uploads/2014/10/5yfv-web.pdf *Supporting integration through new roles and working across boundaries,* Helen Gilburt, The Kings Fund, June 2016 http://www.kingsfund.org.uk/publications/supporting-integration-new-roles-boundaries

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	The development of such extended practice is currently managed at a local level, with no nationally agreed professional standards. This is a concern for some consultant supervisors, and poses a risk to patients. Across NHS Trusts in England, most general anaesthetic services provide 24 hour services for adult and child patients attending for emergency surgery across most specialties, acute emergencies attending hospital via A&E, X-ray procedures, and cover for maternity services. With the growing shortage of medically-trained anaesthetists, it is likely that PA(A)s will be invaluable in providing care to patients in these extended areas of anaesthetic practice.	• More immediate response by senior medical staff for attendance to 'outreach' patients. • Less waiting for anaesthesia for out-of-theatre procedures such as cardioversion. • More senior anaesthetic staff available for emergency calls in A&E. • Compliance of junior doctors' rotas with the EWTD.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
4. Vulnerability of the patient or service user	Patients undergoing general anaesthesia are by definition vulnerable due to the intrinsic unconsciousness and physical paralysis required for successful surgical procedures. Moreover, the profile of patients requiring emergency anaesthetic interventions will be in a critical or life-threatening condition. Many of these patients will require the skills and knowledge required of intensive care and/or emergency pain management and so are a significantly vulnerable patient group. Initially upon graduation, PA(A)s will perform duties delegated to them by their consultant anaesthetist supervisor as described above. However, under locally-agreed extended practice roles, PA(A)s can develop independent responsibility for patients e.g. for sedation of patients undergoing interventional radiology procedures. PA(A)s will also deputise for anaesthetists in a variety of situations where their airway and	The risks of anaesthesia, even when performed by experienced medically-qualified staff, are well documented. A series of patient information leaflets produced by the RCoA provides numerical data on the relative risks of various anaesthetic interventions, including nerve damage, eye damage, accidental awareness, serious allergy and death. The PA(A) may be employed in Trusts which fall short of the highest standards, and this may augment the vulnerability of patients. http://www.telegraph.co.uk/news/nhs/11931401/Three-in-four-NHS-hospitals-are-failing-says-watchdog.html	The vulnerability of patients is evidenced by the 2016 National Institute of Academic Anaesthesia survey where patients reported anxiety as the most common worst aspect of their operation (33%). EMK Walker, M Bell, TM Cook, MPW Grocott, and SR Moonesinghe for the SNAP-1 investigators. *Patient reported outcome of adult perioperative anaesthesia in the United Kingdom: a cross-sectional observational study*. British Journal of Anaesthesia; 2016. The Risks of Anaesthesia, RCoA https://www.rcoa.ac.uk/node/428 http://www.rcoa.ac.uk/patients-and-relatives/risks

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	venous cannulation skills will assist in patient care and where medically qualified anaesthetists cannot be available which is likely to include the emergency setting. Regulation for PA(A)s in this context can provide essential standards, guidance and validation that is of benefit to the practitioner and those he or she is caring for.		

Title of occupation: Physicians' Assistant (Anaesthesia) (PA(A))

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
5. Scale of risk Size of actual / potential practitioner group Size of actual / potential patient or service user group	**Size of actual / potential practitioner group** At September 2016, there were 145 qualified PA(A)s and a further 24 in training. Whilst there are no active targets for the expansion of this role by the DH, the growing predicted deficit of more than 3000 medical anaesthetists identified by the 2015 Centre for Workforce Intelligence (CfWI) report supports a likely future expansion in the non-medically trained anaesthetic workforce. **Size of actual / potential patient or service user group** Anaesthesia is the largest inpatient specialty, with up to two-thirds of all patients receiving care from an anaesthetist during their hospital stay. Perioperative care remains the mainstay of an anaesthetist's work load, and evidence reveals that the demand for surgical intervention has risen by 63% over the last decade to an approximate 10,600,000 finished consultant episodes per year. This increase is primarily driven by older	The 2016/17 HEE Mandate includes a target for the expansion of the PA role to 1000 PAs in General Practice by 2020, recognising the increasing volume and complexity of patient demand for primary care services. This demand is mirrored in anaesthetics and intensive care medicine (ICM) and is acknowledged not to be reconcilable by medically-trained anaesthetists alone. The demand for anaesthesia and ICM services could outstrip supply over the next 20 years, noting a need for growth of 4.7 percent per annum in both specialties. It also recognises an existing, unmet need of 15 percent for anaesthetics and 25 percent for ICM.	Centre for Workforce Intelligence. *In-depth review of the Anaesthetics and Intensive Care Medicine Workforce.* 2015. http://www.cfwi.org.uk/publications/in-depth-review-of-the-anaesthetics-and-intensive-care-medicine-workforce/@@publication-detail The 2016/17 HEE Mandate. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/559940/HEE_mandate_2016-17_acc.pdf In 2015, the CfWI undertook a detailed study on the supply of anaesthetists. Baseline demand for anaesthetics services is forecast to increase by 25 per cent by 2033 and by 26 per cent for ICM when considered solely on

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	adults, with demand growing most rapidly in the over 75 group. In addition to the volume of demand, the complexity and average individual patient need continues to rise due to the prevalence of complex and chronic disease, multiple conditions and obesity. These factors have contributed to the significantly increased demand for anaesthetic services, and an increased average level of risk for patient encounters. Most broadly, this equates with the population of England: 54,786,300 in mid2015. The NHS deals with over 1 million patients every 36 hours (http://www.nhsconfed.org/resources/key-statistics-on-the-nhs) with other services delivering other key healthcare provision both long-term and short-term. Within this, there are demographic cohorts that are more likely to receive healthcare.		demographic changes. This means CfWI modelling projects the number of anaesthetist and intensivist certificate of Completion of Training (CCT) holders in anaesthetics and ICM would need to rise from approximately 6100 to approximately 7600 full time equivalents (FTE) from 2013 to 2033. http://www.cfwi.org.uk/publications/in-depth-review-of-the-anaesthetics-and-intensive-care-medicine-workforce/@@publication-detail

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	For instance: **Growth of the elderly population** 'There are now 11.4 million people aged 65 or over in the UK. The number of people aged 65+ is projected to rise by over 40 per cent (40.77%) in the next 17 years to over 16 million. By 2040, nearly one in four people in the UK (24.2%) will be aged 65 or over.' http://www.ageuk.org.uk/Documents/EN-GB/Factsheets/Later_Life_UK_factsheet.pdf?dtrk=true **Increase in long term and multiple conditions** 15.4 million people in England (over a quarter of the population) have a long term condition, and an increasing number of these have multiple conditions (the number with three or more is expected to increase from 1.9 million in 2008 to 2.9 million in 2018). People with long term conditions use a significant proportion of health care services (70% of days spent in		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	hospital beds) and their care absorbs 70% of hospital and primary care budgets in England. https://www.england.nhs.uk/resources/resources-for-ccgs/out-frwrk/dom-2/		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
6. Means of assurance	**Supervision by a regulated professional** PA(A)s remain accountable to a consultant anaesthetic supervisor for overall responsibility for patient care, even in the context of extended practices. This relationship is founded upon an assumption of adherence to generic professional standards and competencies in the absence of a statutory regulator. However, the RCoA and AAGBI are clear in their position that statutory regulation is an essential component of supervision for the future of the profession, to assure both quality standards and processes for accountability in the event of serious incidents or fitness to practice concerns. **Protected title** The title of PA(A) was agreed upon in 2007 in consultation with the DH, due to confusion with other roles and titles including ODP, PA, recovery nurses and others. The title has the support	**Supervision by a regulated professional** The joint position statement published by the RCoA, APAA and AAGBI in April 2016 states that, 'The AAGBI and RCoA (and PA(A)s themselves) agree that statutory registration and regulation are essential for the future of this group. The RCoA intends to administer the existing voluntary register as a prelude to achieving statutory regulation for PA(A)s by a national healthcare regulatory body. Until statutory registration and regulation are achieved, the AAGBI and RCoA will only recognise PA(A)s who have qualified having completed the approved UK training programme and have subsequently been entered on the voluntary register. The AAGBI and RCoA recommend that only individuals who appear on the voluntary register should be employed in the PA(A) role. Both organisations would support a Member or Fellow who declined to supervise a PA(A) who was not on the voluntary register.' The clarity of this statement in terms of the need for statutory regulation reflects the level of concern from supervising medical consultants about the potential risk to patients	Joint Statement from the RCoA and AAGBI on the scope of practice of Physicians' Assistants (Anaesthesia). April 2016. http://www.rcoa.ac.uk/sites/default/files/JointStatementPAA2016.pdf L Miller, A Cox, J Williams. *Evaluation of the Advanced Practitioner Roles*. Institute for Employment Studies; 2009.

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	of the RCoA although there are still mixed views about the accuracy of the title reflecting the actual scope of practice and functionality of the role. Ensuring a protected title would provide essential clarity of role for supervisors, colleagues and patients. In addition, it would assure a common and clearly defined standard of training has been achieved by anyone using the title. This clarity is of particular benefit in the context of the introduction and expansion of a number of non-medical roles across the NHS, including Nursing Associates, PAs, Surgical Care Practitioners, Advanced Critical Care Practitioners, and other advanced practitioner roles. **Prescribing** Administration of medicines is currently managed variably across the country. Most PA(A)s working in 2:1 formats administer medicines according to locally determined	and service users posed by an unregulated anaesthetic workforce. There has been no large-scale evaluation of the success or efficacy of the PA(A) role in the UK since the introduction of the role in 2004. A 2009 Institute for Employment Studies Report failed to assess the impact of the advanced practitioner role, including PA(A)s, due to a lack of quantitative data. However it did note a significant barrier to integration of the roles caused by lack of clarity over the title. Reports, such as Kings Fund 2016, indicate that 'evidence suggests that valuing and reinforcing professional and organisational identities can help develop trust, recognition and team working'.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	prescribing protocols signed by the consultant supervising anaesthetist at the start of the case. For PA(A)s undertaking extended practices such as sedation lists for interventional procedures, some prescribe directly under their previous regulated professional role e.g. under the title of critical care nurse. In the absence of statutory regulation of the PA(A) role, PA(A)s and their supervisors lack assurance over prescribing rights and responsibilities. This poses a potential significant risk to PA(A)s, patients and supervisors. **Employment controls** There have been failings in care delivery and management despite the following employment controls being in place: • Good CQC inspections; • Evidence of performance management regimes; • Policies and procedures on organisational governance; • Information governance;		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	• Record keeping and knowledge management policies. National Reporting and Learning System (NRLS) data for 2012, analysed by the Safe Anaesthesia Liaison Group, shows medication errors are common in all areas of clinical practice and have been estimated to occur in around 1:133 anaesthetics. Medication errors are the second most common category of incident reported to the National Patient Safety Agency (NPSA) and many more are likely to remain unreported. Many medication errors do not result in patient harm but some can have devastating effects, as can be seen in one of the reports this quarter. Anaesthetists are unusual in that they are responsible for prescribing, dispensing and administering potent drugs, often in rapid succession, whilst monitoring the patient in the complex environment of the operating theatre.		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	A total of 3188 anaesthesia-related incidents were reported during the specified time period. 69% of cases were reported as 'near miss' (harm was prevented from reaching the patient) and 7.5% resulted in moderate or severe harm or death (10 deaths reported) (Figure 1). 65 incidents were reported using the anaesthetic eForm; 40% of these incidents were reported to the NPSA within one day of occurrence. 3123 incidents were reported using Local Risk Management Systems (LRMS); 0.6% of these incidents were reported within one day and 48% were reported more than 30 days after they had occurred. https://www.aagbi.org/sites/default/files/images/PATIENT%20SAFETY%20UPDATE%20-%20Mar%202012.pdf		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
7. Sector impact	The increasing deficit of medically-qualified anaesthetists highlighted by the 2015 CfWI in-depth analysis supports the need for an expansion on the non-medical anaesthesia workforce. The expansion of new medical associate professional roles such as PA(A)s is central to service transformation in the context of the NHS Five Year Forward View, locally-integrated care models and 7-day services in England. Where the impact of PA(A)s has been audited locally, there is accumulating evidence of no significant harm to patients and significant positive impact including facilitating pre-operative assessment, enabling staggered admission of patients, and reducing turnaround times. There is an increasing acceptance that PA(A)s present part of the solution to providing high quality anaesthetic service provision. The costs of training are currently borne by the employing trust providing	The intended benefits of PA(A)s in the sector include: **Increasing flexibility for medical anaesthetists to allow** • Less waiting for a medical anaesthetic opinion in pre-admission clinics. • Faster resolution of problems in patients' post-operative pain. • More immediate response by senior medical staff for attendance to 'outreach' patients. • Less waiting for out-of-theatre procedures such as vascular access and sedation for minor procedures. • Two to one working can release more senior anaesthetic staff for service provision. • Development of new services e.g. regional anaesthesia, sedation and vascular access. • Greater opportunities to provide tuition to anaesthetic trainees while maintaining patient safety. • Reduction in the service component of trainee anaesthetists' workload enabling medical anaesthetic trainees to attend appropriate training opportunities.	Physicians' Assistants (Anaesthesia) Review. AAGBI; 2011. https://www.aagbi.org/sites/default/files/PA(A)%20Review_FINAL%2016MAR2012_0.pdf European Society of Regional Anaesthesia Academy. September 2016. Follow up review of non-physician delivered upper limb local anaesthetic nerve blocks at a tertiary referral hand centre. ESRA Academy. Prins N. Sep 8, 2016; 138342 http://academy.esraeurope.org/esra/2016/35th/138342/niko.prins.follow-up.review.of.non-physician.delivered.upper.limb.local.html?f=m1 Phillips M, Dixon K, Murray F (2013) The 'Two-to-One Model' of

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	trainee PA(A)s with a salary and university fee provision. This is a local NHS trust business case model which therefore has risks to those NHS organisations providing this funding for training in that individual PA(A)s may not be obliged to continue working in that trust, and also a risk to the NHS as a whole as it prevents UK-wide workforce planning.	• Increasing capacity in teams to improve theatre efficiency. • Facilitating service reorganisation. • Hospital services at night. Potential risks of impact identified by the RCoA, AAGBI and APAA include: • Failure of PA(A)s to provide high quality anaesthetic care to patients and service users. • Unclear expectations of the role, resulting in role confusion and delineation of scope of practice. • Variability of competence caused by employment of overseas, non-medically qualified anaesthetists with differing backgrounds and experience. • Ambiguous career prospects, workforce planning and recruitment difficulties. • Failure of front-line teams to accept and integrate the role due to poor understanding. • Potential for negative impact upon training opportunities for junior medical anaesthetic staff and/or trainee ODPs, in the event of a rapid planned expansion of the role such as in the PA workforce. No evidence of any	Delivering Anaesthesia Using Physicians' Assistants (Anaesthesia) in Day Surgery has no Detrimental Impact on Clinical Outcomes, Heart of England NHS Foundation Trust, United Kingdom, *The Journal of One-Day Surgery*, Vol 23. Phillips, Winwood, Murray (2012) Physicians' Assistants (Anaesthesia) Deployed in the 'Two-to-One Model'. Reduce the Cost of Providing an Anaesthetic Service to a Two-Theatre Day Surgery Unit by 22 Per Cent Heart of England NHS Foundation Trust, *The Clinical Service Journal*

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		negative impact of PA(A)s, on training currently. All these risks would be significantly mitigated by the protection of title, role clarity, improved employer confidence in quality of staff, standardisation in practice and greater assurance and equity of competence afforded by statutory regulation of the profession. Local scale studies of efficacy of anaesthetic care, generally for regional anaesthesia, reveal at least an equivocal quality and patient satisfaction rating compared to medical professionals. However, these data are local, confined to examples of extended role/specialised services performed by PA(A)s, and their generalizability is limited by the small number of PA(A)s currently in practice. One significant factor in preventing a large scale review of patient safety and quality of care performed by PA(A)s is the lack of appropriate coding in the Electronic Staff Record (ESR). The professional identity and clarity of role afforded by statutory regulation might support improved national data collection on outcomes for PA(A)s. In the	www. clinicalservicesjournal.com/Story. aspx?Story=10061.

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		absence of regulation, this lack of coherent data collection for PA(A)s and other medical associate professionals is itself a risk to patient safety.	

Title of occupation: Physicians' Assistant (Anaesthesia) (PA(A))

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
8. Risk perception: Impact on public confidence in the occupation Impact on employers' and other stakeholders' confidence in the occupation	The 2016 joint position statement on Physicians' Assistants in Anaesthesia by the RCoA, AAGBI and APAA is explicit in its stance regarding the need for statutory regulation of the profession. This is for the primary protection of patient safety and secondarily for clarity for supervisors and colleagues, recruitment and employment assurance, and the development of enhanced roles.	'The AAGBI and RCoA (and PA(A)s themselves) agree that statutory registration, and regulation are essential for the future of this group. The RCoA administers the existing voluntary register as a prelude to achieving statutory regulation for PA(A)s by a national healthcare regulatory body. Until statutory registration and regulation are achieved, the AAGBI and RCoA will only recognise PA(A)s who have qualified having completed the approved UK training programme and have subsequently been entered on the voluntary register. The AAGBI and RCoA recommend that only individuals who appear on the voluntary register should be employed in the PA(A) role. Both organisations would support a Member or Fellow who declined to supervise a PA(A) who was not on the voluntary register. Finally the AAGBI and RCoA acknowledge that development of PA(A) enhanced roles is taking place and that this remains a controversial issue. The AAGBI and RCoA would only consider supporting role enhancement when statutory regulation is in place. Responsibility for such role enhancement, where it exists, currently remains a local governance issue. Patient safety remains the priority of the AAGBI and RCoA; both organisations will keep this	Joint statement from the RCoA and AAGBI on the Scope of Practice of Physicians' Assistants in Anaesthesia. April 2016. https://www.rcoa.ac.uk/sites/default/files/JointStatementPAA2016.pdf A study to establish if patients have confidence in Physicians' Assistants (Anaesthesia) during their perioperative experience. A dissertation submitted in fulfilment of the requirements for the Degree of Master of Science-Physicians' Assistant (Anaesthesia) Howard Bruce Cox; Institute of Clinical Science University of Birmingham; November 2016.

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		policy under review, as the evidence continues to develop.' A dissertation submission for an MSc in Physician's Assistant (Anaesthesia) from the Heart of England Foundation Trust in 2016 compared perceptions of patient's confidence in PA(A)-led perioperative care with that provided by a non-consultant career grade physician anaesthetist. This revealed high levels of patient confidence in both roles and no statistical difference between the groups. However, the author recognises some methodological limitations which restrict the applicability of this research widely outside the investigation centre itself.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
9. Unintended consequences	Significant change in complex systems always stimulates unintended consequences. We have reviewed a number of evaluations of similar initiatives, which confirm this: 'An evaluation of the introduction of a new Role redesign can be seen as provoking change in a complex adaptive system where outcomes are multifaceted and unpredictable.' (Kneebone et al, 2006) Unintended consequences from these evaluations include: • Resistance to change and innovation among other staff, slowing down the productivity of the role and undermining safety. • Confusion regarding role boundaries leading to underperformance, error or taking on additional work without accountability and training. • Reluctance to delegate to the new role because of concerns about safety and lack of		*New workforce roles in health care: Exploring the longer-term journey of organisational innovations.* Jackie Bridges, City University, London, UK; Louise Fitzgerald, De Montfort University, Leicester, UK, and Julienne Meyer, City University, London, UK Journal of Health Organization and Management Vol. 21 No. 4/5, 2007 pp. 381-392 *q* Emerald Group Publishing Limited **What are the key factors in the successful implementation of assistant practitioner roles in a health care setting? A service evaluation** A Report on Phases 1 & 2 Hilary Bungay, Jo Jackson, Sue Lord, Terry Smyth. University of Essex; 2013

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	regulation. • Success of the role leading to additional work for staff in related services (improved through flow of patients) and increased work load for the practitioner. • Lack of sufficient assessors and mentors due to high uptake.		https://www.essex.ac.uk/hhs/documents/research/assistant-practitioner-roles-2013.pdf The perioperative specialist practitioner: developing and evaluating a new surgical role. R Kneebone, D Nestel, J Chrzanowska, A E Barnet, J Younger, A Burgess, and A Darzi Qual Saf Health Care. 2006 Oct; 15(5): 354–358.

Right-touch Assurance: assessing the level of oversight required for health and care occupations

Title of occupation: Surgical Care Practitioner
UK countries the occupation is applicable: England; Scotland (small number of cardiac SCPs in Edinburgh and Glasgow); Wales (small number)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
1. Description of role	Assistants in surgical practice have been a part of the NHS since 1989 and have developed as extended roles for nurses and operating department practitioners demonstrating their value in the surgical environment. UK perioperative restructuring has also been influenced primarily by the European Working Time Directive (EWTD) 2009, which reduced junior doctors working to a 48hr week, effective from 1st August 2009. A Surgical Care Practitioner (SCP) is a registered healthcare professional (nurse, ODP or other allied health professional) who has extended the scope of their practice to work as a member of a surgical team. They	As the role of the SCP emerged in practice, the need to ensure that consistent and appropriate standards in training were maintained became evident (Assistants In Surgical Practice; A Discussion Document. September 1999). The Royal College of Surgeons of England (RCS (England)) led a steering group that was established to develop a National Curriculum Framework for the developing role of surgical care practitioner. Following a period of public consultation led by the Department of Health in 2005 (Public Perceptions of Surgical Practitioners (working title): Report of Qualitative Research. July 2004) the curriculum framework was finalised and published in April 2006 and represents the definitive statement of the requirements (including national standards for competence in theoretical and clinical skills) for SCP	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	perform surgical intervention and preoperative and postoperative care under the supervision and direction of a consultant, although not independently (RCS 2013). Some can operate independently when they are judged as competent to do so. The SCP is employed as a member of the extended surgical team and as such is clinically responsible to the consultant surgeon who delegates aspects of perioperative care to the SCP. As a registered practitioner, the SCP also has a professional and legal responsibility to the patient through professional codes of conduct and a duty of care. In addition, a number of SCPs follow the Association for Perioperative Practice (AfPP) voluntary code of conduct for registered practitioners working in advancing surgical roles. The RCS (England) has provided guidance on commissioning the role: • Firstly, a requirement for the role must be acknowledged by senior	training to be provided by universities, higher education institutions and trusts in the UK. A refreshed and update curriculum has since been published by the Royal College of Surgeons of England in 2014 http://www.rcseng.ac.uk/surgeons/training/accreditation/surgical-carepractitioners-scps Entry onto any SCP programme will be determined by the higher 2 AfPP SCP FAQ 2014 J Quick & S Hall education institute.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	surgeons, managers and stakeholders. • Funding must be available for a two-year trainee SCP post and a substantive post upon qualifying. • Trusts tend to recruit into a band 6 trainee SCP post and upgrade on completion of academic qualification. • Banding varies, however. From fact finding initiatives and discussions with a wide cross-section of practitioners, it is apparent that typically an SCP is working at the minimum level of Band 7 on the Agenda for Change and National Skills Framework. • A clinical governance framework that includes risk assessment and the implementation or review of local policies and procedures will also need to be in place to support the practitioner undertaking the SCP role. A job description detailing the role and responsibilities of the trainee SCP and, once qualified, the SCP	Minimal requirements are registration as a nurse, ODP or certain AHP (Allied Healthcare Professional) with evidence of 18 months post-qualifying experience in a clinical perioperative background. Evidence that the candidate is in, or in a position to be appointed to, a substantive / recognised trainee SCP post prior to commencing the SCP programme will be required. The trainee SCP must attain core and specialist knowledge and skills as detailed within the Royal College of Surgeons of England SCP Curriculum Framework 2014 (RCS 2014). There are a number of educational routes through which this can be achieved including completion of a minimum graduate programme of study offered by a number of accredited academic institutes. In addition, stand-alone study days, such as a surgical skill workshop, can also help the SCP attain appropriate skills. A commitment to continuing professional development along with an understanding of the professional, legal and ethical implications of extending practice is also required.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	role, is essential. Registered practitioners must not undertake the SCP role until this clinical governance framework is in place.	The number of SCPs who have practised in the National Health Service in each year since 2005 is not identified separately in the annual NHS workforce census.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
2. Complexity of intervention	The role encompasses pre, intra and post-operative care. Under the direction of a consultant surgeon, the SCP may participate in: • Preoperative assessment, including clinical history taking and physical examination. • Enhancing the communication link between theatre, patient and ward. • Involvement in the team completion of the 'Five Steps to Safer Surgery'. • Assisting with the preparation of the patient, including urinary catheterization, venepuncture, patient positioning and preparation. • Providing assistance with surgical procedures. • Some technical and operative procedures according to their scope of practice. • Facilitating the training of trainee surgeons. • Arranging appropriate pre and post-operative investigations. • Post-operative care – including wound assessment and management. • Evaluation of care, including the		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	discharge process, follows up care and outpatient activities.		

Title of occupation: Surgical Care Practitioner (SCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
3. Context in which the practitioner is working	The role of SCPs has largely expanded since the first SCP curriculum was published in 2006. The scope of practice in particular embraces working in clinics, conducting pre-operative assessment and facilitating the continuity of patient care on the wards. However, the role is restricted to practising in acute and secondary care.	SCP Curriculum Framework 2014 http://www.rcseng.ac.uk/surgeons/training/accreditation/surgical-carepractitioners-scps	
4. Vulnerability of the patient or service user	SCPs will provide care for surgical patients in both elective and emergency care settings. They will assess, diagnose and manage patients pre and post-operatively. They will also assist in theatre perioperatively and, in some cases, undertake procedures independently. They will be involved with a variety of service users with variable health needs and presentations. They are expected to diagnose and treat patients which increases the risk associated with that role, especially in the context of the acutely ill patient. The SCP will be part of the surgical	It is outlined in the SCP Curriculum Framework 2014 that the SCP must be a registered practitioner which ensures they have professional accountability. It also outlines that they will work as part of the surgical team under the supervision of a consultant surgeon. However, the scope of practice, along with the level of supervision, can fluctuate from department to department and trust to trust. This disparity can make it difficult to assess the overall risk with practitioners who work with more autonomy at greater risk. Surgical care practitioners who have undertaken a structured Masters programme with set assessments may be better prepared	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	team and will have both educational and clinical supervision by consultant surgeons. The consultant surgeon will maintain overall responsibility for patient care and will supervise the SCP directly or indirectly. As SCPs are required to be registered they will be accountable for their actions to their professional body, and must abide by their code of conduct. This should mitigate the risk to some extent.	to undertake the role of increased autonomy. https://www.rcseng.ac.uk/standards-and-research/standards-and-guidance/service-standards/extended-surgical-team/	

Title of occupation: Surgical Care Practitioner (SCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
5. Scale of risk Size of actual / potential practitioner group Size of actual / potential patient or service user group	**Size of actual / potential practitioner group** It is difficult to ascertain the exact number of SCPs currently working. A faculty at the RCS (Edinburgh) has been established. SCPs may also have membership at the Association of Perioperative Practice. The RCS (England) is also looking at the wider surgical team and how to support and monitor current practice. Currently, our best estimate is around 200 SCPs in the UK. **Size of actual / potential patient or service user group** Anyone within the population who present with surgical related problems has a potential to be cared for by SCPs.	With the increased pressures on the junior doctor workforce, alternative ways of working are being reviewed to meet the service needs across the NHS. Enhanced and advanced roles are being considered as a means of meeting the workforce deficit. SCPs are one of the advanced roles being reviewed and utilised to support the surgical workforce across the surgical patient pathway (pre, peri and post-operative).	

Title of occupation: Surgical Care Practitioner (SCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
6. Means of assurance	Individuals practising as a Surgical Care Practitioner are required to be a registered practitioner and are therefore regulated under their primary profession. However, Surgical Care Practitioner is not a protected title. Patients and the public recognise health professional titles because they indicate competence and fitness to practise. There is a potential risk to patient safety when people practise in a specific profession which requires practitioners to be registered professionals in another profession but can demonstrate the competence to extend their scope of practice to work as a member of the surgical team.[iv] In relation to education and training there are currently four Masters courses which are accredited by the RCS (England) linked with the SCP Curriculum Framework 2014. However, in the past there have been numerous "in house" education programmes which have less quality	Individual employers will have their own quality assurance in terms or clinical governance and risk management arrangements. However there is still confusion around the scope of practice and educational requirements of advanced roles including Surgical care practitioners and this may make it difficult for the employers to mitigate risk. Patient safety around the role has been raised as a concern by the Patients Association, who has argued that there needs to be greater clarity around SCPs and who is regulating them. http://www.bbc.co.uk/news/health-20629396[v]	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	assurance. Further, there have been masters courses in some institutions that have not been accredited by RCS (England). Some of these have been "transient" and currently most, if not all, have disappeared with the exception of the RCS (England) accredited courses. There is currently no mandatory register for SCPs. However some steps are being taken to support and quality assure SCPs. A faculty at the RCS (Edinburgh) has been established. SCPs may also have membership of AfPP. The RCS (England) is also looking at the wider surgical team and how to support and monitor current practice.		

Title of occupation: Surgical Care Practitioner (SCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
7. Sector impact	Within the report, *A Question of Balance; The Extended Surgical Team*. RCS (England); 2016, departments which had SCPs were reviewed. The evidence for SCPs was positive and suggested, "multi-professional teams working together effectively to provide better continuity of care for patients, greater efficiency of discharge and in theatres, and smoother running clinics". Although recommendations have been made to support current and integrate future SCPs.	There is currently no international evidence as SCPs are unique to the UK The Question of Balance report evidences the role of an "extended team" within UK surgical practice. This team includes SCPs in some of the units visited. https://www.rcseng.ac.uk/library-and-publications/college-publications/docs/question-of-balance/	

Title of occupation: Surgical Care Practitioner (SCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
8. Risk perception: Impact on public confidence in the occupation Impact on employers' and other stakeholders' confidence in the occupation	**Public Confidence** Currently the numbers of SCPs are relatively small but there may be an increased need to support the workforce of the future. There needs to be more clarity for the public on the different roles to instil confidence in non-medical practitioners working as part of the surgical team. **Employer and Stakeholder Confidence** There are still concerns over the clarity of scope of practice and educational requirements and this confusion can lead to employers having concerns over governance.	There is currently no evidence regarding public confidence.	
9. Unintended consequences	N/A	N/A	N/A

Right-touch Assurance: assessing the level of oversight required for health and care occupations

Title of occupation: Advanced Critical Care Practitioner
UK countries the occupation is applicable: England and Wales

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
1. Description of role	Advanced Critical Care Practitioners (ACCP) are clinical professionals who have developed their skills and theoretical knowledge to a high standard. They are experienced and educated members of the care team who are able to diagnose and treat health care needs or refer patients to an appropriate specialist if needed. They are empowered to make high-level clinical decisions and will often have their own caseload. It is likely that entrants into this advanced role will be from established roles in healthcare such as nursing and Allied Health Professionals. ACCPs can be from a nursing or physiotherapy background. However the majority of trainee ACCPs at present have nursing as	Any UK registered professional can train as an ACCP i.e. nurses and certain AHPs. Currently this would exclude ODPs as non-medical prescribing is a fundamental part of the ACCP role; being ineligible to undertake this aspect of the course would at this point preclude them from applying for a Faculty of Intensive Care Medicine (FICM) recognised ACCP programme. The curriculum for a postgraduate diploma/masters level qualification in Advanced Critical Care Practice has been informed by, and aligned to, the National Education and Competence Framework for Advanced Critical Care Practitioners (Department of Health; March 2008) https://www.ficm.ac.uk/sites/default/files/National%20Education%20%26%20Competence%20Framework%20for%20ACCPs.pdf and the Advanced Practice Toolkit for Scotland	Many critical care units have introduced new roles or have extended the scope of practice of nurses, technicians, physiotherapists and clinical pharmacists. These developments have been in response to variations in recruitment and retention patterns, the impact of the Working Time Directive, increasing complexity of care pathways and technology, and maximizing opportunities to prevent or reduce the risk of critical illness in medical and surgical patients in general ward areas.

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	their primary profession. 17 trusts have trained ACCPs working on medical rotas in intensive care units (ICU). This doesn't take into account any trust where ACCPs are currently in training – we currently have trainees on our register from 23 different hospitals. Most ACCPs tend to stay working at the trust they trained at. Upon completion of training, the functions that ACCPs perform are: • Undertake comprehensive clinical assessment of a patient's condition. • Request and perform diagnostic tests. • Initiate and manage a clinical treatment plan. • Provide accurate and effective clinical handovers. • Undertake invasive interventions within the scope of practice. • Provide professional leadership and support within a multi-	(Scottish Government; June 2008). http://www.advancedpractice.scot.nhs.uk/ This curriculum is applicable for trainees entering training from August 2015 https://www.ficm.ac.uk/sites/default/files/ACCP%20Curriculum%20v1.0%20(2015)%20COMPLETE_0.pdf https://www.ficm.ac.uk/accps/curriculum All ACCP trainees must register with the FICM as soon as possible after starting their ACCP training, via submission of an ACCP Trainee Registration Form to the Faculty. There is no fee for registration but it is considered vital that ACCP trainees register to inform future training and workforce planning. The Career Framework for Health developed by Skills for Health in 2006 provided a structured career ladder that can be characterised as level 'benchmarks' to support consistency. This framework places the 'Advanced Practitioner' at Level 7, defining advanced practitioners as: "Experienced clinical professionals who have developed their skills and theoretical	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	professional team. • Work autonomously in recognised situations. • Demonstrate comprehensive knowledge across a range of subject areas relevant to the field of critical care. • Critically analyse, evaluate and synthesise different sources of information for the purpose of assessing and managing the care of a critically ill patient. • Apply the principles of diagnosis and clinical reasoning that underlie clinical judgement and decision making. • Apply theory to practice through a clinical decision-making model. • Apply the principles of therapeutics and safe prescribing. • Understand the professional accountability and legal frameworks for advanced practice. • Function at an advanced level of practice as part of the multidisciplinary team as determined by the competency framework.	knowledge to a very high standard. They are empowered to make high-level clinical decisions and will often have their own caseload." Skills for Health; 2007 The intention of the Career Framework for Health definition of advanced-level practice is to relate to a wide range of professional roles and can be used as an over-arching definition of 'advanced practice' crossing professional groups and practice contexts. It is likely that entrants into this advanced role will be from established roles in healthcare, such as nursing and allied health professions. ACCPs can be from a nursing or physiotherapy background however the majority of trainee ACCPs at present have nursing as their primary profession. The Nursing & Midwifery Council (NMC) definition of Advanced Nurse Practitioner (ANP) is: "Advanced nurse practitioners are highly experienced and educated members of the care team who are able to diagnose and treat your health care needs or refer you to an appropriate specialist if needed."	

Title of occupation: Advanced Critical Care Practitioner (ACCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	• Apply the principles of evidence-based practice to the management of the critically ill patient. • Understand and perform clinical audit. ACCPs must complete a programme leading to an appropriate postgraduate diploma / masters degree with a higher education institution (HEI). Teaching within hospitals is overseen by a local clinical lead (LCL) who holds an honorary appointment with the HEI and is responsible to the HEI for the delivery of the clinical components of training. The FICM has published a Curriculum for Training for Advanced Critical Care Practitioners handbook which describes the context in which ACCPs work. https://www.ficm.ac.uk/sites/default/files/ACCP%20Curriculum%20v1.0%20(2015)%20COMPLETE_0.pdf	This applies to advanced practice in all domains including primary care.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
2. Complexity of intervention	ACCPs are expected to perform many of the tasks and take on a similar level of responsibility to trainee medical staff who have a formal regulator in the GMC. These duties may be performed with direct, indirect or distant supervision by a consultant in ICM depending on the task and situation. It is essential for patient safety that practitioners performing at this level are accountable to an appropriate regulator for this role rather than depending on historical regulation from either the NMC for nurses or HCPC for example, physiotherapists. All FICM trained ACCPs work on rotas as a consequence of the shortfall of medical trainees. Supervision varies dependent upon the situation and skill and ranges from distant to direct. As the ACCP becomes more experienced, especially in relation to junior trainees often on 3/12 placements, they increasingly become the right person	National Training Curriculum. National ACCP Continuing Professional Development (CPD) and Appraisal Pathway Logbooks (under development). Service feedback. Non-Medical Prescribing Certificate and CPD.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	to perform some interventions etc. Trained ACCPs are currently supporting skills acquisition in junior trainees on their ICU attachments relieving the pressure on ICU consultants. They can also afford to be aware of the learning needs of the junior medical staff on short placements https://www.ficm.ac.uk/sites/default/files/ficm-critical-eye9-winter2016.pdf An ACCP in conjunction with the medical team can: • Undertake an extensive assessment of the critically ill patient, including taking a history and completing a clinical examination. • Perform or order diagnostic and therapeutic procedures. • Prescribe medications and fluids (subject to current legislation). • Develop and manage an acute management plan and pathway for		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	the patient. • Perform invasive interventions, advanced airway skills, vascular access and other practical skills under appropriate supervision dependent on experience. • Teach and educate patients, relatives and other members of the multi-professional team. • Undertake internal and inter-hospital transfers of critically ill patients.		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
3. Context in which the practitioner is working	ACCPs work in ICM which involves the combination of the ability to correct abnormal pathophysiology (support) whilst simultaneously making sure that the definitive diagnosis is accurately made and therefore that disease modifying therapy (definitive treatment / medicine) is applied - both components of the patient's overall care. ICM comprises a constellation of knowledge and practice – almost all of which is well represented in a variety of other specialties. The ICM specialist transcends the traditional borders of medical specialities bringing all of these competences together in one specialist, and in so doing, develops a unique approach to critical illness. A key area of the ACCP role is the ability to prescribe, having undergone appropriate and ongoing training. Non-medical prescribers are required to be as competent to prescribe as a doctor.	ICM specialists are medical experts in: • Resuscitation; • Advanced physiological monitoring; • Provision of advanced organ support (often multiple); • Diagnosis and disease management in the context of the most gravely ill patients in the hospital; • Provision of symptom control; • Management and support of the family of the critically ill patient; • End of life care; • Collaboratively leading the intensive care team; • Coordination of specialist and multi-specialty input to complicated clinical cases in the unique context of intensive care. These specialists are based ICUs which are hospital areas in which increased concentration of specially trained staff and monitoring equipment allow more detailed and more frequent monitoring and interventions for a seriously ill patient. Whilst practitioners may be based in intensive care and high dependency units their range of referral practice includes most of the	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
		acute hospital. Within a single day, ACCPs may find themselves involved in the care of patients ranging from the young adult to the very old; and encompassing locations such as the Emergency Department and Acute Admissions Units.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
4. Vulnerability of the patient or service user	The relative shortage of junior and middle grade doctors within critical care (multi-factorial including changes in curricula for anaesthesia, ICM and other trainees, EWTD and an increase in the number of trainees necessary to cover a rota) combined with the annually escalating demand for critical care services has resulted in a worsening staffing shortfall. ACCPs represent the only genuine and sustainable solution to this workforce shortfall. Enormous progress has been made over the last 5 years with the development and rollout of the ACCP program across the UK. There are an ever expanding number of training centres and fully qualified ACCPs. Admission to intensive care is reserved for seriously ill patients who, by virtue of their condition, require intensive and invasive treatments to save their lives. Types of patients: • Monitoring immediately after major surgery.		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	• A patient from within the hospital who has complications from their illness. • Problems with organs. • Heart and blood vessel problems. • An imbalance in the level of chemicals, salts, or minerals in bloodstream. • Serious infections. There are growing concerns that the ability of ICUs to continue delivering high quality care is under significant threat due to: • The diminishing supply of medical staff. • A reduction in ward staffing and skill mix. • Escalating demand for intensive care services. • An ageing population with more chronic disease. • Increased public expectation. The ACCP role helps to provide a stable workforce capable of providing high quality patient care.		

Title of occupation: Advanced Critical Care Practitioner (ACCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
5. Scale of risk Size of actual / potential practitioner group Size of actual / potential patient or service user group	**Size of actual / potential practitioner group** There are presently100 qualified ACCPs with similar numbers now in training. Qualified ACCPs work on the same rotas as medical trainees, and work to a medical model of practice. Potentially applicable to all Level 2 and Level 3 critical care units in the UK. Approx 270 units 8-10 person rota = >2000 potential posts. **Size of actual / potential patient or service user group** In relation to scale and demand, there were 258,956 records of critical care periods, an increase of 3.7 per cent on the 249,735 records usable for analysis in 2013-14. Nearly twice as many critical care periods were recorded as starting on each weekday (between 14.9 per cent and 17.2 per cent) as on a Saturday (9.6 per cent) or Sunday (8.7 per cent).		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	More critical care periods were recorded as starting between 18:00 – 18:59 than any other hour in the day (8.0 per cent of all recorded start times). Nearly all records (95.4 per cent, 175,793 records) were for patients admitted to the critical care unit from the same NHS hospital site. • Cardiac surgery and primary cardiac conditions' was the most commonly identified Healthcare Resource Group (HRG), accounting for 24.3 per cent of male and 13.8 per cent of female records. • On average, the equivalent of 9 days' worth of organ support was recorded per critical care period. • More critical care records had 2 types of organ support recorded than any other number of support types (32.1 per cent of records). The majority of the critical care records were for male patients (56.9 per cent, 147,240 records), similar to		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	2013-14 (56.8 per cent, 141,814 records). Older patients generally accounted for greater numbers of critical care periods than younger patients with 65 to 69-year-old men and women being recorded more than any other age groups. However, individual patients may have been admitted for more than one critical care period during the year. http://content.digital.nhs.uk/catalogue/PUB19938		

Title of occupation: Advanced Critical Care Practitioner (ACCP)

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
6. Means of assurance	Individuals practising as an Advanced Critical Care Practitioner are required to be a registered practitioner and are therefore regulated under their primary profession. However, Advanced Critical Care Practitioner is not a protected title. Patients and the public recognise health professional titles because they indicate competence and fitness to practise. There is a potential risk to patient safety when people practise in a specific profession which requires practitioners to be registered professionals in another profession but can demonstrate the competence to extend their scope of practice to work as a member of the critical care team.[vi] The ACCP training programme is run locally by hospital trusts in conjunction with specified HEIs. There is a rigorous 2year training program which consists of clinical modules delivered within the local critical care unit and academic modules leading to a postgraduate	HEI Records FICM Associate Membership database Local Clinical Leads FICM Regional Advisers FICM ACCP exit exam is under discussion as the next step for the role.	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	diploma (including non-medical prescribing). All ACCPs in training are requested to register with the FICM to inform future training development and workforce planning by the Faculty. FICM Associate Membership is available to ACCPs in recognition of the quality standard achieved. https://www.ficm.ac.uk/membership/associate-membership Enormous progress has been made over the last 5 years with the development and rollout of the ACCP programme across the UK. There are an ever expanding number of training centres and fully qualified ACCPs. There are currently 10 training centres (approx.) Training courses are developed with HEIs in partnership with the FICM ACCP Curriculum 2015 Section 2.3. The HEI granting the postgraduate diploma is responsible for delivering this curriculum and ensuring the competence of the ACCPs it produces. This training must be done		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	in collaboration with training units in partner hospitals. Teaching within hospitals should be overseen by an ACCP LCL who will be a consultant in intensive care medicine. They should also hold an honorary appointment with the HEI and be responsible to the HEI for the delivery of the clinical components of training. The LCL will be the point of liaison with the FICM. The partner hospitals must satisfy themselves that the HEI can deliver the ACCP programme to the appropriate level, and the HEI must ensure that hospitals can deliver both competent and excellent clinical training and supervision in the workplace. To our knowledge there has been no negative feedback or incidences. All ACCP non-medical prescribers have to conform to the trust governance and risk arrangements around non-medical prescribing. Prescribing in ICU has inherent safety in that patients are reviewed twice daily by an ICU consultant that will include		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	current drugs and response to medication. ACCPs only prescribe drugs within their competence as per non-medical prescribing requirements. An ACCP's base profession gives them experience relative to the role but the invasive procedures are taught and assessed. Previous experience provides the background knowledge of how the procedure relates to the entire patient situation at that time. However, just because one can doesn't mean one should. Advanced critical care is about clinical decision making and processing often a complex set of patient requirements which may have rapidly changing priorities for which previous critical care experience is essential and integral. Otherwise a practitioner is no more than aa technician. Possessing enhanced skills through the additional training required for an ACCP facilitates the fundamental difference between an assistant and an advanced		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	practitioner.		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
7. Sector impact	As mentioned previously, the shortage of junior and middle grade doctors and the clinical pressures within acute care means ACCPs have huge potential to work within the medical team to provide responsive, enhanced quality and timeliness of care delivery in critical care units. Other benefits include: • Enhanced service continuity with less staff change over necessitating inductions of new staff etc. • Enhanced compliance with guidelines and care bundles. • Enhanced lines of communication between nursing and medical staff. • Enhanced compliance with Critical care standards (e.g. Guidelines for the Provision of Intensive Care Services (GPICS)). • Enhanced staffing levels and long term staffing solutions compared to transient medical trainee staffing.		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
	ACCPs provide a new pathway for nursing career progression that retains senior clinical experience on the shop floor whilst allowing career development. Although there is no international supporting evidence (the ACCP role does not exist in the same format elsewhere), ACCPs are included in the GPICS. https://www.ficm.ac.uk/standards-and-guidelines/gpics The vignettes supplied also add weight to the ACCP role. The FICM has undertaken an ACCP survey which aimed to see how many units trained ACCPs and, if they do not at present, if units were planning on doing so in the future.		

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
8. Risk perception: Impact on public confidence in the occupation Impact on employers' and other stakeholders' confidence in the occupation	There is potential for confusion around the scope of practice and educational requirements of Advanced Clinical Care Practitioners and this may make it difficult for the employers to mitigate risk of an unregulated role under Trust accountability and governance. An external regulator would reassure employers. Communication about the ACCP role to service users has resulted in positive feedback from critical care units currently employing ACCPs.	Patient information leaflet: https://www.ficm.ac.uk/sites/default/files/accp-patient-information-leaflet-v1.pdf As part of workforce research undertaken in 2016, the Faculty for Intensive Care Medicine received positive feedback from participants at four UK regional workforce engagement meetings on the addition of ACCPs in critical care units.[vii]	

Evidence area	Explanation	Examples of evidence	List the evidence supplied and add comments if needed
9. Unintended consequences	Potential (but no evidence of this thus far) for impact on medical training in terms of potential completion for teaching/learning. Evidence to date suggests in fact that ACCPs engage in the training of junior trainees and, by ensuring safe running of day to day unit activities, release more senior trainees to take on areas of training, e.g. leadership, which workload may otherwise limit. Potential short term effect in reducing numbers of senior nurses within critical care due to taking up ACCP training posts. However, this group of experienced and ambitious nurses have traditionally left the bedside for education or management as a route to career progression. The ACCP role is a way to retain skilled staff in clinical practice. ACCPs provide a new pathway for nursing career progression that retains senior clinical experience on the shop floor whilst allowing career development.		

Endnotes

[i] **Royal College of Anaesthetists; Royal College of Physicians; Royal College of Surgeons of England; Royal College of Surgeons (Edinburgh); Royal College of Emergency Medicine**

[ii] **Association of Physicians' Assistants (Anaesthesia); Faculty of Physician Associates; Faculty of Intensive Care Medicine**

[iii] **http://www.professionalstandards.org.uk/what-we-do/improving-regulation/right-touch-regulation**

[iv] **This statement has been amended since the Department of Health carried out its review**

[v] **This statement has been amended since the Department of Health carried out its review**

[vi] **This statement has been amended since the Department of Health carried out its review**

[vii] **This statement has been amended since the Department of Health carried out its review**