

Background Quality Report

Official Statistic:

Mental Health in the UK Armed Forces

1. Introduction

1.1 Overview

1. Defence Statistics produce a series of publications detailing the mental health of UK Armed Forces personnel.

2. The Quarterly UK Armed Forces Mental Health Report is a quarterly publication, first released in July 2007. Data is based on the number of UK Armed Forces personnel seen at a MOD Department of Community Mental Health (DCMH) for outpatient care or at the MODs in-patient contractor for an admission. It provides:

- i) Time trend graphs providing the percentage of personnel at risk for patients seen at MOD Specialist Mental Health Services by Service provider by quarter since April 2007.
- ii) Time trend graphs providing the percentage of personnel at risk for patients seen at MOD Specialist Mental Health Services by initial assessment by quarter since April 2007.
- iii) Summary tables covering the latest five quarter period on the number of personnel seen at MOD Specialist Mental Health Services and the number of new episodes of care.
- iv) Supplementary tables in MS excel provide information on the number and rate per 1,000 personnel at risk for the number of patients and the number of new episodes of care by Regular/Reservist status, Service, Gender, Rank, diagnosis and deployment status for the latest five quarter period.

Note, the last Quarterly UK Armed Forces Mental Health Report was released on 7 April 2016 and covers data up to 31 December 2015.

3. The UK Armed Forces Mental Health Annual Summary is an annual publication, first released in July 2008. It provides :

- i) Summary information on mental health assessed at MOD Specialist Mental Health Services in the UK Armed Forces for the previous financial years back to April 2007, with time trend graphs (now Section 2 of the report as of 2020 edition).
- ii) Detailed analysis of the single Services by demographic breakdowns and deployment status and mental disorder for those seen at a MOD Specialist Mental Health Services.
- iii) Each year data is published on the number of patients seen at MOD Specialist Mental Health Services for a new episode of care.
- iv) Summary financial year information for UK Armed Forces personnel seen by the Field Mental Health Team in Afghanistan, those aeromedically evacuated out of theatre for both Iraq and Afghanistan, those seen at DMRC Headley Court, Service personnel who were seen under the Reserves Mental Health Program (RMHP), those medically discharged from Service due to a mental health condition and UK Armed Forces personnel who have claimed under the Armed Forces Compensation Scheme for mental reasons are also included. **Following a consultation with the public in 2017 it was decided to stop the production of these stats. The 2016/17 edition of this report was the last to produce some of this information.**
- v) The edition published in 2020 is the first in the series to present an understanding of the totality of mental health in the UK Armed Forces by capturing those assessed by a GP in primary care as well as MOD Specialist Mental Health Services (Section 1 of the report).

4. The UK Armed Forces Mental Health mid-year report is an annual publication, first released in December 2016. It provides what was included in the Quarterly UK Armed Forces Mental Health Report as well as a mid-year update on the percentage of UK Armed Forces

personnel assessed with a mental disorder at MOD Specialist Mental Health Services so a comparison could be made with the percentage found in the annual summary.

Note, the last and only UK Armed Forces Mental Health mid-year report was released on 1 December 2016 and covers data up to 30 September 2016.

5. These statistics can all be found on the Gov.uk website:
(<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>)

1.2 Background

6. Assessment and care-management within the Armed Forces for personnel experiencing mental health problems is available at three levels:

- i) In Primary Health Care (PHC), by the patient's own Medical Officer (MO).
- ii) In the community through specialists in military Departments of Community Mental Health (DCMH).
- iii) In hospitals, either the NHS or the contracted In-Patient Service Provider (ISP).

7. The level of care a patient may require is determined by a number of factors, including the severity of symptoms and the degree of risk posed by the patient's current condition.

8. The publications from 2008 to 2019 summarise all attendances for a new episode of care of Service personnel to the **MOD's DCMH for outpatient care, and all admissions to the MOD's in-patient care contractor only**. It captured patients referred to the Specialist Mental Health Service and did not represent the totality of mental health problems in the Armed Forces as some patients can be treated wholly within the primary care setting (now Section 2 of the report). However, since 2020 the series has captured those seen in a military healthcare setting for a mental health related reason (Section 1 of the report).

9. DCMH are specialised psychiatric services based on community mental health teams closely located with primary care services at sites in the UK and abroad. This does not include information on patients seen only by their GP or medical officer. All UK based and aero-medically evacuated Service personnel based overseas requiring in-patient admission are treated by one of eight NHS trusts in the UK which are part of a consortium headed by the SSSFT NHS Foundation trust; UK based Service personnel from British Forces Germany are treated at Gilead IV hospital, Bielefeld under a contract with Guys and St Thomas Hospital in the UK up until April 2013 and from this date the Soldiers, Sailors, Airmen and Families Association (SSAFA) through the Limited Liability Partnership. When presenting in-patient data, the data include returns from both contract providers.

10. In Section 2 of the report where tables or figures provided in the report detail the overall number of personnel assessed as having a 'mental disorder' and the number of episodes of care assessed as having a 'mental disorder', this is as recorded by the DCMH and/or MOD in-patient provider on initial assessment based on presenting signs and symptoms at the patient's first appointment.

11. UK Armed Forces personnel are discharged to the care of the DCMH following admission to one of the MOD in-patient providers, thus in Section 2 of the report where tables and figures provided show the detailed breakdown by mental disorders, this represents the disorder recorded at initial assessment to the DCMH only.

12. Since July 2015, the series of publications detailing mental health in the UK Armed Forces provides figures for the number of UK Armed Forces personnel assessed at a MOD DCMH and/or admitted to one of MOD's in-patient providers in addition to the number of new episodes of care. The number of episodes of care may be larger than the number of people assessed with a disorder during a time period for the following reasons:

- Personnel may be discharged from an episode of care and subsequently return for separate treatment for a new episode of care.

- An individual who receives an in-patient admission will be subsequently discharged to the care of a DCMH. Both the admission and the DCMH attendance for the individual will be counted as two episodes of care.
- As with any recording system, there is potential for clinician error when completing the DMICP templates and new episodes of care can be recorded in error by clinician's seeing a patient for a review during an existing care episode.

It is not possible from the pseudo-anonymised data to quantify the effect of these reasons on the data presented in the report.

1.3 Methodology and production

Data Sources

All mental health in the UK Armed Forces (Section 1 of report)

13. UK Armed Forces personnel seen in a military healthcare setting for a mental health related reason include any with the following mental health related diagnosis read codes recorded in Defence Medical Information Capability Program (DMICP) by a clinician in primary care or specialist mental health care:

Eu432, Eu32, Eu4, Eu431, E2003, E29, Eu32z-1, Eu3y, E2B, E200z, Eu33, Eu101, E2002, E2001-1, Eu900-1, Eu6, E2900-1, Eu321, Eu412, E204-1, E1137, Eu32z, Eu840-1, Eu31, Eu102, E203, Eu3, Eu403, Eu42, Eu50, E292, E29y1, E140-2, E23, Eu41z-1, E28z-2, Eu845, Eu603, Eu341, E2001, E274, E21, E2004, Eu630-1, Eu320, E29z, Eu41z, Eu64, Eu2, E202-1, Eu0, E112, Eu401, Eu411, E2F3-1, Eu43, Eu322, Eu32z-2, E2F3, Eu1, E2, E2005, E1122, E2020, E2C31, Eu2z-1, Eu410, E202-2, E21y2, E271, Eu502, Eu40z-1, Eu340, E2028, Eu50z, E13z-1, E2930, Eu402, Eu400-2, Eu326, Eu44, Eu452-1, Eu41, Eu300, Eu9y7, E202C, Eu44z, E21z, Eu603-2, Eu633, Eu84z-1, Eu331, E113, Eu313, Eu605-3, E20y0, E2723, E24, E1123, Eu324, Eu31y, E203z, Eu23, Eu64z, Eu23z, Eu30, E20, E115, Eu32-3, Eu330, Eu323-1, Eu323, E2F, Eu332, Eu310, E2F3-2, Eu316, E2024, E240, Eu314, E1135, Eu232, E23z, E2E01, E02z, Eu62z, Eu413, Eu402-4, Eu400, Eu10, Eu45, E294, E291, E202z, Eu452, E2021, Eu451, E10z, E2F2, Eu053, Eu503, E2012, Eu501, Eu620, Eu61, Eu531-1, E135, E252, Eu445, E292z, E2F00, Eu602-2, Eu42z, E2B1, Eu3y0, Eu19, Eu30z-1, E1125, Eu21, E1132, E2141, Eu95, E217, Eu332-2, E1151, E1153, E201A, E117, Eu40, E2027, E2750, Eu2y, Eu454-4, Eu453, E13y1, Eu31z, E2751, E13z, Eu31y-1, Eu45z, Eu454, Eu25, E114, Eu450, Eu402-2, E1121, Eu333-5, E1124, E117z, E11y2, E11z0, E11-1, Eu200, Eu440, Eu25z, E1131, E10, Eu220, E113z, Eu40z, E272z, Eu512, Eu630, E207, E215, Eu325, E212, E2120, E241z, Eu605, Eu510, Eu64y, Eu952, Eu95z, E2016, E241-3, Eu500, E1130, E012, Eu816, E112z, E1104, Eu6z, E012-1, Eu400-1, Eu6y3, Eu6y, Eu640, Eu3y0-1, E1114, E01z, Eu63z, E01y, Eu33z, Eu65-1, Eu333, E1120, E1133, Eu32A, E1142, E1145, Eu32-2, Eu32-1, E1146, E115-1, Eu95y, E1111, E1150, Eu315, Eu90z, E1141, E0110, Eu328, E011z, Eu327, E1134, Eu65z, Eu323-4, Eu90, Eu322-2, Eu322-1, E1140, E011, E1103, E03y3, Eu60, Eu600, E1, Eu601, Eu44y, Eu447, Eu446, E1000, Eu602, Eu444-2, Eu443, E03y0, E0z, Eu53z, Eu461, Eu460, E2F1, Eu45z-1, Eu45y, Eu502-1, Eu50y, E03y2, Eu51, Eu452-4, Eu51z, Eu441, E03y, Eu604-1, E11, E0210, E11-2, E11-3, Eu631, E110, Eu40y, E1100, E1101, Eu632, E02, Eu63, Eu41y, Eu621, E100, E02yz, Eu606, E103, Eu607, Eu60y-4, Eu60z, Eu42y, Eu62, E1030, E104, Eu63y, Eu312, E29y3, E25y, E2594, E254-2, E252z, E2522, E2520, E24z, E24A, E249, E248z, E2470, E2462, E244, E243z, E2432, E2431, E2430, E2015-1, E2014, E29y2, E13y0, E29y, E293z, E2932, E2931, E290z, E1y, E290, E1z, E2011, E275z, E275y, E275, E274z, E274y, E2740, E243-3, E242z, E2421, E222, E22, E21yz, E201z-1, E21y1, E21y0, E21y, E2152, E2151, E2140, E210, E201z, E202, E20y, E2021-99, E2022, E2023, E225, E225z, E2420, E242, E241-6, E241, E241-4, E2026, E241-1, E240z, E2400, E2015, E240-3, E240-2, E240-1, E2018, E22z, E22yz, E22y0, E01, E29y5, E1152, E1166, Eu22y-1, Eu220-1, Eu22, Eu21-8, Eu21-5, Eu206, Eu204, Eu202, Eu20, E116z, Eu18, Eu155, Eu15, Eu14z, Eu132, Eu122, Eu230, Eu231, Eu31-1, Eu30z, Eu302, Eu301, E1154, E115z, Eu30-1, E116, Eu2z, E1161, Eu2y-1, Eu25y, E1162, Eu23y, Eu233, Eu232-1, E2460, Eu121, Eu12, Eu11z, Eu022, Eu020, Eu013, Eu01, E2F30, E11y, E121, E2F02, E2F0, E12y, E2Ez, E2E00,

E2C33, E2C32, E12z, E13, E2B-99, Eu02y, Eu02z-1, Eu112, Eu11, Eu10z, Eu10y, Eu107, Eu105, Eu105-4, E1171, E1175, Eu060, Eu056, Eu055, Eu054, Eu052, Eu050, Eu04y-1, Eu02z, E2B-98, E200, E2273-1, E23-2, E26y0, E2924, E2741-1, E250-4, E202A, E28, E292y, E2900, E2000, E227-1, E2C01, E2A2, E2F3z, Eu32z-4, Eu455, E25z, E2273, E, E250z, E2276, E112-4, E28z, E2748, E2749, E2741, E250, E270, E2746, Eu334, Eu411-2, E250-1, Eu32y, E2747, Eu3z, Eu411-3, E2Fz, E2F4, E112-1, E2830, E204, Eu317, E284, E2F5-1, Eu85, Eu412-1, E272, Eu800-2, E2F4-2, E020, E2Fy, E2C-1, Eu800-1, Eu522-2, Eu913, E2016-2, E1126, E2831, Eu515, E227, Eu520-3, Eu112-1, E250-2, E030, E24-1, E23-1, E113-1, E2271, Eu100, E2742, Eu420, Eu840, Eu430, E2275, E205-1, Eu340-3, Eu430-4, Eu410-1, Eu608, Eu32z-3, E2E0, Eu522-3, Eu81z-1, E270-1, Eu46z, Eu520, E26z, Eu445-1, E2C00, E2031, Eu930, E274D-1, E28z-3, Eu432-2, Eu410-2, E2502, Eu34, E27z4, Eu800, E2Dy, E2651, Eu3yy, E2720, Eu220-5, E2Dz-2, Eu411-1, Eu523, E2D-1, Eu341-3, Eu524, Eu514, E2752, E2920, E22y4, Eu84z, E205, Eu953, Eu932, E130-1, E118, Eu910, E01y0, Eu940-1, Eu94z, Eu81z-2, E2731, Eu3y1-1, E1176, E1136, E2E-1, E2722, Eu431-1, E270-2, Eu82-3, E023, E022, Eu80z, E2029, Eu9y5, Eu422, E2743-1, E2D1-1, Eu42-2, E112-2, E2758, Eu901, E12, Eu513, E20z, Eu942, E2Dyz, Eu52, E2112, Eu846, Eu401-2, E2D-2, Eu421, Eu460-1, Eu9, Eu91z-1, Eu33-3, E227z-1, Eu100-1, E2A2-1, E2C10-1, Eu33-1, Eu104-1, Euz-1, Eu642, E2500, E010, Eu113-1, E030z, Eu62y-1, Eu32y-1, Eu110, Eu33-5, Eu32B, E2610, Eu33y, Eu057, E264, Eu530-1, E231, E2312, Eu220-2, Eu54, E2C12, E2613, Eu223, Eu43z, E25, Eu932-1, Eu452-3, Eu452-2, Eu93y, Eu940, Eu430-5, Eu93z, Eu43y, Eu50y-1, Eu430-3, Eu44-2, Eu430-1, Eu933, Eu44y-1, Eu430-2, Eu433, Eu42-1, Eu41y-1, Eu9y6, Eu33z-1, Eu9yy, Eu333-4, Eu333-3, Eu333-1, Eu332-1, Eu44-1, Euz, Eu33-2, Eu26, Eu24-3, Eu24, Eu23z-2, Eu340-2, Eu341-1, Eu941, Eu950, Eu40z-2, Eu402-3, Eu951, Eu9y0, Eu9y1, Eu3y2, E2780, Eu3y1, Eu34z, Eu34y, Eu341-4, Eu9y2, Eu9y3, Eu9y4, Eu23z-1, Eu453-2, Eu522, Eu527, Eu528, Eu52y, Eu52z, Eu53, Eu530, Eu530-2, Eu55, Eu55-3, Eu55-4, Eu525-1, Eu81, Eu522-1, Eu82-1, Eu81z, Eu818, Eu815, Eu814, Eu810-3, Eu810, Eu810-2, Eu523-2, Eu55-5, Eu603-1, Eu80, Eu80y-1, Eu80B, Eu808, Eu806, Eu800-3, Eu805, Eu803, Eu802, Eu801-1, Eu701, Eu6y2, Eu603-3, Eu605-2, Eu607-1, Eu607-2, Eu80y, Eu60y-3, Eu60y, Eu64z-1, Eu660, Eu662, Eu801, Eu521-1, Eu453-4, Eu912-5, Eu912-4, Eu912, Eu911, Eu45y-2, Eu91, Eu45y-3, Eu45y-4, Eu45y-5, Eu46, Eu455-1, Eu454-3, Eu453-7, Eu92z, Eu453-8, Eu453-22, Eu92y-2, Eu453-24, Eu453-12, Eu91z, Eu91z-2, Eu453-14, Eu902, Eu901-1, Eu86, Eu51z-1, Eu84y, Eu842, Eu841, Eu840-2, Eu520-2, Eu84, Eu82, Eu931, Eu515-1, Eu8y, Eu46y-3, Eu46y, Eu46y-6, Eu900, Eu46z-1, Eu5, Eu504, Eu504-1, Eu505-1, Eu505, Eu82-2, E216, E230, E2301, E2302, E230z, E2310, E2311, E2313, E2401, E250-3, E250-99, E2501, E2503, E22y, E227z, E216-3, E21y4, E21y5, E21y7-1, E21y7, E21yz-1, E2200, E2201, E224-1, E2270, E2274, E2277, E251, E2511, E251z, E2614, E2615, E2620, E2622, E2630, E264-1, E2640, E2642, E2643-1, E2644, E2645, E264z, E2611, E261, E253-2, E2552, E256, E2560, E2562, E2570, E259, E2590, E25y-2, E25y-3, E25yz, E26, E265, E00-1, E107, E1070, E110-1, E1116, E112-3, E11z1, E11z2, E120, E130, E131, E132, E133, E1033, E031z, E010-2, E010-1, E013, E014-1, E014, E015, E030-2, E0300, E0304, E031-1, E0310, E0312, E140-3, E140, E1400, E21-1, E211, E2110, E2111, E2113, E211z, E2121, E213-1, E213, E213-2, E214, E214z, E20z-1, E20y2, E14y0, E14yz, E200-99, E201, E2016-1, E201C, E202B, E202D, E202E, E202z-1, E204-99, E206, E216-1, E2Cz-99, E2D22-1, E2D2z-1, E2D3, E2D30, E2D3z, E2Dy0, E2Dz, E2E, E2E0z, E2F01-1, E2F31, E2F32, E2D22, E2D20-1, E2Cz, E2Cz0, E2Czz, E2D-99, E2D, E2D0, E2D01, E2D0z, E2D1, E2D1-2, E2D2-1, E2D20, E2F4-1, E2F5, E2z, Eu108, Eu112-2, Eu113, Eu122-1, Eu130, Eu132-1, Eu133, Eu142-1, Eu15y, Eu160, Eu192-1, Eu202-1, Eu103, Eu102-1, E3, E30-1, E31z, Eu, Eu04-5, Eu05z-1, Eu05z-2, Eu06, Eu060-2, Eu062-2, Eu062, Eu06z, Eu202-3, E2652, E2751-1, E2754, E2757-1, E2757, E276, E2760, E2761, E276z, E277, E2771, E278z, E27z0, E274D, E2653, E26y, E27, E273, E2732, E274-1, E274-2, E2743, E2744, E27z2, E27z3, E28-1, E2Az, E2B0, E2C, E2C0, E2C0z, E2C11, E2C2, E2C3, E2C30, E2C34, E2C4, E2C4z, E2A3-1, E2A2-2, E280, E281, E283, E283z, E28z-1, E2921, E2923, E2923-1, E29yz, E2A0, E2A11, E2A12, E2Cy, 1BT-1, 1B1L, 1B1B, 13JM-3, 1B1Q, 13JM0, 13HT1, Fy0, 1B1J-1, 13Hc, R00z8, R007z-4, 1BD1, ZV40-1, 13H41, 13M, 13HT1-1, TK-5, 1B1T, EMISNQTR1, 13H4-2, EMISCDI21, ZV40-3, R00zW, 1BE, EMISNQDI90, 1BT-2, 1B17-2.

14. These diagnosis codes have been agreed by Defence Statistics and a group of primary care and mental health clinicians working in MOD. They include signs/symptoms of mental health as well as ICD-10 recognised mental disorders.
15. Personnel have only been included if the mental health related diagnosis read code was recorded in their electronic medical record since they were serving in the UK Armed Forces. The Joint Personnel Administration (JPA) system was used to determine when an individual started serving. Initial analysis found some codes had been recorded as past medical history before the person started serving.
16. JPA is the most accurate source for demographic information on UK Armed Forces personnel and is used to gather information on a person's service, gender and rank.

MOD Specialist Mental Health Services data (Section 2 of report)

17. Defence Statistics receive data from DCMH and in-patient providers for UK Armed Forces personnel from the following sources:

DCMH

- i) Between 01 January 2007 and 30 June 2014, the report captures data provided by DCMHs to Defence Statistics in monthly returns.
- ii) For the period 01 April 2012 to 30 June 2014, new episodes of care data was also sourced from the electronic patient record held in Defence Medical Information Capability Program (DMICP) in addition to those provided by DCMH in monthly returns.
- iii) Since 01 July 2014, DMICP was the single source of DCMH new episodes of care data.

In-patient

- i) Since January 2007, SSSFT and SSAFA have submitted relevant in patient records.
18. In April 2012, system developments enabled DCMH to begin recording information of mental health episodes of care in the integrated health record in DMICP; capturing the information in the format required to produce this report through a set of templates. These templates were designed to capture information in the same way as existing Defence Statistics database, with the ultimate aim of reducing duplicate data entry by clinicians.
 19. DMICP data is compiled from the DMICP data warehouse. DMICP comprises an integrated primary Health Record (iHR) used by clinicians to enter and review patient information and a pseudo-anonymised central data warehouse. Free text entered by clinicians in the patient record does not transfer to the data warehouse. Prior to this data warehouse, medical records were kept locally, at each individual medical centre.
 20. JPA is used to gather information on a person's service, Regular/Reservist status, gender, age and deployment.
 21. Defence Statistics maintains a database of individual deployment records from November 2001.
 - iv) Data prior to April 2007 was derived from the single services Operation Location tracking (OPLOC) systems¹ and data since April 2007 is obtained from the Joint Personnel Administration (JPA) system. The data covers deployments on Operation TELIC (Iraq) (2003-2011) and Operation VERITAS (Afghanistan) (2001-2006) and Operation HERRICK (Afghanistan) (2001 - late-2014).
 - v) The deployment data presented in this report represent deployments to the theatre of operation and not deployment to a specific country i.e. deployment to Op

¹ Around 4% of data obtained prior to April 2007 could not be fully validated for a number of reasons including data entry errors, personnel not recording on the system in the theatre of operation, records of contractors or personnel from other Government Departments. However research carried out by the King's Centre for Military Health Research on a large Tri-Service sample of personnel deployed during the first phase of Op TELIC in 2003, who were identified from Defence Statistics' deployment database, reported a cohort error rate of less than 0.5 per cent.

Telic includes deployment to Iraq and other countries in the Gulf region such as Kuwait and Oman. Therefore, this data cannot be compared to data on personnel deployed to a specific country, such as Iraq.

- vi) This report compares those who had been deployed before their episode of care with those who have not been identified as having deployed before their episode of care.
- vii) Operation TELIC is the name for UK operations in Iraq which started in March 2003 and finished on 21 May 2011. UK Forces were deployed to Iraq to support the Government's objective to remove the threat that Saddam posed to his neighbours and his people and, based on the evidence available at the time, disarm him of his weapons of mass destruction. The Government also undertook to support the Iraqi people in their desire for peace, prosperity, freedom and good government.
- viii) Operation HERRICK is the name for UK operations in Afghanistan which started in April 2006. UK Forces are deployed to Afghanistan in support of the UN authorised, NATO led International Security Assistance Force (ISAF) mission and as part of the US-led Operation Enduring Freedom (OEF). Operation VERITAS is the name for UK operations in Afghanistan between 2001 and 2005.

Data Coverage

- 22. The all mental health data in Section 1 of this report includes all those, Regular and Reservist, with a mental health related diagnosis code recorded in their electronic medical record².
- 23. Diagnosis data presented in Section 1 of the report is that recorded by a primary care clinician and may differ to that presented in Section 2 as a diagnosis can change when a patient is seen by a specialist mental health clinician.
- 24. Due to the current difficulties within the electronic medical record to identify care pathways and distinguish between a new episode of mental health or ongoing mental health care accurately presenting whether mental health care has been delivered solely in primary care or combined with specialist care at a MOD DCMH cannot be done. However, crude exploratory analysis has been carried out and suggests that lower risk, uncomplicated mental health disorders were more likely to be treated solely in primary care. Whereas more complex and enduring conditions were more likely to require specialist mental health care.
- 25. The MOD Specialist Mental Health Services data in Section 2 of this report include regular UK Armed Forces personnel, Gurkhas, Military Provost Guard Staff and all currently serving Reserve personnel who have previously deployed since 1 January 2003 as all of these individuals are eligible for assessment at a DCMH.
- 26. While mobilised, Reservists are treated exactly the same as Regulars. Once demobilised reserves are entitled to care under the Veterans and Reserves Mental Health Programme (VRMHP).
- 27. The VRMHP is open to any current or former member of the UK Volunteer and Regular Reserves who has been demobilised since 1 January 2003 following an overseas operational deployment as a Reservist, and who believes that the deployment may have adversely affected their mental health. The VRMHP also provides mental health assessments by military specialists for veterans who have served since 1982. These reports present data for currently serving Reservists only.

² DMICP

28. Under the VRMHP, MOD liaise with the individual's GP and offer a mental health assessment at the Reserves Training and Mobilisation Centre, which since April 2016 has been located in Colchester. If assessed as having a combat-related mental health condition, MOD then offers out-patient treatment via one of the MOD's DCMHs. If more acute cases present, the DMS will assist with access to NHS in-patient treatment.
29. DCMH staff record the initial mental health assessment during a patient's first appointment, based on presenting complaints. The information is provisional and final diagnoses may differ as some patients do not present the full range of symptoms, signs or clinical history during their first appointment. The mental health assessment of condition data were categorised into three standard groupings of common mental disorders used by the World Health Organisation's International Statistical Classification of Diseases and Health-Related Disorders 10th edition (ICD-10). The following ICD 10 Chapters have been included in this report :
- ix) **F10 - F19 Mental and behavioural disorders due to psychoactive substance misuse, including alcohol.**
A wide variety of disorders that differ in severity (from uncomplicated intoxication and harmful use to obvious psychotic disorders and dementia), but that are all attributable to the use of one or more psychoactive substances (which may or may not have been medically prescribed).
 - x) **F30 - F39 Mood affective disorders, including depressive episodes.**
Disorders in which the fundamental disturbance is a change in affect or mood to depression (with or without associated anxiety) or to elation. The mood change is usually accompanied by a change in the overall level of activity; most of the other symptoms are either secondary to, or easily understood in the context of, the change in mood and activity. Most of these disorders tend to be recurrent and the onset of individual episodes can often be related to stressful events or situations. Includes Manic and Bipolar affective disorders, Depressive and recurrent Depressive episodes and other mood affective disorders.
 - xi) **F40 - F49 Neurotic Stress related and somatoform disorders, including PTSD and Adjustment disorders.**
This includes mental disorders characterized by anxiety and avoidance behaviour, with symptoms distressing to the patient, intact reality testing, no violations of gross social norms, and no apparent organic aetiology.
 - xii) **F00 - F09, F20 - F29 and F50 - F99 are presented as 'Other mental health disorders'**
This includes, disorders grouped together on the basis of their having in common a demonstrable etiology in cerebral disease, brain injury, or other insult leading to cerebral dysfunction; schizophrenia, personality disorders, eating disorders, sleep disorders and attention deficit hyperactivity disorder (ADHD).
30. A number of patients present to DCMH with symptoms that require the treatment skills of DCMH staff, whilst not necessarily having a specific and identifiable mental disorder. In the Findings section, these cases are referred to as "assessed without a mental disorder".
31. Diagnosis data presented in Section 2 of the report is that recorded by a MOD DCMH clinician and may differ to that presented in Section 1 as a diagnosis can change when a patient is seen by a specialist mental health clinician.

Methodology

32. Since July 2014 these releases report on the new episodes of care at a DCMH as recorded in the MOD patient electronic record (DMICP). Using DMICP enables a more

robust and appropriate data source to underpin the reporting of incidence of mental health in the Armed Forces for 2012/13 and in the future and reduces the impact of data capture on DCMH staff. Previous releases have used difference methodology:

- xiii) Prior to 2009/10, only an individual's first attendance at a DCMH were included in the data submitted by DCMHs to Defence Statistics.
 - xiv) Since 2009/10, the report captures all new episodes of care provided by DCMH to Defence Statistics in monthly returns.
 - xv) Since 2012/13, the report captures all new episodes of care recorded in DMICP in addition to monthly submissions provided by DCMH to Defence Statistics.
33. Since January 2007 the admissions to in-patient providers is captured in the returns provided by the in-patient provider.
34. Improvements in robustness and integrity of the data have only been possible since DCMH began recording new episodes of care in mental health templates within DMICP. The inclusion of new episodes of care from the MOD patient electronic record (DMICP) in 2012/13 has resulted in an increase of 21% compared to the number previously published for 2012/13 which was only based on the DCMH monthly returns.
35. Rates enable comparisons between groups and over time, taking account of the number of personnel in a group (personnel at risk) at a particular point in time. The number of events (ie. mental disorders) is then divided by the number of personnel at risk and multiplied by 1,000 to calculate the rate.
36. Rates for Reservist mental health have not been calculated as there are currently data quality issues with accurately identifying the number of personnel at risk.
37. The estimate of personnel at risk required for the denominator value is derived :
- xvi) For the quarterly report - the estimate was calculated using a four-month average of strengths figures (e.g. the number of personnel on strength at the first of every month between July 2014 and October 2014 divided by four for Q2 2014/15).
 - xvii) For the annual report - the estimate was calculated using a thirteen-month average of strengths figures (e.g. the number of personnel on strength at the first of every month between April 2017 and April 2018 divided by thirteen for 2017/18).
 - xviii) The denominator for both publications currently includes all personnel who are entitled to mental health care. There is a known issue with the denominator not including Reservist personnel who are no longer mobilised but under the VRMHP are entitled to receive mental health care if their disorder is as a result of Operational service. Defence Statistics are investigating and quantifying the differences in the denominator data, until it is resolved, the rates and population at risk figures reported should be considered provisional and subject to change as a result.
 - xix) The data used to determine Regular and Reserve status at the time of the individual's appointment is derived from JPA which is correct at the time of extraction.
38. In order to understand if a difference in rates is statistically significant, 95% confidence intervals are used. Statistical significance indicates that a finding is not due to chance. The 95% confidence interval for a rate provides the range of values within which we expect to find the real value of the indicator under study, with a probability of 95%. If a 95% confidence interval around a rate excludes the comparison value, then a statistical test for the difference between the two values would be significant at the 0.05 level. If two confidence intervals do not overlap, a comparable statistical test would always indicate a statistically significant difference. The rates and confidence intervals presented have been rounded to 1 decimal place and therefore when small numbers are presented the rate may lie towards one end of the confidence interval instead of more centrally between the lower and upper confidence interval.
39. The recent changes to the UK Armed Forces population through redundancy programmes,

changes in recruitment patterns and the move to the new employment model and the new structures required to meet Future Force 2020³, are likely to impact on the trends in rates presented as the Armed Forces population shrinks and the Service profile of the serving population changes.

1.4 Contact Details

For any enquiries regarding any publication contact

Defence Statistics (Health) Telephone: 030 6798 4423

Email: Analysis-Health-PQ-FOI@mod.gov.uk

2. Relevance

40. These publications meet user need as they form the single source of mental health statistics for UK Armed Forces personnel within the Ministry of Defence.
41. The principal strength is the presentation of the number of Service personnel who have been seen for a new episode of care at a DCMH or in-patient facility, as reported by clinician's
42. Past publications from 2008 to 2019 do not include information on patients seen only by their GP or Medical Officer, a proportion of mental health issues will have been resolved at these levels without the need for further referral, so the data does not represent the totality of mental health problems in the UK Armed Forces. Since 2020 the report has presented an understanding of the totality of mental health in the UK Armed Forces by capturing those assessed by a GP in primary care as well as MOD Specialist Mental Health Services.
43. Due to the current difficulties within the electronic medical record to identify care pathways and distinguish between a new episode of mental health or ongoing mental health care accurately presenting whether mental health care has been delivered solely in primary care or combined with specialist care at a MOD DCMH cannot be done. However, crude exploratory analysis has been carried out and suggests that lower risk, uncomplicated mental health disorders were more likely to be treated solely in primary care. Whereas disorders such as PTSD, Depression and Adjustment Disorders were more likely to require specialist mental health care.
44. In specific reference to the UK Statistics Authority report, The Use Made of Official Statistics, the two publications are used by:
 - xx) Government – Policy Making
 - xxi) Government – Policy Monitoring
 - xxii) Supporting Third Sector Activity (lobbying)
 - xxiii) Academia – Facilitating Research
 - xxiv) Charities – Facilitating research
45. Additionally, by the nature of the content within the publications, these statistics play an important role in: Accountability (i.e. helping to ensure the MOD's accountability to the British public).
46. The key external users include the general public, the media, medical academics and the charitable sector.
47. To ensure these statistics meet the needs of users, users are encouraged to provide comments and subscribe to updates by emailing Analysis-Health-PQ-FOI@mod.gov.uk

³ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/62487/Factsheet5-Future-Force-2020.pdf

3. Accuracy

48. Efficient methods are adopted to capture the Armed Forces mental health information and considerable validation is undertaken to ensure that the information provided is accurate. Users trust the statistics and Defence Statistics receive numerous requests regarding the information presented.
49. In June 2020 Defence Statistics found that some previously reported information had been wrongly presented. This was the result of human error when processing the data. Changes to previously reported data are annotated with an 'r'. There has been no impact on the overall findings of previous reports. A new data process system has now been put in place to reduce the risk of future amendments.
50. Defence Statistics did receive monthly updates from the MOD DCMH's and now take monthly extracts from DMICP, they also receive monthly updates from the MODs in patient contractor, and British Forces Germany. On an annual basis we include medical discharge figures, aeromedical evacuations from theatre, Field Mental Health data, Headley Court Rehabilitation Assessment data, Reserves Mental Health Program data and Armed Forces Compensation Scheme data. **Following a consultation with the public in 2017 it was decided to stop the production of these stats. The 2016/17 edition of this report was the last to produce some of this information.**
51. DMICP, DMCH monthly returns and in-patient provider monthly returns:
- xxv) There has been no audit of the clinical accuracy of the DMICP mental health data entered in the patient record and no validation of the patient record with data held in the data warehouse.
 - xxvi) Data are extracted from the DS database and DMICP six weeks after the end of the reporting period to allow clinician's sufficient time to complete episode of care information.
 - xxvii) It should be noted Defence Statistics cannot verify demographic information submitted in the monthly DCMH returns in the DS database up to 30 June 2014 (Service, gender, rank, age and deployment) for Service personnel who withheld consent. Without the anonymised unique patient identifier, records for these personnel submitted in the DS database could not be identified in the DMICP record. It is therefore possible that new episodes of care for personnel who withhold consent may be counted twice in this report. The number of personnel who withheld consent between 1 April 2007 and 30 June 2014 is 462. As the data is held in a pseudo-anonymised format in the DMICP data warehouse, patient consent is not an issue from 1 July 2014.
 - xxviii) Mental disorder types reported here are the clinician's initial assessment during a patient's first appointment at a DCMH, based on presenting complaints, therefore final diagnosis may differ as some patients do not show full range of symptoms, signs or clinical history during their first appointment. It should also be noted that the clinician's primary diagnosis is reported here, however patients can present with more than one disorder.
 - xxix) Prior to 2008, DCMH staff were not required to complete ICD-10 information in their monthly returns. Defence Statistics received 227 records that did not have information regarding a specific mental disorder for the financial year 2007/2008. We were therefore unable to ascertain whether these individuals had a mental disorder or not. These records have been included within the disorder breakdown tables under 'Missing mental disorder information'. From 2008 onwards, DCMH staff was asked to return records with complete ICD-10 information, so this data is present for all later years. Disorder information for patients seen at a MOD in-patient contractor is provided on discharge not on admission; therefore some personnel reported as being admitted may not have ICD-10 information recorded at the point of data extraction. These records are counted under 'missing mental disorder information'.
 - xxx) The inclusion of new episodes of care direct from the legal electronic patient

record (DMICP) improves the robustness and integrity of the underlying data.

xxxvi) The use of the pseudo-anonymised patient identifier enables Defence Statistics to validate data, importantly allowing identification of repeat attendances, therefore improving accuracy and also enabling linkage to deployment records to identify any effect of deployment on mental health in the Armed Forces.

xxxvii) As with any new data collection system, there is a training burden; user inexperience with the new mental health templates in DMICP may have affected coverage and accuracy.

xxxviii) There is an ongoing technical issue with the pseudo-anonymised patient identifier in DMICP. This only affects patients who leave Service but are still entitled to mental health care. This results in the loss of the ability for Defence Statistics being able to validate the data held on DMICP, therefore the numbers presented are a minimum as these data are excluded from the figures provided.

52. Joint Personnel Administration (JPA) system:

xxxix) Extracts are taken from JPA each month 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. As a result of improvements in the quality of data sourced from JPA and the monthly data validation processes, all JPA data is considered to be fit for purpose

53. Operation Location (OPLOC) :

xxxix) Deployment markers were assigned using the criteria that an individual was recorded as being deployed to the Iraq and/or Afghanistan theatres of operation if they had deployed to these theatres prior to their appointment date.

xl) Person level deployment data for Afghanistan was not available between 1 January 2003 and 14 October 2005. Therefore, it is possible that some UK Armed Forces personnel who were deployed to Afghanistan during this period and subsequently attended a DCMH have not been identified as having deployed to Afghanistan in this report but have been captured in the overall figures for episodes of care at a DCMH.

54. Medical Discharge:

xli) The PULHHEEMS Administrative Pamphlet 10 (PAP10) instructs Armed Forces medical boards to send a copy of all FMed 23 forms to Defence Statistics, unless the individual concerned has withheld consent¹. This data is matched to outflow to exit information on JPA on a quarterly basis. Any records present on JPA for which Defence Statistics have not received an FMed23 are queried with single service representatives.

xlii) F Med 23's are official medical documents used to record all medical board proceedings. Defence Statistics are supplied FMed 23's by the single Service medical boards and code them into the medical discharge database. If consent for Defence Statistics to hold the information is not given the individual appears in the database with no clinical information recorded.

xliii) The principal and contributory medical conditions for the discharge are coded utilising the International Classification of Diseases and Related Health Problems Version 10 (ICD Codes). This data is then validated and tabulated to form the discharge figures presented in the report. All rates are calculated utilising Armed Forces personnel strength figures obtained from JPA.

xliv) Where paper versions of the FMed 23 form have not been made available to Defence Statistics, the electronic version as recorded on the Defence Medical Information Capability Programme (DMICP) has been utilised.

xlv) Whilst FMed23 forms received by Defence Statistics do include some Reservists, the number and coverage of Reservists captured is currently unknown and reliable denominator data is not available. Therefore, numbers and rates have been calculated using only strengths for Regular personnel and for this report all known Reservists have been removed. However, there may be a presence of a small

unknown number of Reservists within the medical discharge dataset which may cause a small bias in the results.

Following a consultation with the public in 2017 it was decided to stop the production of these stats. The 2016/17 edition of this report was the last to produce this information. Statistics relating to medical discharges can be found at <https://www.gov.uk/government/collections/medical-discharges-among-uk-service-personnel-statistics-index>

55. Aeromedical Evacuations from theatre

xlii) Aeromedical Evacuation Control Cell data are subject to validation routines to check on the names and Service numbers of casualties and to ensure we are accurately counting UK Military casualties. Defence Statistics also then carry out additional validation of the casualty and fatality data by linking it with two other sources of data, namely the Defence Patient Tracking System (DPTS) and the Joint Theatre Trauma Registry (JTTR). This allows us to check on both the Operational Theatre and the classification of injury or illness. Any mismatches between the datasets are investigated and amendments are made to the raw data if necessary before the report is processed, ensuring accuracy.

Following a consultation with the public in 2017 it was decided to stop the production of these stats. The 2016/17 edition of this report was the last to produce this information.

56. Field Mental Health data

xliii) Field Mental Health data were supplied to Defence Statistics on aggregate level on a weekly basis, therefore validation of these counts cannot be carried out. Due to high Operational tempo, it is possible these returns are not always sent to Defence Statistics on a timely basis.

Following a consultation with the public in 2017 it was decided to stop the production of these stats. The 2016/17 edition of this report was the last to produce this information.

57. Veterans and Reserves Mental Health Program data

xliv) The data were provided in aggregated form by the VRMHP practice manager and have not been validated by Defence Statistics, or linked to DCMH and/or inpatient data. Please note that Reserve personnel can have a minimum of six weeks between making a call to the program and being assessed, thus the numbers provided for calls made and cases assessed during a year may not be equal.

58. Armed Forces Compensation Scheme:

xlvi) Defence Business Services (DBS) are responsible for ensuring the quality of Compensation and Pension System (CAPS) data supplied to Defence Statistics. The CAPS is a large administrative database and is subject to the data quality issues of any large administrative system with data collated by a large number of staff for operational delivery purposes.

xlvii) The main sources of potential error in the AFCS statistics are as follows:

- Incomplete data extracts from the DBS
- Data processing errors resulting in incorrect data outputs
- Manual error during production of report tables, graphs and commentary

xlviii) To ensure that potential errors are identified and resolved, Defence Statistics implement a series of data quality checks throughout the report production. These checks involve close liaison with the DBS when required, to ensure the accuracy of the figures published.

4. Timeliness and Punctuality

59. Publication dates for the UK Armed Forces Mental Health Annual Summary report are set as mid June. The publication dates ensure data is available and at a suitable level of accuracy and allow sufficient time for processing and producing the reports.
60. The reports have all been published on time to meet preannounced release dates, with the exception of the 2012/13 Annual Summary which was delayed due to the introduction of a new data source and improvements made in data capture. A one year release schedule outlining the following financial year's publication date is published on gov.uk website. Future publication dates will also be announced on the UK Statistics Authority hub at least one month in advance.

5. Accessibility and Clarity

61. The UK Armed Forces Quarterly Mental Health Report, the UK Armed Forces Annual Mental Health Summary and the UK Armed Forces Mental Health mid-year report are published on the Defence Gov.uk website (<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>). Publications are available from 0930 hours on the day of release.
62. Each report is accompanied by commentary on trends in order to provide the user with key points and give understanding in each section.
63. Tables and figures from each statistic are separately available in MS Excel format for users to download. This allows for use in individual research and reports.
64. For epidemiological information on mental health problems in the UK Armed Forces, reference should be made to the independent academic research conducted by the King's Centre for Military Health Research (KCMHR). This research, conducted on a large and representative sample of the UK Armed Forces population, provides a reliable overview of mental health in the UK Armed Forces available at <https://www.kcl.ac.uk/kcmhr/publications/index>.

6. Coherence and Comparability

65. Each statistic gives a time series comparison for comparability.
 - xlvi) The quarterly mental health publication provides a five quarter rolling time series (the latest quarter and the previous four quarters of mental health data only). (Similar for mid-year report).
 - xlix) The annual mental health publication presents data back to financial year 2007/08 for MOD Specialist Mental Health Services data and back to 2012/13 for all mental health data (primary care and specialist care) with analysis of the latest one year period.
66. This gives the user the opportunity to assess trends over time for different diagnosis, providing a balance between presenting analysis for a sufficient period of time from which to provide meaningful data with the need to monitor the impact of MOD policy.
67. Due to the changes in methodology care must be taken when comparing trends over time. Data between 2009/10 and 2011/12 use the same methodology of capturing new episodes of care data and data in years 2007/08, 2008/09, 2012/13 and 2013/14 cannot be directly compared to this period
68. As Defence Statistics MOD Specialist Mental Health Services data starts from January 2007 the publications do not include personnel who were receiving treatment prior to January 2007. The data in this series report attendances for new episodes of care only

after January 2007, not all those who were receiving treatment at the start of data collection.

69. Data on all mental health (primary care and specialist care) starts from April 2012. Those treated for their mental health in primary care before this are not included in the analysis.
70. Comparisons with rates of mental disorders among the UK general population are also provided in the annual report. These comparisons use those aged 16-59, from the Mental Health Bulletin and from the Adult Psychiatric Morbidity Survey provided by NHS Digital.
71. In order to allow comparison against the UK general population, Defence Statistics (Health) uses the World Health Organisations (WHO) International Statistical Classification of Diseases and Related Health Problems Tenth Revision (ICD-10).

7. Trade-offs between output quality components

72. Where possible Defence Statistics minimise the cost to Government of producing these statistics through using data already collated for operational delivery purposes within the MOD's Joint Personnel Administration system. As a large administrative system, data quality across fields is of varying quality and completeness and this limits the information available in real time.

8. Assessment of User Needs and Perceptions

73. By sitting on a variety of internal steering groups Defence Statistics are well placed to understand the policy needs within the department and to either provide bespoke information or, where appropriate, reassess what is released in routine publications.
74. Defence Statistics (Health) maintain a log of all internal and external mental health information requests (i.e. all PQs, internal ad hocs and FOI requests). This log is kept under constant review to identify possible changes to:
 - i) the format of publications
 - ii) the level of detail included that would help meet user needs.
 - iii)
75. Defence Statistics invite feedback on all external releases, with contact details provided on the first page of each publication.

9. Performance cost and respondent burden

76. Annual updates of each publication take two members of staff five weeks to prepare, including data preparation, validation and report writing.
77. The use of custom designed databases in conjunction with the automatically updating Microsoft Excel documents ensures the minimum production time is required, thus keeping production costs to a minimum and ensuring data are as timely as possible.
78. The move to using DMICP as the single source of DCMH data for these reports has reduced the data reporting burden on DCMH staff.

10. Confidentiality, Transparency and Security

79. None of the publications; contains any identifiable personal data. The information presented in each publication has been structured in such a way to release sensitive medical information into the public domain that contributes to the MOD accountability to the British public but which doesn't compromise the operational security of UK Armed Forces personnel nor that risk breaching the rights of UK Armed Forces personnel.

80. In line with the directives of the JSP 200, disclosure control is conducted on all statistical information provided by the MOD to safeguard the confidentiality of individuals. Within these statistics a risk of disclosure has been considered to be high where numbers presented are fewer than five. In cases where a risk of disclosure exists the following appropriate disclosure control method has been applied:

liii) Figures have been suppressed: In most cases where there may be a risk of disclosure, numbers fewer than five have been suppressed and marked as '~'. Where there is only one cell in a row or column that is fewer than five, secondary suppression has been applied where the next smallest number has also been suppressed so that numbers cannot simply be derived from totals.

81. Tables 1 and 2 of the quarterly mental health report and mid-year report bulletins and Tables 1, 1a, 3 and 3a of the annual mental health summary published after 1 October 2015 include numbers fewer than five for records missing a mental disorder; this is because it presents numbers in a non-medical category and there is no risk to individuals' identities being disclosed.

82. All Defence Statistics staff involved in the production 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. All data are stored, accessed and analysed using the MOD's restricted network and IT systems.

83. Defence Statistics 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 at <https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list>.

11. References

	Reference	Website Location
1	Statistics at MOD Homepage	https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics
2	MOD's Timetable of Future Releases of National and Official Statistics	https://www.gov.uk/government/publications/mod-timetable-for-future-releases-of-national-and-official-statistics

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