

3<sup>rd</sup> April 2014

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# Quarterly UK Armed Forces Mental Health: Presenting complaints at MOD Departments of Community Mental Health October 2012/13 - December 2013/14

#### INTRODUCTION

- 1. This quarterly report provides statistical information on mental health in the UK Armed Forces for the period October 2012/13 December 2013/14. Data used in this report summarises all **new episodes of care** of UK Armed Forces personnel at the MOD Departments of Community Mental Health (DCMH) for outpatient care, i.e. new patients, or patients who have been seen at a DCMH but were discharged from care and have been referred again, and **all admissions** to the MOD in-patient care contractors.
- 2. This data updates previous reports and includes previously unpublished data for 1 October 2013 31 December 2013.
- 3. This is the third report in this quarterly series providing new episodes of care at DCMH in 2013/14 using the MOD electronic primary care patient record (DMICP<sup>a</sup>) in addition to those submitted to the existing Defence Statistics (DS) reporting database. 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 in the quarterly series of the UK Armed Forces mental health report using data submitted by DCMH in the existing DS database.

#### **KEY POINTS**

#### Initial Assessments at MOD DCMH

- 4. During the three-month period October December 2013/14, 1,331 new episodes of care for mental disorder were identified within UK Armed Forces personnel, a rate of 7.6 per 1,000 strength.
- 5. The differences between populations this quarter remain broadly consistent with the findings in previous reports. For the 1,331 personnel assessed for a new episode of care with a mental disorder during the period October December 2013/14 there were some statistically significant findings:
  - Rates for Army personnel were significantly higher than the Royal Navy and Royal Marines.
  - Rates for RAF personnel were significantly higher than the Royal Marines
  - Rates for females were significantly higher than for males.
  - Rates for Other ranks were significantly higher than for Officers.
- 6. There was no significant difference between the rate of mental disorder for personnel previously deployed to Op TELIC and/or Op HERRICK and personnel who had not been identified as having previously deployed prior to their episode of care in the latest quarter (8.0 per 1,000 strength and 6.9 per 1,000 strength respectively).
- 7. Neurotic disorders were the most prevalent disorder in the period October December 2013/14; this was consistent with the findings in the previous four quarters. Adjustment disorders accounted for the majority (56%) of all Neurotic disorders. Rates of PTSD remained low at 0.6 per 1,000 strength (n = 105), and there was no significant change in the rate of PTSD compared to previous quarters.

#### Admissions to the MOD In-patient Contractor

8. During the three-month period October - December 2013, there were 78 admissions to the MOD in-patient care contractor representing a rate of 0.4 per 1,000 strength; 61 of these patients had been seen at a DCMH at some point prior to their admission. The rate of admission to the MOD in-patient care contractor showed no change compared to previous quarters.

Defence Medical Information Capability Programme

#### **BACKGROUND NOTE**

- 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 South Staffordshire and Shropshire NHS Foundation trust; UK based Service personnel from British Forces Germany were treated at Gilead IV hospital, Bielefield under a contract with Guys and St Thomas Hospital in the UK up until April 2013 and from this date SSAFA through the Limited Liability Partnership.
- 10. Following an external consultation exercise in July 2012, all releases of this report now present the latest quarter and the previous four quarters of mental health data only. Time trend graphs presenting rates since the start of data collection in January 2007 have also been included in this report. Annual data are presented in the annual report along with the rate ratios for those with a mental disorder comparing those previously deployed with those not previously deployed.
- 11. This is the third report in this quarterly series providing new episodes of care at DCMH in 2013/14 using the MOD electronic primary care patient record (DMICP<sup>b</sup>) in addition to those submitted to the existing Defence Statistics (DS) reporting database. This improves the robustness and integrity of the data which has only been possible since the introduction of system developments enabling DCMH to begin 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 in the quarterly series of the UK Armed Forces mental health report using data submitted by DCMH in the existing DS system. The quarterly reports affected by this methodology change in 2012/13 have been revised and are available on the Defence Statistics website. Detail of the methodology change and a summary of it's impact can be found in the section on 'Data, definitions and methods' in the annual report.
- 12. Due to the methodology changes implemented in July 2009 and in July 2013, when looking at trends over time for new episodes of care, it is advisable to note:
  - Prior to 2009/10, only an individual's first attendance at a DCMH or an in-patient provider were included in the data collected.
  - Since 2009/10, the report captures all new episodes of care provided by DCMH to Defence Statistics in monthly returns.
  - Since 2012/13, the report captures all new episodes of care recorded in the MOD patient electronic record in addition to monthly returns provided by DCMH.

Therefore, data between 2009/10 and 2011/12 use the same methodology of capturing new episodes of care and data in years 2007/08, 2008/09 and 2012/13 cannot be directly compared to this period. The data presented in the tables in this quarterly report are reflective of the new methodology only.

13. A rigid pseudo-anonymisation process, and other measures preserving patient confidentiality, has enabled full verification and validation of the DCMH and in-patient records, importantly allowing identification of repeat attendances. It also ensures linkage with deployment databases was possible, so that potential effects of deployment could be measured.

#### POINTS TO NOTE

- FOINTS TO NOTE
- 14. Interpretation of the findings in this report continues to require caution. The data contained within this report covers the activity of the formal professional mental health services in the Armed Forces and as such, does not represent the totality of mental health problems in the UK Armed Forces. DS (formerly DASA) data starts from January 2007 and if personnel were receiving treatment prior this date they would not be captured in the following data. 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.
- 15. Mental health problems are present in both civilian and military populations and result from multi-factorial issues. The Headquarters Surgeon General (HQ SG) and Joint Medical Command (JMC) are striving to minimise the stigma associated with mental illness and foster the appropriate understanding, recognition and presentation for management of these issues in UK Armed Forces personnel. Stigma concerning mental health issues is, however, deeply embedded in both military

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<sup>&</sup>lt;sup>b</sup> Defence Medical Information Capability Programme

and civilian populations and it will take time to produce attitudinal cultural change.

16. Some mental health problems will be resolved through peer support and individual resources; patients presenting to the UK Armed Forces' mental health services will have undergone a process that begins with the individual's identification of a problem and initial presentation to primary care or other agencies such as the padres or Service social workers. A proportion of mental health issues will have been resolved at these levels without the need for further referral. The diagnostic breakdown in this report is based upon initial assessments at a DCMH, which may be subject to later amendment. 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.

#### DATA, DEFINITIONS AND METHODS

Data Sources

- 17. DCMH are specialised psychiatric services based on community mental health teams closely located with primary care services at sites in the UK and abroad.
- 18. All UK based and aero-medically evacuated Service personnel based overseas requiring inpatient admission are treated by one of eight NHS trusts in the UK which are part of a consortium headed by the South Staffordshire and Shropshire NHS Foundation trust; UK based Service personnel from British Forces Germany were treated Gilead IV Hospital Bilefield. When presenting inpatient data in this report, the data include returns from both medical providers.
- 19. Defence Statistics receive data from DCMH and in-patient providers for <u>all</u> UK regular Armed Forces personnel from the following sources :
  - Since January 2007, DCMH have submitted relevant information required to produce this report to Defence Statistics on a monthly basis (captured on the DS database).
  - Since April 2012, system developments enabled DCMH to begin recording on the MOD's electronic patient record system (DMICP) in a consistent way for reporting.
  - Since January 2007, SSSFT and Gilead IV hospital Bilefield have submitted relevant information required to produce this report to Defence Statistics.
- 20. 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.
- 21. The DMICP programme commenced during 2007 and by 2010 was in place for the UK and the majority of Germany. Rollout to other overseas locations took place between November 2011 and May 2013.
- 22. A DMICP template is a specifically designed electronic form which is accessed by clinicians entering data in the patient record. Templates are used to ensure key pieces of information relating to a specific patient consultation are recorded in a consistent way for analysis. Items in templates are coded in order that they transfer into the data warehouse. The circumstances under which clinicians must enter data into the patient record through a template are mandated through policy and protocols.
- 23. In April 2012, a new set of templates enabled DCMH to begin recording information on mental health episodes of care in the integrated health record; capturing the information in the format required to produce this report. These templates were designed to capture information in the same way as the existing Defence Statistics database, with the ultimate aim of reducing duplicate data entry by clinicians.
- 24. 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.
- 25. The patient data from each data sources were cross referenced with the Joint Personnel Administration (JPA) system for UK Armed Forces personnel. JPA is the most accurate source for demographic information on UK Armed Forced personnel and is used to gather information on a

<sup>&</sup>lt;sup>c</sup> Their findings are published in the peer-reviewed medical literature and are freely available in the public domain at URL:http://www.kcl.ac.uk/kcmhr/information/publications/publications.html.

person's service, Regular/Reservist status, gender, age and deployment.

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. 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. Data from all sources is correct at the time of data extraction. Amendments to any data previously published will be indicated by an 'r'.

- The data in this report include regular UK Armed Forces personnel (including Ghurkhas and Military Provost Guard Staff), mobilised reservists, Full Time Reserve Service personnel and Nonregular Permanent Staff as all of these individuals are eligible for assessment at a DCMH.
- 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).
- 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".
- From July 2009 onwards, Defence Statistics (formerly DASA) have also included data from four mental health posts located in medical centres, attached to a DCMH, staffed by mental health nurses and operating in the same way as a DCMH; seeing and treating personnel referred for specialist care with suspected mental health disorders. Throughout this report the term DCMH included these four mental health posts.
- Up to 2009 if Service personnel withheld consent, their data was supplied in fully anonymised 31. format. DS received 148 records for personnel assessed with a mental disorder for the period April 2007 – June 2009, but with no demographic information provided. In 2009/10 DCMH staff agreed to collect basic demographic information (Service, gender, rank, age and deployment) for Service personnel who withheld consent thus enabling DS to include these cases within the tables.

#### Methodology

- Changes made to the methodology in July 2009 and July 2013 can be read in more detail in the UK Armed Forces Annual Mental Health Report, published on the Gov.uk Website on 3 October 2013 at https://www.gov.uk/government/publications/mod-national-and-official-statistics-by-topic
- It should be noted Defence Statistics cannot verify demographic information submitted in the DS database (Service, gender, rank, age and deployment) for Service personnel who withheld consent (see paragraph 31). 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. In Q3 2013/14, 17 Service personnel withheld consent in records submitted in the DS database.
- In order to calculate the rates in this report, an estimate of person time at risk is required for the denominator value. The estimate was calculated using a four-month average of strengths figures (e.g. the strength at the first of every month between October 2013 and January 2014 divided by four for Q3 2013/14). Strengths figures include regulars (including Ghurkhas and Military Provost Guard Staff), mobilised reservists, Full Time Reserve Service personnel and Non-regular Permanent Staff as all of these individuals are eligible for assessment at a DCMH.
- With the recent changes to the 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 2020<sup>d</sup>, there will be an impact on the trends in rates presented as the Armed Forces population shrinks and the Service profile of the serving population changes

dhttps://www.gov.uk/government/uploads/system/uploads/attachment data/file/62487/Factsheet5-Future-Force-2020.pdf

- 36. 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.
- 37. Defence Statistics maintains a database of individual deployment records from November 2001. Data prior to April 2007 was derived from the single services Operation Location tracking (OPLOC) systemse 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 HERRICK (Afghanistan) (2001-present).
- 38. 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 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.
- 39. 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. 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. Please note: 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.
- 40. 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.
- 41. 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).
- 42. The information presented in this publication has been structured in such a way to release information into the public domain in a way that contributes to the MOD accountability to the British public but which doesn't risk breaching individual's rights to medical confidentiality. In line with Defence Statistics' rounding policy for health statistics (May 2009), and in keeping with the Office for National Statistics Guidelines, all numbers less than five have been suppressed and presented as '~' to prevent the inadvertent disclosure of individual identities. Where there is only one cell in a row or column that is less than five, the next smallest number (or numbers where there are tied values) has also been suppressed so that numbers cannot simply be derived from totals.
- 43. Revisions have been made to Tables 2 to 6 in this publication which are different to previous releases due to a processing error. These changes do not significantly change the overall at risk groups or metal disorder types than what has been previously presented. Additional validation steps have since been put in place.

Strengths and weaknesses of the data presented in this report

44. A key strength of this report 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. The inclusion in this report of new episodes of care direct from the legal electronic patient record improves the robustness and integrity of the underlying data. As the data is held in a pseudo-anonymised

<sup>&</sup>lt;sup>e</sup> 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.

format in the DMICP data warehouse, patient consent is not an issue. A further strength is the use of the pseudo-anonymised patient identifier to enable DS to validate data therefore improving accuracy and enabling linkage to deployment records to identify any effect of deployment on mental health in the Armed Forces and in addition, the tables in this report have been scrutinised to ensure individual identities have not been revealed inadvertently.

45. Users should be aware that this report does not include information on patients seen only by their GP or Medical Officer. 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. A further weakness of data in this report is that 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.

#### Changes in previously published data

- 46. Due to two separate processing errors the following changes have been made to previously published data:
  - The numbers and rates previously reported in Table 6 showing the breakdown by mental disorders for October December 2012/13 (Q3 2012/13) have been revised. This revision is due to an linking error in the workings spreadsheet which populates Table 6. The greatest impact of this is revision for the rate of Mood Disorder, where the rate increased significantly from the previously published figure from 1.8 per 1,000 (95% CI: 1.6-2.0) to 2.3 per 1,000 (95% CI: 2.1-2.5). All other revisions in this table are minor.
  - The numbers and rates for personnel with a mental disorder previously reported in Tables 2-6 for April June 2013/14 (Q1 2013/14) and Jul September 2013/14 (Q2 2013/14) have been revised due to a error in the MS Access query used to populate these tables. Overall there was less than 1% change in the rates, and no significant changes in the rates presented.
  - The populations at risk has remained the same in each of the quarters presented and have not been effected by either of these revisions.

#### **REFERENCES**

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#### New Episodes of Care at MOD DCMHs, October - December 2013 summary

- During the three-month period October December 2013, a total of 1,664 UK Service personnel were recorded as having been assessed for a new episode of care at MOD DCMH, representing a rate for personnel seen for the period of 9.5 per 1,000 strength<sup>f</sup>.
- Table 1 provides details of the key socio-demographic characteristics for the 1,664 new episodes of care at MOD DCMH during October - December 2013.

Table 1: New episodes of care at MOD DCMH by demographic characteristics, 1 October 2013 -

31 December 2013, numbers and rates per 1,000 strength per quarter

	AI_	Patients assesse	ed with a ment	tal disorder	Patients assessed
Characteristic	patients seen	Number	Rate	95% CI	without a mental disorder <sup>1</sup>
All	1,664	1,331	7.6	(7.2 - 8.0)	333
Service					
Royal Navy	214	161	6.2	(5.2 - 7.1)	53
Royal Marines	41	33	4.2	(2.8 - 5.6)	8
Army	1,055	857	8.2	(7.6 - 8.7)	198
RAF	354	280	7.7	(6.8 - 8.6)	74
Gender					
Males	1,356	1,081	6.8	(6.4 - 7.2)	275
Females	308	250	15.0	(13.2 - 16.9)	58
Rank					
Officers	139	120	4.0	(3.3 - 4.7)	19
Other ranks	1,525	1,211	8.3	(7.9 - 8.8)	314
Deployment - Theatres of operation <sup>2</sup>					
Op TELIC and/or Op HERRICK <sup>3</sup>	1,084	896	8.0	(7.5 - 8.5)	188
of which, Op TELIC	558	476	7.6	(7.0 - 8.3)	82
Op HERRICK <sup>3</sup>	902	742	8.0	(7.4 - 8.6)	160
Neither Op TELIC nor Op HERRICK <sup>3</sup>	580	435	6.9	(6.3 - 7.6)	145

Data Source : DS Database and DMICP

- Of the 1,664 new episodes of care, 1,331 (80%) were assessed with a mental disorder, representing an overall rate for new episodes of care for mental disorder of 7.6 per 1,000 strength. There were 333 patients who were recorded as having no mental disorder at their initial assessment. **Table 1** shows some statistically significant findings:
- The Army had a significantly higher rate of mental disorder (8.2 per 1,000 strength) compared to the Royal Marines and the Royal Navy (4.2 per 1,000 strength and 6.2 per 1,000 strength respectively). In addition, the RAF had a significantly higher rate of mental disorder (7.7 per 1,000 strength) compared to the Royal Marines.
- The rate of mental disorder was higher in females than males (15.0 per 1,000 strength and 6.8 per 1,000 strength respectively).
- Rates of those assessed with a mental health disorder in Other Ranks were higher than Officers. Ranks had a significantly higher rate of mental disorder at 8.3 per 1,000 strength compared to Officers at 4.0 per 1,000 strength.
- In the latest quarter, there was no significant difference between the rate of mental disorder for personnel previously deployed to Op TELIC and/or Op HERRICK (8.0 per 1,000 strength) and personnel who had not been identified as having previously deployed (6.9 per 1,000 strength) prior to their episode of care.

Using a four-month average of regular and mobilised reserves strength from 1 October 2013 to 1 January 2014 (see paragraph 34).

<sup>1.</sup> Patients assessed without a mental disorder (see paragraph 29).

<sup>2.</sup> Deployment to the wider theatre of operation (see paragraph 38).

<sup>3.</sup> Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see paragraph 39).

## New Episodes of Care at MOD DCMH for the five quarter period October-December 2012/13 to October-December 2013/14

Trends overall and by demographic variable

**Table 2** presents numbers and rates of Service personnel who attended a DCMH for a new episode of care and were assessed with a mental disorder in the last five quarters (October 2012 to December 2013).

Table 2: Episodes of care at MOD DCMH, 1 October 2012 - 31 December 2013 by quarter,

numbers and rates per 1,000 strength per quarter

		Patients assess	ed with a mental	disorder	Patients assessed
	All patients seen	Number	Rate	95% CI	without a mental disorder
October - December 2012/13	1,886	1,462	7.9	(7.5 - 8.3)	424
January - March 2012/13	1,648	1,248	6.9	(6.5 - 7.2)	400
April - June 2013/14	1,733	1,368 <sup>r</sup>	7.6	(7.2 - 8.0)	365 <sup>r</sup>
July - September 2013/14	1,724	1,316 <sup>r</sup>	7.4 <sup>r</sup>	(7.0 - 7.8)	408 <sup>r</sup>
October - December 2013/14	1,664	1,331	7.6	(7.2 - 8.0)	333

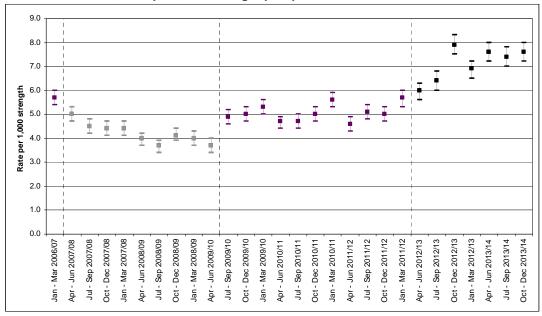
Data Source : DS Database and DMICP

r denotes revisions to previously published data (paragraph 43)

**Table 2** shows the rate for the latest quarter, October - December 2013/14 was not significantly different to the rate for the same time period a year ago (7.6 per 1,000 strength and 7.9 per 1,000 strength respectively) or to the previous quarter July - September 2013/14 (7.4 per 1,000 strength).

56. **Figure 1** presents the rate of UK Armed Forces personnel assessed with a mental disorder each quarter since the start of data collection in January 2007.

Figure 1: UK Armed Forces personnel assessed with a mental disorder, January 2007 to December 2013<sup>1,2,3</sup>, rates per 1,000 strength per quarter and 95% confidence intervals



Data Source: DS Database and DMICP

57. **Figure 1** shows between July 2009<sup>9</sup> and March 2013, the rate has been stable at around 5.0 per 1,000 strength, with a rise in January – March each year, **Please note that quarterly data after April 2012 using the new methodology is not comparable across the quarters presented before <b>April 2012.** Since 1 April 2012 there has been a rise in the rate of personnel assessed with a mental

<sup>1.</sup> January 2007 - June 2009 new attendances, July 2009 onwards new episodes of care (see paragraph 12).

<sup>2.</sup> January 2007 represents a genuine baseline as at this point all cases were 'new episodes of care' as this was the start of data capture by Defence Statistics.

<sup>3.</sup> April 12 - June 13 revised methodology to include electronic record source (see paragraphs 12 and 32).

<sup>&</sup>lt;sup>g</sup> Methodology change from July 2009 onwards and April 2012 onwards (See paragraphs 12 and 32)

disorder, however the rate over the last two quarters has remained stable at 7.4 per 1,000 strength and 7.6 per 1,000 strength respectively. It is not clear if the rise in rates is due to DMICP template usage in the DCMH or a true rise in the number of Service personnel assessed with a mental disorder. Figure 1 has been repeated for each of the Services and is available in **Annex A**.

58. **Tables 3, 4** and **5** present the demographic details for Service personnel who attended a DCMH for a new episode of care and were assessed with a mental disorder in the last five quarters.

Table 3: Episodes of care at MOD DCMH by Service, 1 October 2012 - 31 December 2013 by

quarter, numbers and rates per 1,000 strength per quarter

						S	ervice								
		Royal Na	ıvy	Re	oyal Mar	ines		Army							
		Patients assessed with a mental disorder													
Date	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI			
October - December 2012/13	172	6.3	(5.4 - 7.3)	34	4.3	(2.9 - 5.8)	937	8.4	(7.9 - 8.9)	319	8.2	(7.3 - 9.2)			
January - March 2012/13	143	5.3	(4.5 - 6.2)	25	3.2	(2.1 - 4.7)	821	7.5	(7.0 - 8.0)	259	6.8	(6.0 - 7.7)			
April - June 2013/14	175	6.6	(5.6 - 7.6)	22	2.8	(1.8 - 4.3)	917 <sup>r</sup>	8.4	(7.9 - 9.0)	254	6.8	(6.0 - 7.6)			
July - September 2013/14	125 「	4.8	(3.9 - 5.6)	25	3.2	(2.1 - 4.7)	888 r	8.3 <sup>r</sup>	(7.8 - 8.9)	278 <sup>r</sup>	7.6 <sup>r</sup>	(6.7 - 8.4)			
October - December 2013/14	161	6.2	(5.2 - 7.1)	33	4.2	(2.8 - 5.6)	857	8.2	(7.6 - 8.7)	280	7.7	(6.8 - 8.6)			

Data Source : DS Database and DMICP

r denotes revisions to previously published data (paragraph 43)

- 59. **Table 3** shows some significant differences in the rates of mental health disorders between the Services. The Army had higher rates of mental disorders compared to the Royal Navy and Royal Marines in each of the last five quarters. Rates of mental disorders among the RAF were also significantly higher than the Royal Marines throughout the five-quarter period presented.
- Royal Marines had the lowest rate of mental disorders compared to the other Services in each of the last five quarters, this may be due to the rigorous training they undergo which ensures only the 'elite' go forward as Royal Marines (thus the selection process removes those that may be more susceptible to mental health problems) and/or it may be due the tight unit cohesion that exists amongst the elite forces, thus the support received from the Unit further supports the 'healthy worker' effect (Pers comm. Def Prof Mental Health).

Table 4: Episodes of care at MOD DCMH by gender and rank, 1 October 2012 - 31 December

2013 by quarter, numbers and rates per 1,000 strength per quarter

			Ge	nder		Rank									
		Males			Females			Officers			ks				
		Patients assessed with a mental disorder													
	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI			
October - December 2012/13	1,147	6.8	(6.4 - 7.2)	315	18.2	(16.1 - 20.2)	126	4.0	(3.3 - 4.7)	1,336	8.7	(8.2 - 9.1)			
January - March 2012/13	991	6.0	(5.6 - 6.4)	257	15.0	(13.2 - 16.9)	120	3.9	(3.2 - 4.6)	1,128	7.5	(7.0 - 7.9)			
April - June 2013/14	1,090 r	6.7	(6.3 - 7.1)	278	16.4	(14.5 - 18.3)	127	4.2	(3.4 - 4.9)	1,241 「	8.3	(7.8 - 8.7)			
July - September 2013/14	1,070 <sup>r</sup>	6.7	(6.3 - 7.1)	246 <sup>r</sup>	14.6 <sup>r</sup>	(12.8 - 16.5)	117 '	3.9 <sup>r</sup>	(3.2 - 4.6)	1,199 「	8.1 <sup>r</sup>	(7.7 - 8.6)			
October - December 2013/14	1,081	6.8	(6.4 - 7.2)	250	15.0	(13.2 - 16.9)	120	4.0	(3.3 - 4.7)	1,211	8.3	(7.9 - 8.8)			
0 0 0 1		1 1100													

Data Source : DS Database and DMICP

r denotes revisions to previously published data (paragraph 43)

- 61. The rate of mental disorder was significantly higher in females than males throughout the latest five quarters (**Table 4**). This finding was replicated in the civilian population where females were more likely to report mental health problems than males. A study following up the mental health of adults suggested that this is because females are likely to have more interactions with health professionals (Singleton N, Lewis G 2003). Defence Statistics have not investigated whether females in the UK Armed Forces have more interactions with health professionals than their male colleagues.
- 62. Rates of those assessed with a mental health disorder in Other Ranks were significantly higher than Officers in each of the quarters presented. The differences between ranks and Officers may be due to educational and/or socio-economic background, where both higher educational attainment and higher socio-economic background are associated with lower levels of mental health disorder (Meltzer *et al* 2002). The majority of Officers (with the exception of those promoted from the Ranks) are recruited as graduates of the higher education system, whilst the majority of Other Ranks are recruited straight from school and often from the inner cities (particularly for the Army).

Table 5: Episodes of care at MOD DCMH by deployment<sup>1,2</sup>, 1 October 2012 - 31 December 2013

by quarter, numbers and rates per 1,000 strength per quarter

					De	oloyment - The	atres of ope	ration <sup>1</sup>								
	Op TELIC	and/or C	p HERRICK <sup>2</sup>		Op TELI	С	0	p HERRIC	CK <sup>2</sup>							
		Patients assessed with a mental disorder														
Date	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI				
October - December 2012/13	935	7.8	(7.3 - 8.3)	528	7.4	(6.8 - 8.1)	734	7.8	(7.3 - 8.4)	527	8.0	(7.3 - 8.7)				
January - March 2012/13	814	7.0	(6.5 - 7.5)	459	6.7	(6.1 - 7.3)	663	7.1	(6.6 - 7.7)	434	6.6	(6.0 - 7.3)				
April - June 2013/14	873 「	7.5	(7.0 - 8.0)	467 「	7.0	(6.4 - 7.7)	713 「	7.6	(7.0 - 8.1)	495	7.7	(7.0 - 8.4)				
July - September 2013/14	918 「	8.1	(7.5 - 8.6)	487	7.6	(6.9 - 8.2)	756 <sup>r</sup>	8.1 <sup>r</sup>	(7.5 - 8.7)	398 「	6.2 <sup>r</sup>	(5.6 - 6.9)				
October - December 2013/14	896	8.0	(7.5 - 8.5)	476	7.6	(7.0 - 8.3)	742	8.0	(7.4 - 8.6)	435	6.9	(6.3 - 7.6)				

Data Source : DS Database and DMICP

63. In the latest quarter, there was no significant difference in the rate of mental disorder for personnel identified as having previously deployed to Op TELIC and/or Op HERRICK compared to personnel who had not been identified as having previously deployed prior to their episode of care. This is consistent with findings in all other quarters presented with the exception of July – September 2013/14.

#### Trends by mental disorder

- **Table 6** (see page 11) provides details of the types of presenting complaints, by ICD-10 grouping, for the 1,331 new episodes of care assessed with a mental disorder during October December 2013 and for the previous four quarters.
- 65. Neurotic disorders were the most common disorder throughout the five quarter period presented in **Table 6**. Adjustment disorders accounted for 56% of all neurotic disorders in the latest quarter, in line with previous quarters. Rates in all other disorders have remained fairly constant across the five quarters.

<sup>1.</sup> Deployment to the wider theatre of operation (see paragraph 38).

<sup>2.</sup> Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see paragraph 39).

r denotes revisions to previously published data (paragraph 43)

Table 6: Initial mental disorder assessments for all new episodes of care seen at MOD DCMH by ICD-10 grouping, 1 October 2012 - 31 December 2013 by quarter, numbers and rates<sup>1</sup> per 1,000 strength per quarter

						_						ICD-10 d	escription											
	Psychoad	ctive subs	tance use	of which dis	orders du	e to alcohol	Mod	d disord	ers	of which depressive episode Neurotic disorders				of which PTSD of which a			of which a	djustment	disorders	Other m	ental dis	orders		
			Patients assessed with a mental disorder																					
Date	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI
October - December 2012/13	91 '	0.5 r	(0.4 - 0.6)	87 '	0.5 r	(0.4 - 0.6)	429 r	2.3 r	(2.1 - 2.5)	322 r	1.7 '	(1.5 - 1.9)	888 r	4.8 r	(4.5 - 5.1)	81 r	0.4 r	(0.3 - 0.5)	480 °	2.6 r	(2.4 - 2.8)	54 r	0.3 r	(0.2 - 0.4)
January - March 2012/13	69	0.4	(0.3 - 0.5)	67	0.4	(0.3 - 0.5)	325	1.8	(1.6 - 2.0)	257	1.4	(1.2 - 1.6)	820	4.5	(4.2 - 4.8)	89	0.5	(0.4 - 0.6)	470	2.6	(2.3 - 2.8)	34	0.2	(0.1 - 0.2)
April - June 2013/14	71 '	0.4	(0.3 - 0.5)	68 <sup>r</sup>	0.4	(0.3 - 0.5)	353 <sup>r</sup>	2.0 r	(1.8 - 2.2)	289 ¹	1.6 °	(1.4 - 1.8)	897 <sup>r</sup>	5.0	(4.6 - 5.3)	91 <sup>r</sup>	0.5 r	(0.4 - 0.6)	497 <sup>r</sup>	2.8	(2.5 - 3.0)	47 <sup>r</sup>	0.3 <sup>r</sup>	(0.2 - 0.3)
July - September 2013/14	70	0.4	(0.3 - 0.5)	69	0.4	(0.3 - 0.5)	364	2.0 r	(1.8 - 2.3)	302	1.7 '	(1.5 - 1.9)	840	4.7 r	(4.4 - 5.0)	97	0.5	(0.4 - 0.7)	521	2.9 r	(2.7 - 3.2)	42	0.2	(0.2 - 0.3)
October - December 2013/14	58	0.3	(0.2 - 0.4)	57	0.3	(0.2 - 0.4)	426	2.4	(2.2 - 2.7)	357	2.0	(1.8 - 2.3)	812	4.6	(4.3 - 5.0)	105	0.6	(0.5 - 0.7)	452	2.6	(2.3 - 2.8)	35	0.2	(0.1 - 0.3)

Data Source : DS Database and DMICP

<sup>1.</sup> The rates and confidence intervals have been rounded to 1 decimal place (paragraph 36). r denotes revisions to previously published data (paragraph 43)

#### Admissions to the MOD's In-patient Contractors

- 66. **Tables 7 to 9** provide details by demographic breakdowns for the latest five quarters for admissions to in-patient contractors. It is important to note that an individual may be seen for an episode of care at a DCMH and then be admitted to an in-patient facility, therefore individuals may appear in both datasets and the numbers provided in this report. As a result it is not appropriate to add together the DCMH episodes of care and in-patient admissions.
- 67. During the three-month period October December 2013, 78 Service personnel were admitted to a MOD in-patient contractor<sup>h</sup>, a rate of 0.4 per 1,000 strength.
- 68. Of the 78 admissions, 61 had been seen at a DCMH between January 2007 and the date of their admission. The remaining 17 patients were admitted to one of the in-patient contractors without Defence Statistics records and DMICP records showing that they had been seen at a DCMH prior to their admission. Possible explanations of this are emergency admissions or personnel overseas being admitted following an aeromedical evacuation back to the UK.

Table 7: Admissions to the MOD in-patient contractors by Service, 1 October 2012 - 31 December 2013 by quarter, numbers and rates<sup>1</sup> per 1,000 strength per quarter

				Service											
	A	l admissio	ns	Na	val Ser	vice <sup>2</sup>		Army							
		Patients assessed with a mental disorder													
Date	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI			
October - December 2012/13	74	0.4	(0.3 - 0.5)	~	0.3	(0.1 - 0.5)	61	0.5	(0.4 - 0.7)	~	0.1	(0.0 - 0.3)			
January - March 2012/13	71	0.4	(0.3 - 0.5)	11	0.3	(0.2 - 0.6)	53	0.5	(0.4 - 0.6)	7	0.2	(0.1 - 0.4)			
April - June 2013/14	73	0.4	(0.3 - 0.5)	9	0.3	(0.1 - 0.5)	52	0.5	(0.3 - 0.6)	12	0.3	(0.2 - 0.6)			
July - September 2013/14	87	0.5	(0.4 - 0.6)	14	0.4	(0.2 - 0.7)	68	0.6	(0.5 - 0.8)	5	0.1	(0.0 - 0.3)			
October - December 2013/14	78	0.4	(0.3 - 0.5)	9	0.3	(0.1 - 0.5)	59	0.6	(0.4 - 0.7)	10	0.3	(0.1 - 0.5)			

Data Source: British Forces Germany and SSFT in-patient data.(see paragraphs 18-19).

- 1. The rates and confidence intervals have been rounded to 1 decimal place (paragraph 36).
- 2. Royal Navy and Royal Marines combined to protect patient confidentiality.
- 3. Data presented as "~" has been suppressed in accordance with Defence Statistics rounding policy (see paragraph 42).
- 69. **Table 7** shows in the latest quarter there were no significant differences in the rates of inpatient admissions between each of the Services. This finding is in contrast to the previous quarter when Army rates were significantly higher than the RAF.

Table 8: Admissions to the MOD in-patient contractors by gender and rank, 1 October 2012 - 31 December 2013 by quarter, numbers and rates<sup>1</sup> per 1,000 strength per quarter

			Ger	der			Rank							
		Males	1		Female	s	·	Officer	s	Ot	nks			
				P	atients	assessed w	with a mental disorder							
Date	Number	Rate	95% CI	Number	Rate	95%CI	Number	Rate	95% CI	Number	Rate	95% CI		
October - December 2012/13	~	0.4	(0.3 - 0.5)	~	0.2	(0 .0- 0.5)	~	0.1	(0.0 - 0.3)	~	0.5	(0.4 - 0.6)		
January - March 2012/13	63	0.4	(0.3 - 0.5)	8	0.5	(0.2 - 0.9)	5	0.2	(0.1 - 0.4)	66	0.4	(0.3 - 0.5)		
April - June 2013/14	64	0.4	(0.3 - 0.5)	9	0.5	(0.2 - 1.0)	~	0.1	(0.0 - 0.3)	~	0.5	(0.4 - 0.6)		
July - September 2013/14	75	0.5	(0.4 - 0.6)	12	0.7	(0.4 - 1.2)	8	0.3	(0.1 - 0.5)	79	0.5	(0.4 - 0.7)		
October - December 2013/14	63	0.4	(0.3 - 0.5)	15	0.9	(0.5 - 1.5)	6	0.2	(0.1 - 0.4)	72	0.5	(0.4 - 0.6)		

Data Source: British Forces Germany and SSFT in-patient data.(see paragraph 18-19).

- 1. The rates and confidence intervals have been rounded to 1 decimal place (paragraph 36).
- 2. Data presented as "~" has been suppressed in accordance with Defence Statistics' rounding policy (see paragraph 42).
- 70. **Table 8** shows no significant difference in the admission rate between males and females throughout the last five quarters. This was in contrast to the higher rates seen among females attending a MOD DCMH for a new episode of care during the same time period.
- 71. During the latest quarter, October December 2013/14 there was no significant difference in the rate of admission for Other Ranks compared to Officers (0.5 per 1,000 compared to 0.2 per 1,000 respectively). Admission rates among Other Ranks were significantly higher than Officers in the same quarter last year, October December 2012/13 and in April June 2013/14.
- 72. The admissions data are based on very small numbers and therefore we would expect to see these data fluctuate on a quarter by quarter basis.

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<sup>&</sup>lt;sup>h</sup> See paragraph 19 for further information on the data providers for in-patient care.

Table 9: Admissions to the MOD in-patient contractors by deployment<sup>1,2</sup>, 1 October 2012 - 31 December 2013 by quarter, numbers and rates<sup>3</sup> per 1.000 strength per quarter

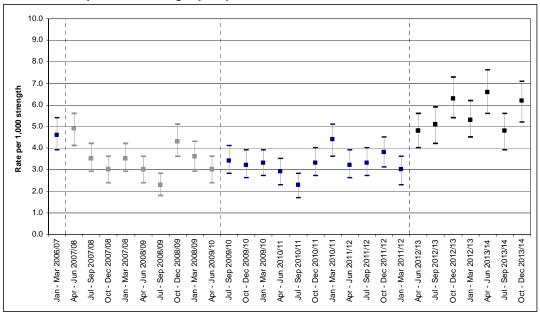
						The									
		Deployment - Theatres of operation1													
	Op TE	ELIC and	d/or Op		of w										
	H	HERRIC	K <sup>2</sup>	K <sup>2</sup> Op TELIC Op HERRICK <sup>2</sup>							Neither				
		Patients assessed with a mental disorder													
Date	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI			
October - December 2012/13	45	0.4	(0.3 - 0.5)	18	0.3	(0.1 - 0.4)	36	0.4	(0.3 - 0.5)	29	0.4	(0.3 - 0.6			
January - March 2012/13	38	0.3	(0.2 - 0.4)	18	0.3	(0.2 - 0.4)	32	0.3	(0.2 - 0.5)	33	0.5	(0.3 - 0.7)			
April - June 2013/14	34	0.3	(0.2 - 0.4)	18	0.3	(0.2 - 0.4)	33	0.4	(0.2 - 0.5)	39	0.6	(0.4 - 0.8)			
July - September 2013/14	56	0.5	(0.4 - 0.6)	26	0.4	(0.3 - 0.6)	53	0.6	(0.4 - 0.7)	31	0.5	(0.3 - 0.7			
October - December 2013/14	44	0.4	(0.3 - 0.5)	24	0.4	(0.2 - 0.6)	36	0.4	(0.3 - 0.5)	34	0.5	(0.4 - 0.7			
	1														

Data Source: British Forces Germany and SSFT in-patient data.(see paragraph 18-19).

- 1. Deployment to the wider theatre of operation (see paragraph 38).
- 2. Data for Afghanistan between 1 January 2003 and 14 October 2005 were not available for person level deployment (see paragraph 39).
- 3. The rates and confidence intervals have been rounded to 1 decimal place (paragraph 36).
- 73. **Table 9** shows there was no significant difference in the admission rates between those identified as having previously deployed on Op TELIC and/or Op HERRICK and those who had not been identified as having previously deployed over each of the five quarters presented. This is in line with the similar rate of episodes of care at a MOD DCMH in the latest quarter, among personnel who were identified as having previously deployed compared to those who not previously deployed (see paragraph 61).

Rate of Armed Forces personnel assessed with a mental disorder quarterly by Service, Time Series, January 2007 to December 2013.

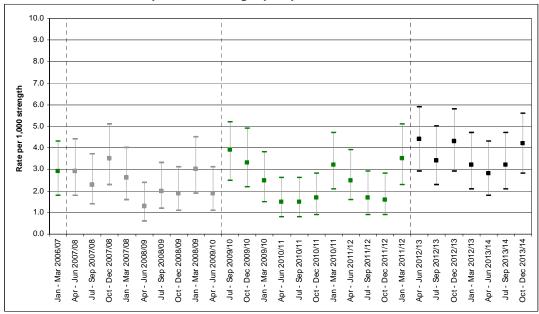
Figure A1: Royal Navy personnel assessed with a mental disorder, January 2007 to December 2013<sup>1,2,3</sup>, rates per 1,000 strength per quarter and 95% confidence intervals



Data Source : DS Database and DMICP

- 1. January 2007 June 2009 new attendances, July 2009 onwards new episodes of care (see paragraph 32).
- 2. January 2007 represents a genuine baseline as at this point all cases were 'new episodes of care' as this was the start of data capture by Defence Statistics.
- 3. April 12 June 2013 new methodology (see paragraph 32).

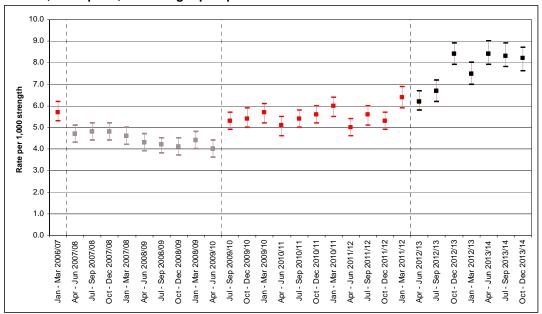
Figure A2: Royal Marine personnel assessed with a mental disorder, January 2007 to December 2013<sup>1,2,3</sup>, rates per 1,000 strength per quarter and 95% confidence intervals



Data Source : DS Database and DMICP

- 1. January 2007 June 2009 new attendances, July 2009 onwards new episodes of care (see paragraph 32).
- 2. January 2007 represents a genuine baseline as at this point all cases were 'new episodes of care' as this was the start of data capture by Defence Statistics.
- 3. April 12 June 2013 new methodology (see paragraph 32).

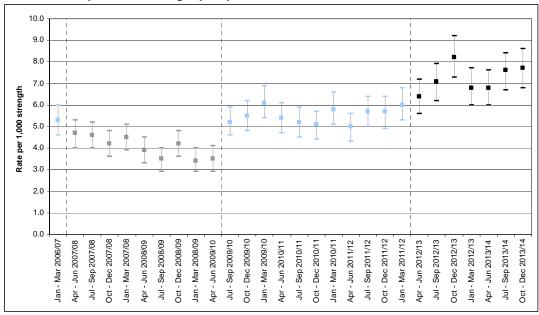
Figure A3: Army personnel assessed with a mental disorder, January 2007 to December 2013<sup>1,2,3</sup>, rates per 1,000 strength per quarter and 95% confidence intervals



Data Source: DS Database and DMICP

- 1. January 2007 June 2009 new attendances, July 2009 onwards new episodes of care (see paragraph 32).
- 2. January 2007 represents a genuine baseline as at this point all cases were 'new episodes of care' as this was the start of data capture by Defence Statistics.
- 3. April 12 June 2013 new methodology (see paragraph 32).

Figure A4: RAF personnel assessed with a mental disorder, January 2007 to December 2013<sup>1,2,3</sup>, rates per 1,000 strength per quarter and 95% confidence intervals



Data Source : DS Database and DMICP

- 1. January 2007 June 2009 new attendances, July 2009 onwards new episodes of care (see paragraph 32).
- 2. January 2007 represents a genuine baseline as at this point all cases were 'new episodes of care' as this was the start of data capture by Defence Statistics.
- 3. April 12 June 2013 new methodology (see paragraph 32).