Background Quality Report

Bi-annual NHS Commissioning Population Statistics

Introduction

1. This bi-annual official statistic provides information on the number of UK armed forces and entitled civilian personnel with a Defence Medical Services (DMS) registration. Personnel with a DMS registration have their primary care (GP services) provided by the Ministry of Defence (MOD) rather than the NHS.

2. This official statistic enables the MOD, the Department of Health (DH), NHS England (and devolved administrations), Public Health England, and local authorities to make informed decisions regarding the commissioning of clinical services in different parts of the country depending on the size and make-up of the populations requiring access to care. The statistic also contributes to the MOD's commitment to release information where possible.

3. Data are presented for personnel with a DMS registration. This includes UK armed forces (including Regulars, Gurkhas, Officer Designates and Full Time Reserve Service (FTRS) personnel) and entitled civilians (service personnel's family dependents and MOD-employed civilian personnel who are entitled to care).

Background

4. Across the UK the systems and policies regarding the provision of healthcare vary between the devolved administrations of England, Wales, Scotland and Northern Ireland.

5. Gaining an understanding of the local population is vital to any assessment of health. The makeup of the UK armed forces population is very different to that of the UK as a whole. This has implications for the planning and provision of public services. The UK armed forces population is typically young males who tend to be physically fit, but due to the nature of their employment can sustain more injuries than in the civilian population. The nature of military employment also means that the population is transient, and regularly moves around the country and to overseas locations.

6. Prior to April 2013, the single services (Royal Navy, army and RAF) were responsible for the provision of care through the medical centres located at their units. Since April 2013 Defence Primary Healthcare (DPHC) has been responsible for the provision of care across all MOD medical centres in the UK and overseas (excluding operations). This transfer began on 1 April 2013 (Initial Operating Capability) with medical centres in the south region, Regional Occupational Medicine Departments, Regional Rehabilitation Units, and Departments of Community Mental Health. The transfer of medical centres in the remaining regions began in October 2013, with Full Operating Capability achieved in April 2014.

England

7. The Health and Social Care Act 2012 reshaped the NHS in England; aiming to make it more responsive, efficient and accountable[1]. Central to this restructuring was the establishment of Clinical Commissioning Groups, putting clinicians in charge of shaping services. CCGs are groups of General Practitioner (GP) practices, with representatives from nursing, public health and hospital doctors. Their role is to improve the health of their section of the population by choosing and buying services. CCGs are supported by Commissioning Support Units; who provide technical support data, contract negotiations etc, and Clinical senates; hospital doctors providing specialist advice and leadership at a strategic level. CCGs are also supported by NHS England (the operating name of the NHS Commissioning Board). NHS England has a role of assurance, support and development of, and co-commissioning with, CCGs. It is also responsible for specialist commissioning, regionally or nationally for smaller groups of patients with rare conditions and the commissioning of primary care services (not done by CCGs)[2].

8. The Health and Social Care Act 2012 also provided a new focus for Public Health; the public health budget was moved over to local government budget putting local authorities in charge of driving health improvement. Health and Wellbeing boards (part of local authorities) bring together key players to improve health and social care to improve care in a joined-up way and reduce health inequalities. They are responsible for commissioning services such as smoking cessation, alcohol and drug misuse services, or interventions to tackle obesity. CCGs and Health and Wellbeing boards work together in assessing local needs and developing commissioning plans.

9. The NHS England organisational structure was updated in early 2019 to incorporate Sustainability and Transition Partnerships (STPs) that sit between regions and Clinical Commissioning Groups (CCGs). STPs were created to bring local health and care leaders together to plan around the long-term needs of local communities. They were drawn up by senior figures from different parts of the local health and care system, following discussion with staff, patients and others in the communities they serve (NHS England).

10. The Armed Forces Clinical Reference Group provides clinical advice to NHS England in support of its commissioning decisions regarding serving armed forces personnel, their families, mobilised reservists and veterans, ensuring that patients experience a seamless transition between MOD and NHS services.

Wales

11. In Wales, the NHS reforms in 2009 saw the former 22 Local Health Boards and seven NHS Trusts replaced with seven integrated Local Health Boards (LHB) and a new Public Health Wales NHS Trust. (The former Velindre NHS Trust and

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[1] 'The Health and Social Care Act 2012' *June 2012*; www.legislation.gov.uk/ukpga/2012/7/contents/enacted/data.html

[2] 'An alternative guide to the new NHS in England' *retrieved Sept 2013* www.kingsfund.co.uk

Welsh Ambulance Services Trusts also continued)[3]. The seven Local Health Boards plan, secure and deliver healthcare services on their areas. These reforms aim to improve joined up working between health and social care services, to place a greater emphasis on public health and to improve health outcomes. Tables C1.1 to C2.7 in the supplementary tables of this report contain statistics by Local Health Board and Local Area Authority.

Scotland

12. The Public Bodies (Joint Working) (Scotland) Act 2014[4] replaced Community Health Partnerships (CHPs) with Health and Social Care Partnerships (HSCPs) from 1 April 2016. Under the new legislation NHS and local council care services will be jointly responsible for the health and care needs of patients. HSCPs share the same boundaries as Council Areas. Tables D1.1 to D1.7 in the supplementary tables of this report contain statistics by council areas.

Northern Ireland

13. In Northern Ireland, health and social care are jointly managed and provided. The Health and Social Care in Northern Ireland Board was established in 2009 and has five Local Commissioning Groups (LCG) that are responsible for assessing, planning and securing the delivery of health and social care.

14. Local Government Districts (LGDs) in Northern Ireland were replaced by District Council Areas (DCAs) from 1 February 2016. Tables E1.1 to E2.7 in the supplementary tables of this report now contain statistics by Local Commissioning Group (LCG) and District Council Areas in line with the August 2016 edition of the National Statistics Postcode Lookup Guide.

Presentation

15. MOD staff, mainly Public Health, Healthcare and DPHC, are in constant communication with NHS England to determine overall commissioning requirements, quality standards and pricing. The specialist medical and occupational health needs of MOD patients are arranged by this group, bringing in specialists for cases of "exceptional funding”.

16. This statistical notice will provide information to commissioning and public health bodies to enable them to understand the MOD population at risk and in order that the needs of the armed forces can be considered in the commissioning of clinical services and provision of public health initiatives. Information has been presented by[5]:

- England: Region, Sustainability Transition Partnership, Clinical Commissioning Group, Local Area Authority.
- Wales: Local Health Board, Local Area Authority.
- Scotland: Health and Social Care Partnerships (HSCP), Council Area (CA).

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[3] NHS in Wales - Why we are changing the structure' Oct 2009; www.wales.nhs.uk

[4] http://www.legislation.gov.uk/asp/2014/9/pdfs/asp_20140009_en.pdf

[5] As advised by the Office of National Statistics (ONS)

- Northern Ireland: Local Commissioning Group and District Council Area (DCA).
- Defence Primary Healthcare region (UK).

Methodology

17. Data are compiled by Defence Statistics Health from the Defence Medical Information Capability Programme (DMICP) data warehouse. The DMICP programme commenced during 2007 and comprises an integrated primary Health Record (iHR) for clinical use and a pseudo-anonymised central data warehouse. Prior to this data warehouse, medical records were kept locally, at each individual medical centre. By 2010, DMICP was in place for the UK and the majority of Germany. Rollout to other overseas locations commenced in November 2011.

18. A DMS registration[6] at a MOD medical centre means that the MOD are responsible for providing long term, permanent and full primary healthcare; however these individuals will be referred to the NHS for secondary healthcare provision as required. In the first report in this series (published on 25 September 2013) all Regulars, Gurkhas, Officer Designates and FTRS personnel were included. Following a methodology review, from the second report (published on 28 November 2013) onwards, registration types have been checked and any individuals with a 'non DMS' registration have been excluded. A 'non-DMS' registration denotes that a person's primary healthcare is delivered by the NHS, with a record also being held on DMICP. This record is used for when they access healthcare facilities in DMS medical centres for emergency or ad hoc treatment, and for treatment whilst on operations.

19. FTRS personnel on Home or Local Commitment (excluding aircrew) are not DMS entitled. These personnel should hold a 'non DMS' registration and have a registration within the NHS. FTRS on Full Commitment (FC) and FTRS aircrew should be DMS registered. However, some of these individuals are registered incorrectly and so are excluded from this report. It is also possible for some individuals such as FTRS on Local or Home Commitment, foreign military personnel and civilian employees to incorrectly hold a DMS registration. Such personnel are incorrectly included in this report.

Entitled civilian population

20. The data presented on entitled civilian personnel were based on the number of DMS registrations in DMICP identified as 'civilian'. 'Civilians' include contractors, MOD employed entitled civilians and military family dependents. Please note the numbers presented are NOT representative of the number of MOD employed civilians or military dependents associated with the MOD, as the majority of MOD civilian employees are not entitled to military health care, and the majority of military dependents will be registered with an NHS GP practice. In the UK, when military dependents are entitled to military health care, the movements of patients around medical centres may be just as frequent as movements in

[6] DMICP Process – Patient Registration, Transfer and Ceasing from DMS Care PHCUG/DMICP Process_PatientRegistration/1.0

military patients if families follow their military partners to the locations where they have been based.

21. There are a small number of MOD UK medical centres which provide primary healthcare to entitled civilians. A full list of these practices can be found in Annex I of the supplementary tables of this report. These medical centres are training facilities for military healthcare personnel and exist to offer a full range of training opportunities for the purposes of GP revalidation.

Non-UK registration methodology

22. Personnel registered at a MOD medical centre in Germany or Cyprus are presented to enable stakeholders to identify any changes to the populations in these areas, and any subsequent impact on UK MOD medical centres, for example the drawdown of troops in Germany and the return of these personnel to UK locations as a result of the Strategic Defence and Security review (SDSR) 2010.

23. ***Other Overseas:*** At any time there are UK armed forces personnel stationed or deployed overseas. In order to allow commissioning bodies to make decisions regarding the possible numbers of personnel who may need access to healthcare services in the UK, it is important to include as many of these personnel as possible in the numbers presented. Therefore, UK armed forces personnel registered at medical centres in overseas locations (other than Germany and Cyprus), or on Operations at the time of the data extract, were reported against the UK medical centre they were registered at in the previous 12 months. Where this was a UK, Cyprus or Germany medical centre, the personnel were allocated to their most recent UK, Cyprus or Germany location and presented for the corresponding region. Where a previous UK, Cyprus or Germany medical centre could not be identified in the last 12 months, these personnel have been categorised as “Other Overseas” within the data tables.

24. In late 2019, the administration of the SHAPE Mons, Central European Practice and JSU Naples practices transferred from Germany to other overseas as a result of the drawdown of the UK military presence in Germany as detailed in the SDSR 2010.

25. ***Unknown:*** Due to movements of UK armed forces personnel, potentially to a non DMICP enabled location, and the movements of troops on deployment, it is necessary to have data management practices set up for the handling and movement of patient records. These practices perform a legitimate function, but sometimes records are not correctly moved out of these locations and become a data quality issue. For service personnel registered at data management practices, Defence Statistics Health identified the medical centres at which they were previously registered in the last 12 months. Where this was a UK, Cyprus or Germany medical centre, the personnel have been allocated to their most recent UK, Cyprus or Germany location and presented for the corresponding region. Where a previous UK, Cyprus or Germany medical centre could not be identified in the last 12 months, these personnel have been categorised as “Unknown” within the data tables.

26. In late 2019, as part of continuous improvements to the management of patient records, some personnel who had previously been registered to a data management practice had their registration transferred to a practice under the "Other Overseas" administration, which better reflected the location of personnel.

27. Where UK armed forces personnel are incorrectly registered at non primary care locations (e.g. Regional Occupational Health Teams (ROHT), Regional Rehabilitation Units (RRU), Departments of Community Mental Health (DCMH) and Primary Care Rehabilitation Facilities (PCRF)), Defence Statistics Health identified the medical centres at which they were previously registered in the last 12 months. Where this was a UK, Cyprus or Germany medical centre, the personnel have been allocated to their most recent UK, Cyprus or Germany location and presented for the corresponding region. Where a previous UK, Cyprus or Germany medical centre could not be identified in the last 12 months, these personnel have been categorised as "Unknown" within the data tables.

28. ***Civilian "other" registrations:*** Where civilian personnel are registered overseas, at a data management practice or at non primary care practices such as ROHTs, RRUs, DCMHs etc., they have been put in an 'Other' category. Previous registrations for civilians were not looked into due to of the sporadic nature of their care patterns and locations. Civilians under military care are known to move between NHS and military practices. As such, tracing back civilians to their last known UK, Cyprus or Germany military medical centre could create a false impression of civilian registrations. It is not possible to tell when civilians are registered under NHS care and as such, current practice registrations only are used in this report.

Relevance

Coverage

29. The report findings are split into four main sections. The first three sections refer to all regions. The fourth section (regional analysis) refers to each specific country in the UK: England, Wales, Scotland and Northern Ireland. The supplementary tables contain DMS registrations by location, age and gender. There is also a mapping table, showing which Clinical Commissioning Groups fit into which DPHC regions, and a table showing which UK MOD medical centres offer care to the dependents of service personnel.

30. The report also presents figures for registrations not in the UK. It shows the number of personnel who are currently registered in Germany, Cyprus, and those records from Operations and other non-UK locations whose previous registrations over the last 12 months were also not in the UK. This group includes registrations in:

- British Forces Germany (BFG)
- Cyprus
- Other overseas locations
- Operations (presented as "Other overseas")

- Exercises (presented as "Other overseas")
- Reserve practices
- A data management or holding practice (presented as "Unknown")
- Decommissioned Royal Navy vessels (presented as "Unknown")
- Blank records - persons without a named medical centre and/or without a specified registration type - (presented as "Unknown")

31. For personnel registered at the facilities listed below. Defence Statistics Health identified the medical centres at which they were previously registered in the last 12 months. Where this was a UK, Germany or Cyprus medical centre, the personnel have been allocated to their most recent UK, Germany or Cyprus location and presented for the corresponding region:

- Overseas, operations and exercises
- Data management practices
- Non primary care locations
- Reserve practices.

32. Defence Statistics (Tri Service) produce Annual Location Statistics on the national and international locations of UK Armed Forces and civilian personnel, however the Annual Location Statistic differs to the Bi-annual NHS Commissioning Population Statistic for two reasons:

- Different population: The Annual Location Statistic excludes reservists and Gurkhas whereas the Bi-annual NHS Commissioning Population Statistic includes Full Time Reserve Service (FTRS) and Gurkha personnel.
- Different methodology: The Annual Location Statistic uses the stationed location of the individual as recorded in the Joint Personnel Administration system, whereas the Bi-annual NHS Commissioning Population Statistic uses the medical registration and allocates the numbers of personnel back to previous locations for certain medical practices (as detailed in the methodology section of this Background Quality Report).

While the CCGs identified as having the largest populations do correspond with the most heavily populated areas in terms of stationed locations with the military, it is important to note that the tables in this report do not show where personnel are based.

User Needs

33. This statistical notice will provide information to commissioning and public health bodies to enable them to understand the MOD population at risk and in order that the needs of the UK armed forces can be considered in the commissioning of clinical services and provision of public health initiatives.

34. The information can also be used by NHS England, Public Health England, the DH, equivalent bodies for the devolved administrations, local government departments and charities to enable a better understanding of the MOD population at risk. Defence Statistics aim to carry out future internal and

external consultations to review the NHS Commissioning Official Statistic to ensure it is coherent and continues to meet users' needs.

Accuracy

35. Individual MOD medical centres are responsible for ensuring the accuracy of clinical and registration information in the electronic patient record, which forms the 'front end' of the Defence Medical Information Capability Programme (DMICP). All coded (not free text) information is saved into the central data warehouse at regular intervals; usually every three days. The DMICP system is a large clinical and administrative database and is subject to the data quality issues of any large administrative system with data collated by a large number of medical and administrative staff for clinical delivery purposes.

36. Demographic data for UK armed forces personnel is cross referenced with the Joint Personnel Administration (JPA) system. This is the MODs 'official' source of the truth for personnel information and is used to maintain personnel records and pay their salaries. Defence Statistics hold cleansed and validated monthly snapshots of JPA data for the production of National and Official Statistics. Extracts are taken from JPA each month and stored on a separate database to form a time series. The extracts are taken six calendar days after the end of the month and the situation as at the first of the month is calculated. This ensures most late-reporting is captured.

37. The data goes through a series of automatic validation checks and edits to ensure the basic quality of the data and a series of derived fields are calculated.

38. The data is then made available to Defence Statistics' single service manpower branches. They undertake a wide range of validation checks and implement specialist editing rules using their expert knowledge and experience as well as data obtained from other sources within the Department.

39. The main sources of potential error in the NHS Commissioning population statistics are as follows:

- Incomplete or inaccurate data from the DMICP or JPA system.
- Data processing errors resulting in incorrect data outputs.
- Manual error during production of report tables and commentary.

40. To ensure that potential errors are identified and resolved, Defence Statistics Health implement a series of data quality checks throughout the report production. When required, these checks involve close liaison with personnel in DPHC headquarters who are responsible for providing service delivery, to ensure the accuracy of the figures published.

Timeliness and Punctuality

Timeliness

41. Data are entered into the electronic patient record in real time and the data warehouse is updated every three days. Defence Statistics Health extract data and publish NHS Commissioning figures on a bi-annual basis.

42. Figures are published eight weeks after the end of the reporting period. This is due to the time lag in data availability, and to give time to process the figures.

Punctuality

43. The Official Statistics reports have been published on time to meet preannounced release dates. A one-year release schedule outlining the following financial year's publication date is published on the Defence Statistics website. Future publication dates will also be announced on the UK Statistics Authority hub at least one month in advance.

Accessibility and Clarity

Accessibility

44. NHS Commissioning population statistics are published on the GOV.UK website (https://www.gov.uk/government/collections/defence-personnel-nhs-commissioning-quarterly-statistics-index).

45. The publications are available from 0930 hours on the day of release.

Clarity

46. Users with an interest in the key findings can read a short summary of main messages immediately following the Introduction.

47. All tables in the report are separately available in Microsoft Excel and Open Source Document format for users to download (these are located on the gov.uk website alongside the main report). This allows for use in individual research and reports.

Coherence and Comparability

Coherence

48. The NHS Commissioning population statistics do cohere with Defence Statistics' Annual Location Statistics, which presents information on the stationed location of all UK Regular service and civilian personnel. Although there are differences between the two reports (see point 32), there is overlap between the two reports on the location of military personnel. The CCGs with the largest number of reported medical registrations in the Commissioning statistics also stand out as being the most heavily populated areas in terms of stationed locations within the military.

49. Civilian data is not coherent between NHS Commissioning population statistics and the Annual Location Statistics. This is because the NHS Commissioning population statistics includes registrations of any civilian receiving primary care from MOD. This includes families of service personnel, regardless of whether they carry out MOD duties or not. Whereas the Annual Location Statistics only account for civilians that work for MOD (such as Royal Fleet Auxiliary).

50. NHS Commissioning population statistics are coherent with location statistics produced by the Office for National Statistics (ONS). They follow the same presentational order and use the same area boundaries and codes for Clinical Commissioning Groups and Local Area Authorities (or devolved administrative equivalents).

Comparability Over Time

51. Tables containing UK armed forces and civilian breakdowns (Table 1) in the main report show the changes in population figures over the latest six months (for all UK armed forces, and for civilians). Tables containing age and gender breakdowns in the supplementary tables of the report show changes in the population figures at the overall countrywide level only (top row of each table). The following arrows indicate percentage changes:
    - + There has been between a greater than 5% and less than or equal to 10% increase since the previous six-month period;
    - ++ There has been a greater than 10% increase since the previous six-month period;
    - - There has been between a greater than 5% and less than or equal to 10% decrease since the previous six-month period;
    - -- There has been a greater than 10% decrease since the previous six-month period.

52. Percentage changes have not been shown where population figures were below 20 in both the current and previous six-month periods. This is because a difference of a small number of people can show a large percentage change, creating a false sense of change over the six-month period.

53. Where no arrow is presented, but the population figure is at least 20 in the current and/or previous six-month period, the percentage change between the population numbers over the last six month period is less than or equal to 5%.

Trade-offs between output quality components

54. Where possible, Defence Statistics Health minimise the cost to Government of producing these statistics by using data already collated for operational delivery purposes within MOD. The main source of data used for compiling these statistics is the Defence Medical Information Capability Programme (DMICP) data warehouse. Patient registration data (for military personnel only) from DMICP were cross referenced with the MOD's Joint Personnel Administration (JPA) system for UK armed forces personnel. Both data systems are large administrative databases, and as such, data quality across fields is of varying quality and completeness. This limits information available to customers in our statistics and requests for information.

Assessment of User Needs and Perceptions

55. In reference to the UK Statistics Authority report, The Use Made of Official Statistics, the NHS Commissioning population statistics are used by:
    (i) MOD – Policy making and monitoring
    (ii) NHS – Clinical service delivery
    (iii) Local Government – Public Health service delivery
    (iv) Academia – Facilitating research
    (v) Charities - Service delivery

56. External organisations such as NHS trusts and local Government use the reports and location figures as part of estimating and planning the provision of primary care e.g. to assess the numbers and needs of Service personnel and civilians in their local area.

Description of Users and Usage of Statistics

57. The NHS Commissioning population statistics have been published in response to user demand. Interest has come from internal MOD policy makers, the NHS and charities.

58. The publication of the statistics also plays an important part in ensuring the Department's accountability to the British public.

Strengths and Weakness in Relation to User Needs

59. Users external to the MOD are encouraged to give feedback via the MOD website.

60. Defence Statistics Health aim to carry out future internal and external consultations to review the NHS Commissioning Official Statistic to ensure it is coherent and continues to meet users' needs.

61. The key strength of the NHS Commissioning data is that the registration data used is the information held at each MOD medical centre in order to provide patient care. The timeliness of this data and the regular updates to the data model mean the most up to date information is available for analysis.

62. The key weakness is that Defence Statistics Health have no control over the quality of the raw data used to collate figures. The registration data in DMICP is input by administrative staff at the medical centres. It is possible for such staff to incorrectly register a patient and/or assign them the wrong registration status. User error and turnover of administrative staff can create such data quality issues. In order to partially overcome this problem, military data are matched to the JPA system, which is likely to have higher standards of data quality in relation to personnel administration data (though not in terms of medical data such as the medical practice an individual is registered at). For civilians, no such system for matching data exists.

Performance cost and respondent burden

Operational Cost

63. The production of the NHS Commissioning statistic requires 0.2 FTE per year.

64. The NHS Commissioning report uses administrative data sources already collected by the MOD. As such, there is no respondent burden, and the main operational cost to production of the statistics is for quality assurance and data interpretation.

Confidentiality, Transparency and Security

65. All Defence Statistics Health staff involved in the production of NHS Commissioning Population statistics have signed a declaration that they have completed the Government wide Protecting Information Level 1 training and they understand their responsibilities under the Data Protection Act and the Official Statistics Code of Practice. All staff involved in the production process have signed the Data Protection Act, and all MOD, Civil Service and data protection regulations are adhered to.

66. Defence Statistics Health also adhere to Joint Service Publication 200 (March 2016). Defence Statistics Health ensure that the NHS Commissioning data is kept confidential by holding this data on a secure server. Only individuals who work on the reports have access to the data. In presenting patient registration information, Defence Statistics Health provide as much detail as possible, whilst maintaining the confidentiality of serving UK armed forces personnel and civilian patients under military care.

67. Defence Statistics Health adhere to the principles and protocols laid out in the Code of Practice for Official Statistics and comply with pre-release access arrangements. The Defence Statistics pre-release access lists are available on the GOV.UK website (https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list).