

UK Armed Forces mental health: Presenting complaints at MOD Departments of Community Mental Health January - March 2010 Revised Edition

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INTRODUCTION

1. This report provides statistical information on mental health in the UK Armed Forces for the period January 2007 to March 2010. Between the dates 01 January 2007 and 30 June 2009, this report summarises all new referrals of Service personnel to the MOD's Departments of Community Mental Health (DCMHs) for outpatient care, and new admissions to the MOD's in-patient care contractor. From the date 01 July 2009 onwards, it summarises all **new episodes of care** of Service personnel at the MOD's Departments of Community Mental Health (DCMHs) 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's in-patient care contractor. This data updates previous reports and includes previously unpublished data for January – March 2010.

2. DCMHs are specialised psychiatric services based on community mental health teams closely located with primary care services at sites in the UK and abroad. **Information on patients only seen in the primary care system is not currently available.** To ensure these statistics pick up all **new episodes of care**, DASA have made some changes to data collection and validation from 01 July 2009 onwards. From this date, DASA have also included data from four mental health posts located in medical centres, attached to a DCMH, staffed by psychiatric nurses and operating in the same way as a DCMH; seeing and treating personnel referred with suspected mental health disorders. Throughout this report the term DCMH includes these four mental health posts. Details of these changes can be found in the section on '**Points to note**'.

3. A rigid pseudo-anonymisation process, and other measures preserving patient confidentiality, has enabled full verification and validation of the DCMH returns. It has also ensured linkage with deployment databases was possible, so that potential effects of deployment could be measured. The first report^a in this series provides important background information on data governance. A summary of this, along with detail of some minor methodology changes, can be found later in the section on '**Data, definitions and methods**'.

KEY POINTS

Initial Assessments at MOD DCMHs

4. During the 3-month period January – March 2010, 1,068 new episodes of care for mental disorder were identified within UK Armed Forces personnel, representing a rate of 5.3 per 1,000 strength. This is similar to the rate of 5.0 per 1,000 strength in October – December 2009.

5. For the 1,068 personnel assessed under a new episode of care with a mental disorder, there were some statistically significant findings:

- rates for Army and RAF personnel were higher than for Royal Navy and Royal Marines personnel;
- rates for other ranks were higher than for Officers;
- rates for females were higher than for males.

These findings are broadly consistent with previous reports.

6. Comparing those deployed to the Iraq and/or Afghanistan theatres of operation and those not deployed to either theatre of operation:

- there was no significant difference in the rate of overall mental disorder;
- the rate of neurotic disorder was significantly higher among those who had deployed to the Afghanistan theatre;
- the rate PTSD was significantly higher among those who had deployed. However, PTSD remained a rare condition, affecting 62 personnel seen during this three-month period.

Admissions to the MOD's In-patient Contractor

During the 3-month period January – March 2010, 69 patients were admitted to the MOD's in-patient care contractor, of which 49 had previously been seen at a DCMH prior to 31 March 2010.

^a UK Armed Forces psychiatric morbidity: Assessment of presenting complaints at MOD DCMHs and association with deployment on operations in the Iraq or Afghanistan theatres of operation January – March 2007.

RESULTS

Initial Assessments at MOD DCMHs

7. During the 3-month period January – March 2010, a total of 1,536 UK Service personnel were recorded as having been seen for assessment for a new episode of care at the MOD's DCMHs, representing a rate for the period of 7.6 per 1,000 strength^b.

8. **Table 1** provides details of the key socio-demographic and military characteristics of the 1,536 new episodes of care at the MOD's DCMHs during January – March 2010.

Table 1: New episodes of care at the MOD's DCMHs by demographic and military characteristics, 1 January – 31 March 2010, numbers and rates per 1,000 strength.

Characteristic	Strength ²	All patients seen	Patients assessed with a mental disorder			Patients assessed without a mental disorder
			Number	Rate	95% CI	
All	202,800	1,536	1,068	5.3	(5.0 - 5.6)	468
Service						
Royal Navy	31,300	169	103	3.3	(2.7 - 3.9)	66
Royal Marines	8,100	31	20	2.5	(1.5 - 3.8)	11
Army	118,900	948	672	5.7	(5.2 - 6.1)	276
RAF	44,500	388	273	6.1	(5.4 - 6.9)	115
Gender						
Males	184,000	1,213	821	4.5	(4.2 - 4.8)	392
Females	18,800	323	247	13.1	(11.5 - 14.8)	76
Rank						
Officers	33,800	127	101	3.0	(2.4 - 3.6)	26
Other ranks	169,000	1,409	967	5.7	(5.4 - 6.1)	442
Deployment - Theatres of operation						
Iraq and/or Afghanistan¹	120,900	887	662	5.5	(5.1 - 5.9)	225
of which, Iraq	90,200	632	468	5.2	(4.7 - 5.7)	164
Afghanistan ¹	67,500	517	393	5.8	(5.3 - 6.4)	124
Neither Iraq nor Afghanistan	81,800	649	406	5.0	(4.5 - 5.4)	243

1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 35).
2. Strengths data rounded to the nearest 100, so subtotals may not sum to the total. Strengths are a 4-month average (see paragraph 34).

9. Of the 1,536 new episodes of care, 1,068 (70%) were assessed with a mental disorder, representing an overall rate for new episodes of care for mental disorder of 5.3 per 1,000 strength. There were 468 patients who were recorded as having no mental disorder at their initial assessment.

10. There were some statistically significant differences in the initial assessment rates between various sub-groups of the patients seen during January – March 2010.

- Army personnel and RAF personnel had a higher rate of mental disorder (5.7 per 1,000 strength, 95% CI: 5.2-6.1, N=672, and 6.1 per 1,000 strength, 95% CI: 5.4-6.9, N=273 respectively) than Royal Navy personnel and Royal Marine personnel (3.3 per 1,000 strength, 95% CI: 2.7-3.9, N=103, and 2.5 per 1,000 strength, 95% CI: 1.5-3.8, N=20 respectively).
- Female personnel had a higher rate of mental disorder at 13.1 per 1,000 strength (95% CI: 11.5-14.8, N=247) than male personnel at 4.5 per 1,000 strength (95% CI: 4.2-4.8, N=821).
- Other ranks had a higher rate of mental disorder at 5.7 per 1,000 strength (95% CI: 5.4-6.1, N=967) than Officers at 3.0 per 1,000 strength (95% CI: 2.4-3.6, N=101).

11. **Tables 2, 3, 4, 5, 6, 8, 9 and 10** contain comparisons of data across the last five published quarters. However, due to the introduction of the revised methodology, interpretation of these figures requires caution. As part of the data validation process, prior to 1 July 2009 DASA identified individuals who had previously attended a DCMH and removed them from the analysis. This method of analysis has been revised, and figures for 1 July 2009 onwards now include repeat attendances if they are classified by the DCMH as a new episode of care. This has resulted in an increase in recorded numbers from July 2009 onwards. Proportions across the quarters, however, have remained broadly the same, suggesting that the revised methodology has not altered the pattern of findings.

^b Using a 4-month average of regular and mobilised reserves strength from 1st January to 1st April 2010 (see paragraph 34).

12. Tables 2, 3, 4, and 5 compare the number of new attendances at the DCMHs between January 2007 and June 2009 who were assessed with a mental disorder, and the number of new episodes of care at the DCMHs between July 2009 and March 2010 who were assessed with a mental disorder.

Table 2: Attendances at the MOD's DCMHs, 1 January 2007 – 31 March 2010, numbers and rates per 1,000 strength.

	All patients seen	Patients assessed with a mental disorder			Patients assessed without a mental disorder	Presenting complaint information not provided
		Number	Rate	95% CI		
2007	5,649	3,920	19.6	(19.0 - 20.2)	1,353	376
2008	4,465	3,189	16.2	(15.6 - 16.7)	1,276	0
2009	5,100	3,543	17.7	(17.1 - 18.2)	1,557	0
2010 (to date)	1,536	1,068	5.3	(5.0 - 5.6)	468	0
January - March 2009	1,184	798	4.0	(3.7 - 4.3)	386	0
April - June 2009	1,033	738	3.7	(3.4 - 4.0)	295	0
July - September 2009	1,411	987	4.9	(4.6 - 5.2)	424	0
October - December 2009	1,472	1,020	5.0	(4.7 - 5.3)	452	0
January - March 2010	1,536	1,068	5.3	(5.0 - 5.6)	468	0

Table 3: Attendances at the MOD's DCMHs by Service, 1 January 2007 – 31 March 2010, numbers and rates per 1,000 strength.

Date	Service												Not known ²
	Royal Navy			Royal Marines			Army			RAF			
	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	
2007 ¹	511	16.1	(14.7 - 17.5)	89	11.6	(9.2 - 14.0)	2,318	20.1	(19.3 - 20.9)	847	18.8	(17.5 - 20.0)	271
2008	413	13.2	(11.9 - 14.5)	61	7.8	(5.8 - 9.7)	1,959	17.2	(16.4 - 17.9)	706	16.1	(14.9 - 17.3)	50
2009	413	13.3	(12.0 - 14.5)	97	12.1	(9.7 - 14.5)	2,244	19.1	(18.3 - 19.9)	779	17.6	(16.4 - 18.9)	10
2010 (to date)	103	3.3	(2.7 - 3.9)	20	2.5	(1.5 - 3.8)	672	5.7	(5.2 - 6.1)	273	6.1	(5.4 - 6.9)	0
January - March 2009	112	3.6	(2.9 - 4.3)	24	3.0	(1.9 - 4.5)	509	4.4	(4.0 - 4.8)	150	3.4	(2.9 - 4.0)	3
April - June 2009	94	3.0	(2.4 - 3.6)	15	1.9	(1.1 - 3.1)	468	4.0	(3.6 - 4.4)	154	3.5	(2.9 - 4.1)	7
July - September 2009	106	3.4	(2.8 - 4.1)	31	3.9	(2.5 - 5.2)	619	5.3	(4.9 - 5.7)	231	5.2	(4.6 - 5.9)	0
October - December 2009	101	3.2	(2.6 - 3.9)	27	3.3	(2.2 - 4.9)	648	5.4	(5.0 - 5.9)	244	5.5	(4.8 - 6.2)	0
January - March 2010	103	3.3	(2.7 - 3.9)	20	2.5	(1.5 - 3.8)	672	5.7	(5.2 - 6.1)	273	6.1	(5.4 - 6.9)	0

1. As 376 records have been excluded for lack of ICD-10 information, these data represent a minimum (see paragraph 33).
2. Records supplied without identifiers (see paragraph 32).
3. 'r' indicates a change to previously published data.

Table 4: Attendances at the MOD's DCMHs by gender and rank, 1 January 2007 – 31 March 2010, numbers and rates per 1,000 strength.

Date	Gender						Rank						Not known ²
	Males			Females			Officers			Other Ranks			
	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	
2007 ¹	3,065	16.9	(16.3 - 17.5)	700	38.4	(35.5 - 41.2)	251	7.3	(6.4 - 8.2)	3,514	21.2	(20.5 - 21.9)	271
2008	2,511	14.0	(13.5 - 14.6)	628	34.8	(32.1 - 37.6)	240	7.2	(6.3 - 8.1)	2,899	17.7	(17.1 - 18.4)	50
2009	2,833	15.6	(15.0 - 16.1)	700	37.9	(35.1 - 40.7)	339	10.1	(9.0 - 11.2)	3,194	19.1	(18.5 - 19.8)	10
2010 (to date)	821	4.5	(4.2 - 4.8)	247	13.1	(11.5 - 14.8)	101	3.0	(2.4 - 3.6)	967	5.7	(5.4 - 6.1)	0
January - March 2009	627	3.5	(3.2 - 3.7)	168	9.2	(7.8 - 10.6)	78	2.3	(1.8 - 2.9)	717	4.3	(4.0 - 4.7)	3
April - June 2009	581	3.2	(2.9 - 3.5)	150	8.2	(6.9 - 9.5)	76	2.3	(1.8 - 2.8)	655	3.9	(3.6 - 4.2)	7
July - September 2009	792	4.4	(4.1 - 4.7)	195	10.6	(9.1 - 12.0)	98	2.9	(2.3 - 3.5)	889	5.3	(5.0 - 5.7)	0
October - December 2009	833	4.5	(4.2 - 4.8)	187	10.0	(8.5 - 11.4)	87	2.6	(2.0 - 3.1)	933	5.5	(5.2 - 5.9)	0
January - March 2010	821	4.5	(4.2 - 4.8)	247	13.1	(11.5 - 14.8)	101	3.0	(2.4 - 3.6)	967	5.7	(5.4 - 6.1)	0

1. As 376 records have been excluded for lack of ICD-10 information, these data represent a minimum (see paragraph 33).
2. Records supplied without identifiers (see paragraph 32).
3. 'r' indicates a change to previously published data.

Table 5: Attendances at the MOD's DCMHs by deployment, 1 January 2007 – 31 March 2010, numbers and rates per 1,000 strength.

Date	Deployment - Theatres of operation												Not known ³
	Iraq and/or Afghanistan ²			of which						Neither			
				Iraq		Afghanistan ²							
	Patients assessed with a mental disorder												
Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	
2007 ¹	1,898	18.1	(17.3 - 19.0)	1,725	18.8	(17.9 - 19.7)	375	12.5	(11.2 - 13.8)	1,867	19.6	(18.7 - 20.5)	271
2008	1,769	15.8	(15.0 - 16.5)	1,463	15.8	(15.0 - 16.6)	661	15.0	(13.9 - 16.2)	1,370	16.1	(15.3 - 17.0)	50
2009	2,151	^r 18.2	(17.4 - 19.0)	1,648	^r 17.9	(17.0 - 18.7)	1,049	^r 18.1	(17.0 - 19.2)	1,382	^r 16.8	(15.9 - 17.7)	10
2010 (to date)	662	5.5	(5.1 - 5.9)	468	5.2	(4.7 - 5.7)	393	5.8	(5.3 - 6.4)	406	5.0	(4.5 - 5.4)	0
January - March 2009	493	4.2	(3.9 - 4.6)	400	4.3	(3.9 - 4.7)	216	4.2	(3.6 - 4.7)	302	3.7	(3.2 - 4.1)	3
April - June 2009	427	^r 3.6	(3.3 - 4.0)	328	^r 3.5	(3.2 - 3.9)	201	3.6	(3.1 - 4.1)	304	3.7	(3.3 - 4.1)	7
July - September 2009	628	5.3	(4.9 - 5.7)	489	5.3	(4.8 - 5.8)	299	5.0	(4.4 - 5.6)	359	4.4	(3.9 - 4.9)	0
October - December 2009	603	5.0	(4.6 - 5.4)	431	4.7	(4.3 - 5.2)	333	5.2	(4.6 - 5.7)	417	5.0	(4.6 - 5.5)	0
January - March 2010	662	5.5	(5.1 - 5.9)	468	5.2	(4.7 - 5.7)	393	5.8	(5.3 - 6.4)	406	5.0	(4.5 - 5.4)	0

1. As 376 records have been excluded for lack of ICD-10 information, these data represent a minimum (see paragraph 33).
2. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 35).
3. Records supplied without identifiers (see paragraph 32).
4. '^r' indicates a change to previously published data.

13. Overall rates of mental disorder in the period January – March 2010 are consistent with the rates for October – December 2009. Over the last three quarters, the following trends have remained consistent:

- Over the last three quarters the rate of patients assessed with a mental disorder has increased, although the differences in the rates were not significantly different;
- During the period January – March 2010 rates were significantly higher among Army and RAF personnel compared to Royal Navy and Royal Marines personnel;
- Females had significantly higher rates than males;
- Other ranks had significantly higher rates than Officers;
- Over the last three quarters the rate of patients assessed with a mental disorder who had deployed to the Afghanistan theatre of operation has increased, although the differences in the rates were not significantly different.

14. **Table 6** (see page 5) provides details of the types of presenting complaints, by ICD-10 grouping, for the 1,068 patients seen for a new episode of care during January – March 2010 and assessed with a mental disorder. The table also includes data for the previous four quarters.

15. In line with previous reports, neurotic disorders were the most common initial assessment for patients with a mental disorder. The rate of neurotic disorders was 3.2 per 1,000 strength (95% CI: 3.0-3.5, N=655) which is statistically significantly higher than rates of any other mental disorder groupings. Rates of post-traumatic stress disorder (PTSD) remained low at a rate of 0.3 per 1,000 strength. For all major mental health groupings, rates for January – March 2010 were broadly consistent with previous quarters.

16. **Table 7** (see page 6) provides details of the types of mental disorder by the patients' past deployment on operations to the Iraq or Afghanistan theatres of operation. The rate ratios presented provide a comparison of cases seen between new episodes of care for attendees identified as having deployed to a theatre and those who have not been identified as having deployed to either theatre. A rate ratio less than 1 indicates lower rates in those deployed than those not deployed, whereas a rate ratio greater than 1 indicates higher rates in those deployed than those not deployed. This difference is statistically significant if 1.0 is not contained within the 95% Confidence Interval.

17. Of the 1,068 patients initially assessed as having a new episode of mental disorder: 662 were identified as having deployed in the Iraq and/or Afghanistan theatres of operation, of which 468 to Iraq, 393 to Afghanistan, and 199 to both; and 406 patients were not identified as having deployed to either of these operational theatres.

Table 6: Initial mental disorder assessments for all new episodes of care seen at a DCMH by ICD-10 grouping, 1 January 2007 to 31 March 2010, numbers and rates per 1,000 strength.

Date	ICD-10 description																							
	Psychoactive substance use			<i>of which disorders due to alcohol¹</i>			Mood disorders			<i>of which depressive episode</i>			Neurotic disorders			<i>of which PTSD</i>			<i>adjustment disorders</i>			Other mental disorders		
	Patients assessed with a mental disorder																							
	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
2007 ¹	435	2.2	(2.0 - 2.4)	308	1.5	(1.4 - 1.7)	897	4.5	(4.2 - 4.8)	738	3.7	(3.4 - 4.0)	2,340	11.7	(11.2 - 12.2)	180	0.9	(0.8 - 1.0)	1,384	6.9	(6.6 - 7.3)	248	1.2	(1.1 - 1.4)
2008	326	1.7	(1.5 - 1.8)	310	1.6	(1.4 - 1.7)	734	3.7	(3.5 - 4.0)	622	3.2	(2.9 - 3.4)	1,863	9.5	(9.0 - 9.9)	156	0.8	(0.7 - 0.9)	1,144	5.8	(5.5 - 6.1)	266	1.4	(1.2 - 1.5)
2009	330	1.6	(1.5 - 1.8)	312	1.6	(1.4 - 1.7)	827	4.1	(3.8 - 4.4)	756	3.8	(3.5 - 4.0)	2,115	10.5	(10.1 - 11.0)	172	0.9	(0.7 - 1.0)	1,264	6.3	(6.0 - 6.6)	271	1.4	(1.2 - 1.5)
2010 (to date)	75	0.4	(0.3 - 0.5)	72	0.4	(0.3 - 0.4)	260	1.3	(1.1 - 1.4)	237	1.2	(1.0 - 1.3)	655	3.2	(3.0 - 3.5)	62	0.3	(0.2 - 0.4)	396	2.0	(1.8 - 2.1)	78	0.4	(0.3 - 0.5)
January - March 2009	90	0.5	(0.4 - 0.5)	86	0.4	(0.3 - 0.5)	173	0.9	(0.7 - 1.0)	159	0.8	(0.7 - 0.9)	475	2.4	(2.2 - 2.6)	39	0.2	(0.1 - 0.3)	238	1.2	(1.0 - 1.4)	60	0.3	(0.2 - 0.4)
April - June 2009	83	0.4	(0.3 - 0.5)	76	0.4	(0.3 - 0.5)	139	0.7	(0.6 - 0.8)	126	0.6	(0.5 - 0.7)	442	2.2	(2.0 - 2.4)	31	0.2	(0.1 - 0.2)	295	1.5	(1.3 - 1.6)	74	0.4	(0.3 - 0.5)
July - September 2009	80	0.4	(0.3 - 0.5)	77	0.4	(0.3 - 0.5)	229	1.1	(1.0 - 1.3)	205	1.0	(0.9 - 1.2)	596	3.0	(2.7 - 3.2)	42	0.2	(0.1 - 0.3)	372	1.9	(1.7 - 2.0)	82	0.4	(0.3 - 0.5)
October - December 2009	77	0.4	(0.3 - 0.5)	73	0.4	(0.3 - 0.4)	286	1.4	(1.2 - 1.6)	266	1.3	(1.2 - 1.5)	602	3.0	(2.7 - 3.2)	60	0.3	(0.2 - 0.4)	359	1.8	(1.6 - 2.0)	55	0.3	(0.2 - 0.3)
January - March 2010	75	0.4	(0.3 - 0.5)	72	0.4	(0.3 - 0.4)	260	1.3	(1.1 - 1.4)	237	1.2	(1.0 - 1.3)	655	3.2	(3.0 - 3.5)	62	0.3	(0.2 - 0.4)	396	2.0	(1.8 - 2.1)	78	0.4	(0.3 - 0.5)

1. Specific data for disorders due to alcohol is not available for the period January - March 2007.

Table 7: Initial mental disorder assessments for all new episodes of care seen at a DCMH by deployment and ICD-10 grouping, 1 January – 31 March 2010, numbers and rates per 1,000 strength.

ICD-10 description	All patients seen	Deployment - Theatres of operation									Patients seen
		Iraq and/or Afghanistan ¹			of which						
		Patients seen	Rate ratio ²	95% CI	Iraq			Afghanistan ¹			
				Patients seen	Rate ratio ²	95% CI	Patients seen	Rate ratio ²	95% CI		
All patients seen	1,536	887			632			517			649
All patients assessed with a mental disorder	1,068	662	1.1	(1.0 - 1.2)	468	1.0	(0.9 - 1.2)	393	1.2	(1.0 - 1.3)	406
Psychoactive substance use	75	47	1.1	(0.7 - 1.8)	33	1.1	(0.6 - 1.8)	27	1.2	(0.7 - 2.0)	28
of which disorders due to alcohol	72	44	1.1	(0.7 - 1.7)	32	1.0	(0.6 - 1.7)	24	1.0	(0.6 - 1.8)	28
Mood disorders	260	143	0.8	(0.6 - 1.1)	111	0.9	(0.7 - 1.1)	72	0.7	(0.6 - 1.0)	117
of which Depressive episode	237	133	0.9	(0.7 - 1.1)	103	0.9	(0.7 - 1.2)	70	0.8	(0.6 - 1.1)	104
Neurotic disorders	655	437	1.4	(1.2 - 1.6)	296	1.2	(1.0 - 1.5)	275	1.5	(1.3 - 1.8)	218
of which PTSD	62	52	3.5	(1.8 - 6.9)	31	2.8	(1.4 - 5.7)	42	5.1	(2.6 - 10.2)	10
of which Adjustment disorders	396	263	1.3	(1.1 - 1.6)	172	1.2	(0.9 - 1.5)	166	1.5	(1.2 - 1.9)	133
Other mental disorders	78	35	0.6	(0.4 - 0.9)	28	0.6	(0.4 - 1.0)	19	0.5	(0.3 - 0.9)	43
No mental disorder	468	225			164			124			243

1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 35).
2. Rate ratio compares personnel identified as deployed to these theatres of operation with those not identified as deployed to either theatre of operation.

18. There was no significant difference in the overall rates of mental disorder in those deployed to the Iraq and/or Afghanistan theatres of operation than those not deployed there. However, there were several significant differences in the rates between individual mental health disorders:

- The rate of neurotic disorder, including the sub-categories PTSD and adjustment disorders, was significantly higher in those deployed to the Iraq and/or Afghanistan theatre of operation than those not deployed there. The rate remains significantly higher when broken down into those who deployed to the Afghanistan theatre of operation than those not deployed there.
- The rate of PTSD was significantly higher in those deployed to the Iraq and/or Afghanistan theatres of operation than those not deployed there. The rate of PTSD remains significantly higher in those deployed to the Iraq theatre of operation than those not deployed there, and in those deployed to the Afghanistan theatre of operation than those not deployed there.
- The rate of 'other mental disorders' was significantly lower in those deployed to the Iraq and/or Afghanistan theatres of operation than those not deployed there. The rate of 'other mental disorders' remained significantly lower in those deployed to the Afghanistan theatre than those not deployed there, however when broken down to those deployed to the Iraq theatre of operation than those not deployed there is no significant difference.

Admissions to the MOD's In-patient Contractor

19. During the 3-month period January – March 2010, there were 69 admissions of Service personnel to the MOD's in-patient contractor which corresponds to a rate of 0.3 per 1,000 strength.

20. Of the 69 personnel admitted during January – March 2010, 49 had been seen at a DCMH prior to 31 March 2010. The remaining 20 patients were admitted to the in-patient contractor without DASA's records showing that they had been seen at a DCMH. They are likely to have been emergency admissions.

21. **Tables 8, 9 and 10** provide details of all new admissions to the MOD's in-patient care contractor between January 2007 and June 2009 and all admissions to the MOD's in-patient care contractor between July 2009 and March 2010.

Table 8: Admissions to the MOD's in-patient contractor by Service, 1 January 2007 – 31 March 2010, numbers and rates per 1,000 strength.

Date	All first admissions			Service								
				Naval Service ¹			Army			RAF		
	Patients assessed with a mental disorder											
Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	
2007	247	1.2	(1.1 - 1.4)	42	1.1	(0.7 - 1.4)	165	1.4	(1.2 - 1.6)	40	0.9	(0.6 - 1.2)
2008	213	1.1	(0.9 - 1.2)	49	1.3	(0.9 - 1.6)	119	1.0	(0.9 - 1.2)	45	1.0	(0.7 - 1.3)
2009	231	1.2	(1.0 - 1.3)	45	1.1	(0.8 - 1.5)	143	1.2	(1.0 - 1.4)	43	1.0	(0.7 - 1.3)
2010 (to date)	69	0.3	(0.3 - 0.4)	15	0.4	(0.2 - 0.6)	43	0.4	(0.3 - 0.5)	11	0.2	(0.1 - 0.4)
January - March 2009	57	0.3	(0.2 - 0.4)	8	0.2	(0.1 - 0.4)	42	0.4	(0.3 - 0.5)	7	0.2	(0.1 - 0.3)
April - June 2009	51	0.3	(0.2 - 0.3)	14	0.4	(0.2 - 0.6)	29	0.2	(0.2 - 0.4)	8	0.2	(0.1 - 0.4)
July - September 2009	66	0.3	(0.2 - 0.4)	12	0.3	(0.2 - 0.5)	40	0.3	(0.2 - 0.4)	14	0.3	(0.2 - 0.5)
October - December 2009	57	0.3	(0.2 - 0.4)	11	0.3	(0.1 - 0.5)	32	0.3	(0.2 - 0.4)	14	0.3	(0.2 - 0.5)
January - March 2010	69	0.3	(0.3 - 0.4)	15	0.4	(0.2 - 0.6)	43	0.4	(0.3 - 0.5)	11	0.2	(0.1 - 0.4)

1. Royal Navy and Royal Marines combined to protect patient confidentiality.

2. 'r' indicates a change to previously published data.

Table 9: Admissions to the MOD's in-patient contractor by gender and rank, 1 January 2007 – 31 March 2010, numbers and rates per 1,000 strength.

Date	Gender						Rank					
	Males			Females			Officers			Other Ranks		
	Patients assessed with a mental disorder											
Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	
2007	206	1.1	(1.0 - 1.3)	41	2.2	(1.6 - 2.9)	18	0.5	(0.3 - 0.8)	229	1.4	(1.2 - 1.6)
2008	173	1.0	(0.8 - 1.1)	40	2.2	(1.5 - 2.9)	18	0.5	(0.3 - 0.9)	195	1.2	(1.0 - 1.4)
2009	196	1.1	(0.9 - 1.2)	35	1.9	(1.3 - 2.5)	19	0.6	(0.3 - 0.9)	212	1.3	(1.1 - 1.4)
2010 (to date)	56	0.3	(0.2 - 0.4)	13	0.7	(0.4 - 1.2)	7	0.2	(0.1 - 0.4)	62	0.4	(0.3 - 0.5)
January - March 2009	50	0.3	(0.2 - 0.4)	7	0.4	(0.2 - 0.8)	~	0.1	(0.0 - 0.3)	~	0.3	(0.2 - 0.4)
April - June 2009	45	0.2	(0.2 - 0.3)	6	0.3	(0.1 - 0.7)	~	0.1	(0.0 - 0.2)	~	0.3	(0.2 - 0.4)
July - September 2009	54	0.3	(0.2 - 0.4)	12	0.7	(0.3 - 1.1)	6	0.2	(0.1 - 0.4)	60	0.4	(0.3 - 0.5)
October - December 2009	47	0.3	(0.2 - 0.3)	10	0.5	(0.3 - 1.0)	7	0.2	(0.1 - 0.4)	50	0.3	(0.2 - 0.4)
January - March 2010	56	0.3	(0.2 - 0.4)	13	0.7	(0.4 - 1.2)	7	0.2	(0.1 - 0.4)	62	0.4	(0.3 - 0.5)

1. Data presented as "~" has been suppressed in accordance with DASA's rounding policy (see paragraph 37).

2. 'r' indicates a change to previously published data.

Table 10: Admissions to the MOD's in-patient contractor by deployment, 1 January 2007 – 31 March 2010, numbers and rates per 1,000 strength.

Date	Deployment - Theatres of operation											
	Iraq and/or Afghanistan ¹			of which						Neither		
				Iraq			Afghanistan					
Patients assessed with a mental disorder												
Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	Number	Rate	95% CI	
2007	123	1.2	(1.0 - 1.4)	111	1.2	(1.0 - 1.4)	33	1.1	(0.7 - 1.5)	124	1.3	(1.1 - 1.5)
2008	98	0.9	(0.7 - 1.0)	80	0.9	(0.7 - 1.1)	35	0.8	(0.5 - 1.1)	115	1.4	(1.1 - 1.6)
2009	134	1.1	(0.9 - 1.3)	113	1.2	(1.0 - 1.5)	52	0.9	(0.7 - 1.1)	97	1.2	(0.9 - 1.4)
2010 (to date)	38	0.3	(0.2 - 0.4)	30	0.3	(0.2 - 0.5)	23	0.3	(0.2 - 0.5)	31	0.4	(0.2 - 0.5)
January - March 2009	35	0.3	(0.2 - 0.4)	30	0.3	(0.2 - 0.4)	12	0.2	(0.1 - 0.4)	22	0.3	(0.2 - 0.4)
April - June 2009	25	0.2	(0.1 - 0.3)	20	0.2	(0.1 - 0.3)	7	0.1	(0.0 - 0.3)	26	0.3	(0.2 - 0.5)
July - September 2009	37	0.3	(0.2 - 0.4)	30	0.3	(0.2 - 0.4)	19	0.3	(0.2 - 0.5)	29	0.4	(0.2 - 0.5)
October - December 2009	37	0.3	(0.2 - 0.4)	33	0.4	(0.2 - 0.5)	14	0.2	(0.1 - 0.4)	20	0.2	(0.1 - 0.4)
January - March 2010	38	0.3	(0.2 - 0.4)	30	0.3	(0.2 - 0.5)	23	0.3	(0.2 - 0.5)	31	0.4	(0.2 - 0.5)

1. Does not include personnel deployed to Afghanistan during the period January 2003 to October 2005 (see paragraph 35).

22. Overall rates of admission remained consistent with previous quarters:
- There were no significant differences in admission rates between Services;
 - There were no significant differences in admission rates between males and females;
 - There were no significant differences in admission rates between Officers and Other Ranks;
 - There were no significant differences in admission rates between those deployed to the Iraq or Afghanistan theatres of operation and those who had not been deployed.

POINTS TO NOTE

23. 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. These figures report only attendances for new episodes of care, not all those who were receiving treatment in the time period.

24. Mental health problems are present in both civilian and military populations and result from multi-factorial issues. The Surgeon General's Department (SGD) 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 Armed Forces personnel. Stigma concerning mental health issues is, however, deeply embedded in both military and civilian populations and it will take time produce attitudinal cultural change.

25. Some mental health problems will be resolved through peer support and individual resources; patients presenting to the Armed Forces' mental health services will have undergone a selection 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 DCMHs, which may be subject to later amendment. For epidemiological information on mental health problems in the 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^c.

26. To ensure these statistics pick up all new episodes of care, DASA have made some changes to data collection and validation from July 2009 onwards. Prior to July 2009, we identified individuals who had previously attended a DCMH and removed them from the analysis. Following discussions with mental health professionals, DASA have reviewed the methodology and have expanded our data collection in order to more effectively capture the overall burden of mental health in the Armed Forces, including the effect of deployment on those who might have previously been seen for an unrelated mental health condition. We now include all new episodes of care, including both first referrals and patients who were seen at a DCMH previously, were discharged from care and have been referred again for a new episode of care. Patients whose care has been transferred between clinicians or between DCMHs within a single episode of care have been removed from the analysis.

27. From July 2009 onwards, DASA have also included data from four mental health posts located in medical centres, attached to a DCMH, staffed by psychiatric 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.

28. As a result of the change in methodology, recorded numbers for Q3 2009 onwards have increased from previous quarters. This increase should be treated with caution, however, as is clear by comparison to the figures produced using the previous methods, that this increase is due to the change in the methodology used and not an increase in the number of Armed Forces personnel in attendance at a DCMH (see Armed Forces mental health reports July – September 2009 and October – December 2009 for methodology comparisons). Importantly, the patterns and main trends have remained the same and high profile findings such as rates of PTSD and substance abuse have not significantly changed.

DATA, DEFINITIONS AND METHODS

29. DCMH staff record the initial psychiatric 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 psychiatric assessment 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).

^c 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](http://www.kcl.ac.uk/kcmhr/information/publications/publications.html).

30. A number of patients present to DCMHs 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. Following a range of validation and verification quality assurance procedures, some of the records submitted were excluded from the main analysis. These records were duplicates and repeat attendances in the same episode of care, and civilian or non-UK military personnel not covered by this report. Eight cases were included in the analysis, but since they were supplied in fully anonymous format, could not be verified or linked to personnel data.

32. During 2007, DCMH staff were not required to complete ICD-10 information in their monthly returns and DASA received 376 records that did not have information regarding a specific mental disorder. We were therefore unable to ascertain whether these individuals had a mental disorder or not, and these records have been excluded from tables analysing ‘patients assessed with a mental disorder’. From 2008 onwards, DCMH staff were unable to return records without completing ICD-10 information, so this data is present for all later years.

33. In order to calculate the rates in this annex, an estimate of person time at risk is required for the denominator value. The estimate was calculated using a 4-month average of strengths figures (e.g. the strength at the first of every month between January and April 2010 divided by 4 for Q1 2010). This estimate is in line with the method used for the annual reports. Strengths figures include regulars (including Gurkhas 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. The strengths figures for June 2009 have been updated due to a processing error in the original report released in September 2009. This has resulted in some revisions made, annotated with ‘r’ in this report.

34. Deployment data, used to calculate denominators, cover several operational deployments between November 2001 and December 2009, although person level deployment data for Afghanistan between 1 January 2003 and 14 October 2005 were not available. About 4% of the deployment records were not successfully validated against the “gold standard” personnel records held by the Service Personnel and Veterans Agency^d.

35. 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. **To be accurate, this report compares those who had been deployed before their first appointment with those who have not been identified as having deployed before their first appointment.**

36. In line with DASA’s rounding policy (May 2009) all numbers fewer than five have been suppressed. Where there is only one cell in a row or column that is fewer than five, the next smallest number has also been suppressed so that numbers cannot be derived from totals. Where there are equal values, both numbers have been suppressed.

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^d It is reassuring that the 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 DASA’s deployment database, reported a cohort error rate of less than 0.5 per cent⁴