Tracking Op HERRICK (Afghanistan) VSI/SI Operational Casualties: 1 January 2008 to 30 June 2011

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Issued By:
Defence Analytical Services and Advice (DASA)
Spur 7 B Block
Ensleigh
Bath
BA1 5AB
Enquiries
Press Office:
020 721 83253

Statistical Enquiries:
Dr Kate Harrison
Head of Health Information
DASA
Tel: 01225 468456
kate.harrison@dasa.mod.uk

Internet:
http://www.dasa.mod.uk

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INTRODUCTION

1. This report produces statistical information on patients that were very seriously injured (VSI) or seriously injured (SI) on Operation HERRICK (Afghanistan) between 1 January 2008 and 30 June 2011 as listed on the initial Notification of Casualties (NOTICAS) signal. It complements and expands upon the fortnightly publication of operational casualty and fatality statistics which include counts of Service personnel VSI or SI.

2. This report **does not** include patients that were very seriously ill or seriously ill on Operation HERRICK (Afghanistan) between 1 January 2008 and 30 June 2011 as listed on the initial Notification of Casualties (NOTICAS) signal, in line with the fortnightly publication of operational casualty and fatality statistics.

3. This report has been provided in response to the increasing number of requests for information about injured UK Service Personnel. The requests vary from requesting more detail on the injuries sustained to understanding the long-term outcome of those injured.

4. The MOD are committed to making information on Operational Casualties public but have to draw a line between how much information is provided regularly in the public domain and information which compromise operational security of UK Armed Forces Personnel or which risks breaching an individual's right to medical confidentiality. This report along with the quarterly release of the Op HERRICK and Op TELIC Amputation Statistics is supporting the MOD's commitment to release information wherever possible.

5. The findings in this report first focus on the casualty care pathway in theatre in Afghanistan, including admittance to the field hospital, the length of time in the field hospital and how many of these were aeromedically evacuated to the UK. The report then presents information on the casualty care pathway once they have been returned to the UK. This includes:
   - Where they were initially admitted on return to the UK and the length of time at that first location.
   - Medical locations where the casualties received further specialist treatment.
   - The number of VSI/SI casualties that were amputees.
   - The number of pathways closed and the overall length of the care pathway from initial injury to the date the care pathway was closed (or the date of download from the Defence Patient Tracking System (DPTS) for open pathways).
   - The number of casualties that return to medically fully deployable or medically limited deployable status.
   - The number of casualties who have been discharged from Service.
   - The number of casualties who have been medically discharged from Service.
   - The number of casualties who have registered a claim for compensation and who have been awarded compensation under the Armed Forces and Reserve Forces Compensation Scheme (AFCS).

KEY POINTS

6. In 2008, there were 65 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (27 were VSI, 38 were SI). 60 (92%) of these were the result of hostile action, 5 (8%) were the result of operational accidents.

7. In 2009, there were 157 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (82 were VSI, 75 were SI). 147 (94%) of these were the result of hostile action, 10 (6%) were the result of operational accidents.

8. In 2010, there were 154 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (80 were VSI, 74 were SI). 144 (94%) of these were the result of hostile action, 10 (6%) were the result of operational accidents.

9. Between 1 January 2011 and 30 June 2011 there were 43 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (20 were VSI, 23 were SI). 40 (93%) of these were the result of hostile action, three (7%) were the result of operational accidents.

10. This totals 419[a] casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK between 1 January 2008 and 30 June 2011 (209 were VSI, 210 were SI). Of the 419 personnel, 163 (39%) were identified as amputees at 30 September 2011, 160 (98%) of which were the result of hostile action, three (2%) were the result of operational accidents.

11. All of the 419 casualties were admitted to a field hospital in Afghanistan. The length of stay at the field hospital varied between less than a day to six days, with an average (median) length of stay of one day. Seven patients were discharged from the field hospital and returned to unit in theatre of which one later returned to the UK on a routine flight. The remaining 412 casualties were aeromedically evacuated to the UK for treatment (one of these was initially aeromedically evacuated to the American Hospital in Landstuhl, Germany).

12. As the main receiving unit for military casualties evacuated from an Operational theatre; the Royal Centre for Defence Medicine (RCDM) received 409 of the 412 casualties in the UK (one casualty was treated in Germany initially and upon returning to the UK was then treated at the RCDM). Three patients were returned to their unit to be treated at Primary Health Care.

13. Of the 409 casualties received by RCDM, 407[b] patients (406 received by RCDM and one received by RCDM via Germany) have gone on to either receive further treatment at RCDM or to receive treatment at other specialist care locations.

14. As at 1 September 2011, 156 (37%) of the 419 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK between 1 January 2008 and 30 June 2011 had closed pathways, indicating that no further specialist care was required, 15[c] of these 156 personnel had subsequently redeployed on Operation HERRICK and/or Operation TELIC.

15. As at 1 September 2011, 41 (26%) of the 156 personnel with a closed pathway were no longer in Service. The remaining 378 (115 with closed pathways, 263 with open pathways) remain in Service. Of the 41:
    - 39 had a closed pathway in the DPTS indicating that no further specialist care was required and had then been discharged from Service.
    - One personnel had a closed pathway in the DPTS and was returned to duty after recovering from his injuries then later died in an unconnected incident.
    - One personnel had a closed pathway in the DPTS after dying as a result of their injuries with their care pathway still active.

16. As at 31 March 2011, nine (22%) of the 41 VSI and SI patients, that were discharged had been discharged from Service due to medical grounds. It should be noted that the principal condition leading to discharge may not be related to the VSI/SI injury sustained.

[a] One patient had two separate VSI/SI incidences and therefore has been counted twice in this report totalling 419 personnel.
[b] Two patients have been excluded as they had not completed their first in-patient episode at RCDM.
[c] Excludes Service personnel that returned to Unit in theatre after sustaining their injury (VSI/SI) and includes one personnel who redeployed and died in an unconnected incident.

17. As at 1 September 2011, the latest Medical Deployability Standard (MDS) recorded, for the 115 personnel who were still in Service with a closed pathway;
    - 45 were medically full deployable (MFD)
    - 20 were medically limited deployable (MLD)
    - 40 were medically non deployable (MND)
    - 10 had no MDS recorded after their injury on DMICP

18. As at 31 March 2011, 336 (80%) of the 419 casualties had claimed for compensation under the AFCS. This resulted in a total of 439 claims, which includes multiple and/or additional claims for some individuals. Currently individuals have up to seven years from the date of their injury to make a claim and as such, the remaining 83 individuals who have yet to claim may still do so in the future.

19. Of those who claimed under the AFCS, a total of 287 have been awarded compensation for an injury or illness caused by Service. The remaining 48 casualties who registered a claim are still awaiting the outcome of their AFCS claim.

CONTENTS

Data, Definitions and Methods

Very Seriously Injured (VSI) and Seriously Injured (SI)

20. The VSI and SI categories are defined by Joint Casualty and Compassionate Policy and Procedures. They are not strictly 'medical categories' but are designed to give an indication of the severity of the injury to inform the next of kin and the chain of command.

21. Casualties are listed as VSI and SI in the Notification of Casualty (NOTICAS). NOTICAS is the name for the formalised system of reporting casualties within the UK Armed Forces. It sets in train the MOD's procedure for informing next of kin. The MOD's Joint Casualty and Compassionate Policy and Procedures set out the guidance under which a NOTICAS report is to be raised. NOTICAS takes precedence over all but the most urgent operational and security matters.

22. This report **does not** include patients that were very seriously ill or seriously ill on Operation HERRICK (Afghanistan) between 1 January 2008 until 30 June 2011 as listed on the initial NOTICAS signal, in line with the fortnightly publication of operational casualty and fatality statistics.

23. The NOTICAS reports raised for casualties contain information on how serious medical staff in theatre judge their condition to be. This information is used to inform what the next of kin are told. "VSI" and "SI" are the two most serious categories into which personnel can be classified:
    - Very Seriously Injured or VSI is the definition used where the injury is of such severity that life or reason is imminently endangered.
    - Seriously Injured or SI is the definition used where the patient's condition is of such severity that there is cause for immediate concern, but there is no imminent danger to life or reason.

24. The NOTICAS system is initiated very early in the patient's admission to the field hospital, the classification of a casualty will change as time progresses. The initial signal listing of VSI or SI may in some cases be followed by an updated less serious listing if the case appeared worse on admission than transpires. This report only includes casualties with an initial NOTICAS listing of VSI or SI.

25. The Ministry of Defence publishes the VSI and SI casualty statistics for Operation HERRICK every two weeks, two weeks in arrears. These can be obtained from the DASA website: www.dasa.mod.uk.

Operation HERRICK

26. 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.

27. **Operation Panther's Claw** was preceded by several other operations carried out by British and Afghan government forces with the purpose of "taking and holding ground" in Helmand Province prior to the Afghanistan elections in 2009.

Operation TELIC

28. Operation TELIC is the name for UK operations in Iraq which started in March 2003. There was a drawdown of troops in July 2009 and Operation TELIC 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.

Roulemont

29. A roulemont in Afghanistan comprises a six month time period from April to October or October to April. Some of the results in this report are presented by these time periods representing the summer and winter deployments. Each six month time period is assigned a sequential number, the time periods covered by each roulemont are:
    - HERRICK 4: 15 April 2006 to 14 October 2006
    - HERRICK 5: 15 October 2006 to 14 April 2007
    - HERRICK 6: 15 April 2007 to 14 October 2007
    - HERRICK 7: 15 October 2007 to 14 April 2008
    - HERRICK 8: 15 April 2008 to 14 October 2008
    - HERRICK 9: 15 October 2008 to 14 April 2009
    - HERRICK 10: 15 April 2009 to 14 October 2009
    - HERRICK 11: 15 October 2009 to 14 April 2010

- HERRICK 12: 15 April 2010 to 14 October 2010
- HERRICK 13: 15 October 2010 to 14 April 2011
- HERRICK 14: 15 April 2011 to 14 October 2011

Amputee

30. An amputee is defined as live UK Service personnel who have an injury coded in the Joint Theatre Trauma Register (JTTR) as Amputation (traumatic), partial or complete, for either upper or lower limbs using the Abbreviated Injury Scale (AIS) Dictionary 2005 (Military Edition), and live UK Service personnel who had a surgical amputation performed either at the field hospital or at a UK hospital (the majority of these will be at the Royal Centre for Defence Medicine). A traumatic or surgical amputation can range from the loss of part of a finger or toe up to the loss of entire limbs. Only amputees with an initial NOTICAS listing of VSI or SI have been included in this report.

Data sources

31. The information provided in this report includes Naval Service Personnel (includes the Royal Navy and the Royal Marines), Army Personnel including those from the Gibraltar Regiment, RAF Personnel and Reservists.

32. The information has been compiled from a number of sources:
    - Notification of Casualty (NOTICAS)
    - Field Hospital Admissions from J97 Returns and Operational Emergency Department Attendance Register (OpEDAR)
    - The Joint Theatre Trauma Registry (JTTR)
    - DMRC Headley Court Prosthetics Database
    - DMRC Headley Court Complex Trauma Database
    - The Defence Patient Tracking System (DPTS)
    - DASA's Mental Health Returns Database
    - DASA's Medical Discharge Database
    - Compensation and Pension System (CAPS)
    - Joint Personnel Administration (JPA)
    - Defence Medical Information Capability Programme (DMICP).

33. Detailed information on these datasets and how they were used in this report is contained in **ANNEX A.**

Pseudo-anonymisation

34. Prior to analysis data sources have been linked using a pseudo-anonymisation process. The individual identifiers were stripped from datasets and replaced by a pseudo-anonymiser, generated, effectively, by an automated sequential numbering system. The key to the system is that it recognises previous occurrences of a given Service number and allocates the same pseudo-anonymiser on each occasion. The pseudo-anonymisation process can only be reversed in exceptional circumstances controlled by the Caldicott Guardian under strict protocols.

Statistical Methods

35. Information on length of stay and length of pathways has been presented as a median average with an inter-quartile range, rather than a mean average and standard deviation as these statistics are affected less by outliers.
    a. The median is the value in the centre of the data set when they are arranged from smallest to largest.
    b. A quartile is any of three values (first/lower quartile, second quartile (median), third/upper quartile) that divides the sorted (from smallest value to largest value) dataset into four equal parts. The lower quartile is the value that at which 25% of the values in the dataset will be below. The upper quartile is the value that at which 75% of the values in the dataset will be below.
    c. The inter-quartile range is the range in which the middle 50% of the data points fall (i.e. the distance between the lower and upper quartile). The longer the inter-quartile range the wider the spread of data.
    d. An outlier is a value lower than the lower quartile or higher than the upper quartile.

36. The Non-Parametric Mann-Whitney U Test for Independent samples has been used to test if the distribution of length of admission time is different for VSI and SI patients at both RCDM and at DMRC. The same test has also been used to test if the distribution of length of admission time is

different for hostile and non hostile patients at RCDM and to test if the distribution of the number of admissions to DMRC is different for VSI and SI patients.

37. Some of the data sources used in this report are live systems that are constantly being updated. This means occasionally figure can change, any amendments made since the last release have been indicated by an ‘r’.

Medical Care Pathway

38. **Figure 1** presents an example of a *typical* medical care pathway for a UK Service Personnel VSI or SI whilst on Operation HERRICK.

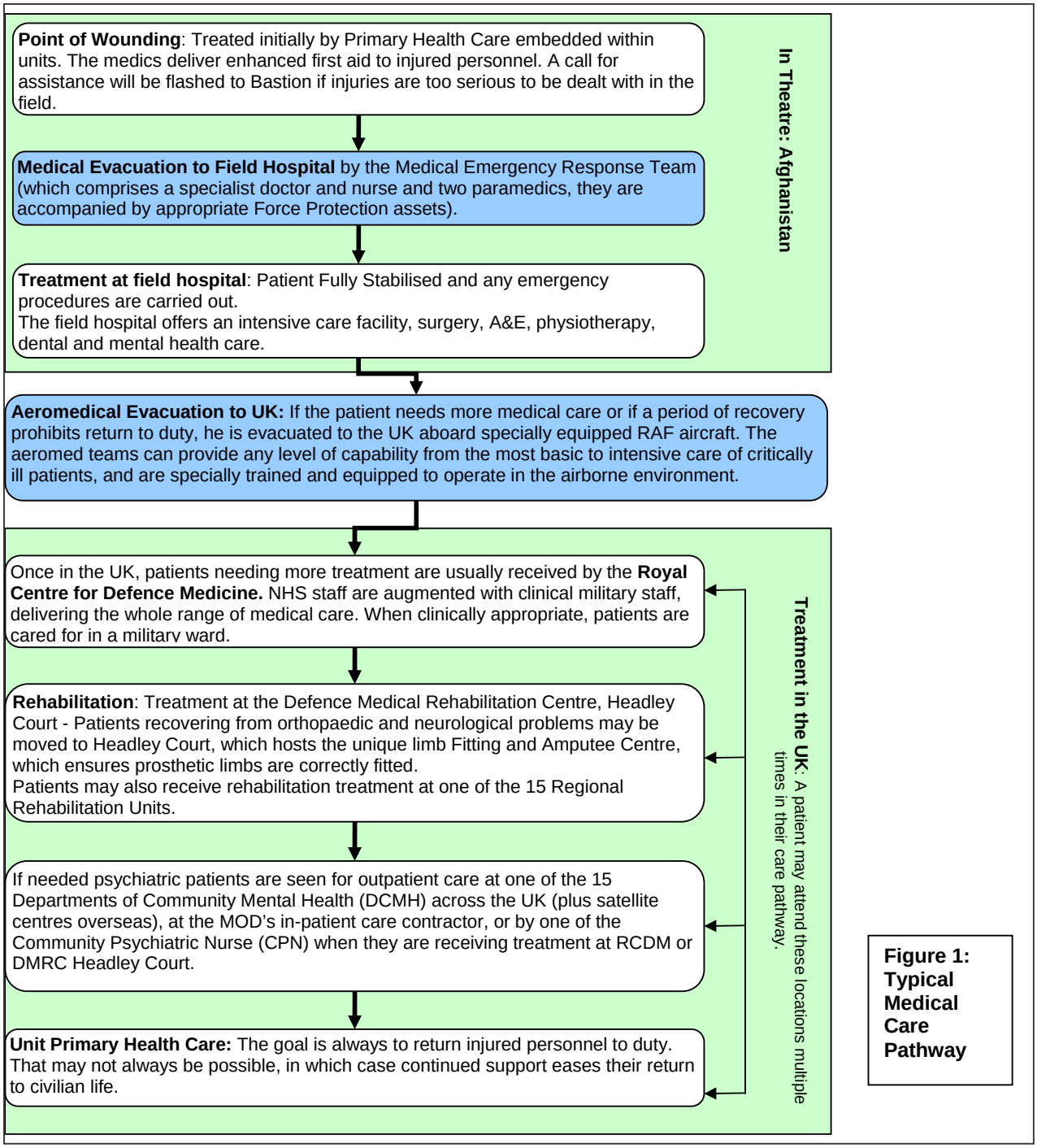


Figure 1: Typical Medical Care Pathway

Specialist Treatment Locations

39. More detailed Information on the Specialist Treatment locations included in this report is contained in **ANNEX B**.

FINDINGS

40. **Figure 2** presents a summary of the VSI/SI patient treatment pathway for those injured between 1 January 2008 and 30 June 2011.

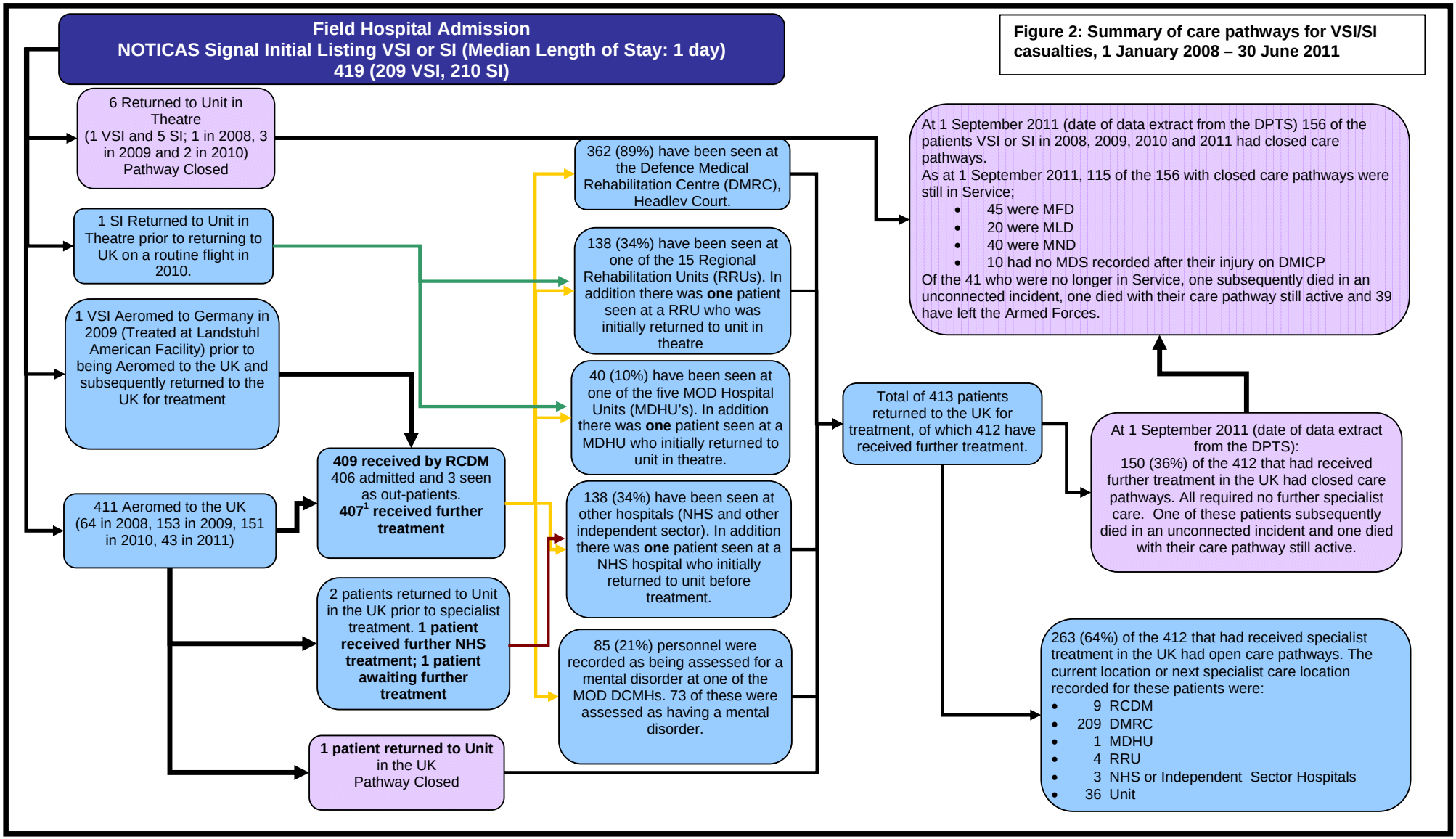


Figure 2: Summary of care pathways for VSI/SI casualties, 1 January 2008 – 30 June 2011

[1] September 2011, two patients had not completed their first in-patient episode at RCDM.

Number of Personnel Very Seriously Injured or Seriously Injured

41. In 2008, there were 65 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (27 were VSI, 38 were SI). 60 (92%) of these were the result of hostile action, five (8%) were the result of operational accidents.

42. In 2009, there were 157 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (82 were VSI, 75 were SI). 147 (94%) of these were the result of hostile action, 10 (6%) were the result of operational accidents.

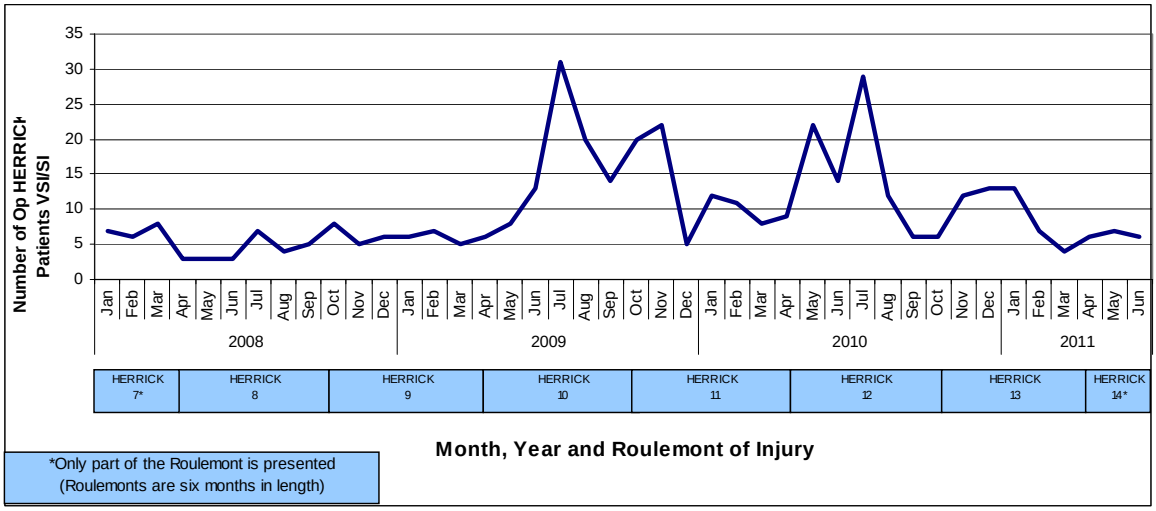
43. In 2010, there were 154 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (80 were VSI, 74 were SI). 144 (94%) of these were the result of hostile action, 10 (6%) were the result of operational accidents.

44. Between 1 January 2011 and 30 June 2011, there were 43 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK (20 were VSI, 23 were SI). 40 (93%) of these were the result of hostile action, three (7%) were the result of operational accidents.

45. This totals 419[d] casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK between 1 January 2008 and 30 June 2011 (209 were VSI, 210 were SI). Of the 419 casualties, 48 were Naval Service personnel (includes Royal Navy and Royal Marines), 363 were Army personnel and eight were Royal Air Force personnel.

46. **Figure 3** presents the number of casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK by month of injury and roulemont. The fluctuations seen are largely due to Operational tempo. The rise on HERRICK 10 (summer 2009 tour) was largely due to Operation Panther's Claw and the rise in HERRICK 12 (summer 2010 tour) was largely due to the Operational tempo in the province of Sangin.

Figure 3: Personnel with an initial NOTICAS classification of VSI or SI on Operation HERRICK by month of injury and Roulemont, 1 January 2008 – 30 June 2011, Numbers



47. Of the 419 casualties with an initial NOTICAS classification of VSI or SI on Operation HERRICK between 1 January 2008 and 30 June 2011, 163 (39%) were identified as amputees as at 30 September 2011, 160 (98%) of which were the result of hostile action, three (2%) were the result of operational accidents. The 163 amputees are a subset of those reported in the Quarterly Op HERRICK and Op TELIC Amputation Statistics produced by DASA[e], and do not match the statistics published in this report for several reasons;
    - their injury occurred before 1 January 2008 and the amputation was a surgical amputation that occurred after 1 January 2008;
    - their injuries resulted in an initial NOTICAS listing of 'Incapacitating Injury' or 'Unlisted injury' as the injuries were not of such severity that life or reason is imminently endangered (VSI) or of

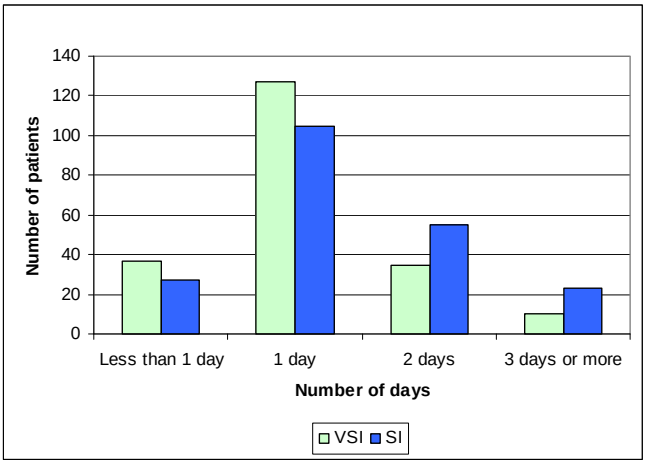
[d] One patient had two separate VSI/SI incidences and therefore has been counted twice in this report totalling 419 personnel.

[e] Quarterly Op HERRICK and Op TELIC amputation statistics can be found on the DASA website (www.dasa.mod.uk)

such severity that there is cause for immediate concern, but there is no imminent danger to life or reason (SI) (as some of the amputees include personnel who have lost a finger or toe).

48. All of the 419 casualties were admitted to a field hospital in Afghanistan. The length of stay at the field hospital varied from less than one day to six days, with a (median) length of stay of one day. The length of stay in the field hospital will have been based on individual circumstances, before leaving the field hospital the casualty will have been fully stabilised and any emergency procedures will have been carried out. **Figure 4** presents the length of stay of those admitted to the field hospital.

Figure 4: Days[1] in field hospital, initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, Numbers



[1] Dates into and out of the field hospital are recorded as date only and not date and time, therefore if a patient arrived and departed on the same day this would be recorded as less than a day. If a patient arrived one day and departed the following day this would be recorded as 1 day.

49. Although the proportion of the 419 casualties is evenly distributed between VSI (n=209) and SI (n=210) there is a higher proportion of the VSI casualties (78%, n =164) who spend less than 2 days in field hospital, compared to SI casualties (63%, n=132). This is reflective of the urgency to return VSI casualties back to the UK to receive specialist treatment.

50. Seven casualties (one was VSI and six were SI) were treated in the field hospital and then returned to unit in theatre. These casualties may have had conditions that were less serious than originally judged or the treatment may have been readily available in the field hospital and the casualties did not require aeromedical evacuation to the UK. However one of these casualties subsequently returned to the UK on a routine flight and received specialist treatment.

51. Of the remaining 412 casualties, 411 were returned to the UK for treatment (via an aeromed flight) and one was returned (via an aeromed flight) to the US hospital in Germany for initial treatment for one month and then later returned to the UK for treatment. When patients require aeromedical evacuation they will be given appropriate degrees of Priority so that if the aircraft space is limited the more urgent patients may be evacuated before those with conditions less serious. Of the 412 patients:
    - 237 (58%) were returned as priority 1 – Urgent: These are patients for whom speedy evacuation is necessary to save life or limb, to prevent complication of serious illness or to avoid serious permanent disability. Priority 1 patients will normally be returned to the UK within 24 hours.
    - 110 (27%) were returned as priority 2 – Priority: These are patients who require specialised treatment not available locally and who are liable to suffer unnecessary pain or disability unless evacuated to the UK within 48 hours.
    - 65 (16%) were returned as priority 3 – Routine: These are patients whose immediate treatment requirements are available locally but whose prognosis would definitely benefit by air evacuation on routine flights. Most return to the UK within 3-4 days.

    Occasionally patients, particularly those of greater dependency may wait longer than 7 days in order to maximise fitness to fly and to reduce any risks associated with their movement by air. Such deferment would result from purely clinical considerations.

VSI/SI Personnel returned to the UK for treatment

First Location of Specialist Care

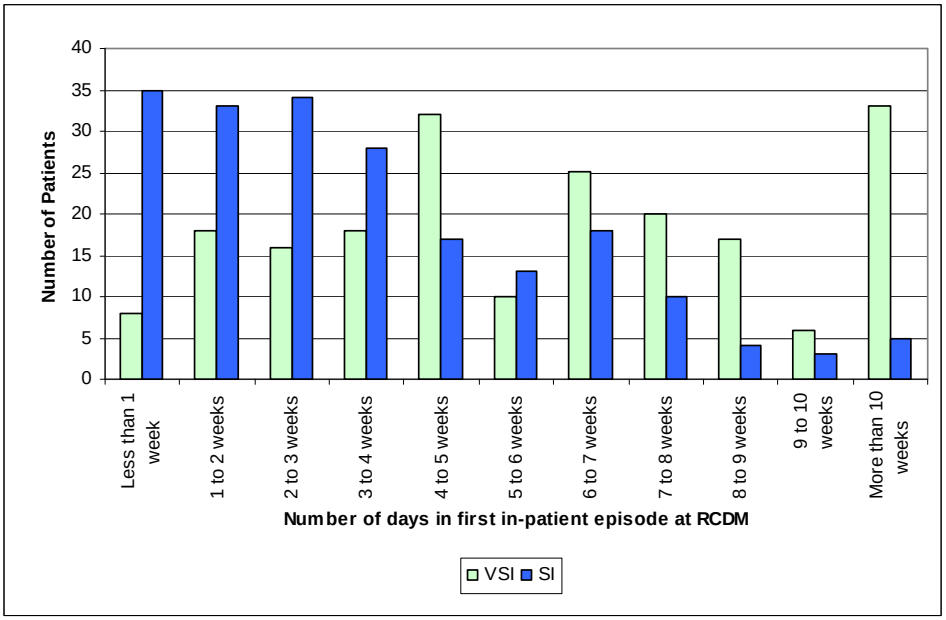
52. As the main receiving unit for military casualties evacuated from an operational theatre, the Defence Patient Tracking System (DPTS) recorded that the Royal Centre for Defence Medicine (RCDM) received 409 of the 412 VSI and SI casualties aeromed to the UK for treatment (including one patient aeromed via Germany). There were three patients recorded on the DPTS as not being treated at RCDM:
    - One casualty was returned to unit, receiving treatment/care at primary health care. This patient was listed as SI as they were involved in an incident, with more than one casualty and the unit determined it was important to return the individual to the UK as soon as possible.
    - Two casualties were returned to unit, receiving treatment/care at primary health care. One of these casualties was later seen at a NHS (Independent Sector) hospital so has been included in subsequent sections of this report. The second patient is awaiting treatment and therefore not included in subsequent sections of this report.

53. At RCDM, National Health Service (NHS) staff, augmented with clinical military staff, deliver the whole range of medical care. Serious casualties need and receive advanced levels of care across a wide range of medical disciplines that can only be found in a major trauma hospital. When clinically appropriate, patients are cared for in a military ward.

54. 406 of the 409 casualties received by RCDM were admitted as in-patients. **Figure 5** presents the length of stay of their first episode of care which varied between 1 day (less than one week) and 218 days (31 weeks), with an average (median) of 29 days (4-5 weeks), and an inter-quartile range of 34 days (lower quartile of 15 days and an upper quartile of 49 days).

55. Note that one casualty that initially received treatment at a US hospital in Germany for one month prior to their in-patient episode at RCDM and two patients that have not yet been discharged from their first episode of care, have been excluded from **Figure 5** to avoid skewing the length of first in-patient episode at RCDM.

Figure 5: Length of stay at first in-patient episode at RCDM (weeks), initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, Numbers[1,2]



[1] *For the weekly categories, 1 to 2 weeks includes patients at RCDM for 1 or more weeks but less than 2 weeks.*
[2] *Graph represents the length of stay for the 403 in-patients received by RCDM immediately following evacuation from theatre, that have completed their first in-patient episode.*

56. The distribution of the length of casualties' first in-patient episode as an in-patient at RCDM was significantly different for VSI and SI casualties[f]. The median length of stay of VSI patients (41 days, (5 to 6 weeks); inter-quartile range of 34 days (lower quartile of 25 days and an upper quartile of 59 days)) was longer than for SI patients (21 days (2 to 3 weeks); inter-quartile range of 25 days (lower quartile of 11 days and an upper quartile of 36 days)).

57. The distribution of the length of casualties' first in-patient episodes were significantly different for those injured as a result of hostile action and those injured as a result of non-hostile action[f]. The median length of stay of patients injured as a result of hostile action (31 days (4 to 5 weeks); inter-quartile range of 34 days (lower quartile of 16 days and upper quartile of 50 days)) was longer than for patients injured as a result of non-hostile action (10 days (1 to 2 weeks); inter-quartile range of 11 days (lower quartile of 5 days and upper quartile of 16 days)). This is likely to be due to the complexity of conditions suffered by some of the casualties who were injured as a result of hostile action.

Subsequent Locations of Specialist Care

58. As at 1 September 2011 (date of extract from the DPTS), two patients received by RCDM had not completed their first in-patient episode at RCDM. All of the remaining 407 patients that had completed their first in-patient (n=404[g]) or out-patient (n=three) episodes have gone on to either receive further treatment at RCDM or to receive treatment at other specialist care locations.

Royal Centre for Defence Medicine

59. As at the 1 September 2011 (date of data extract from the DPTS):
    - 236 (58%) of the 407 patients had received subsequent treatment as an in-patient or out-patient at ***RCDM,*** 134 of which were admitted as an in-patient more than once.
    - Nine (2%) of the 407 patients were receiving treatment at RCDM or were awaiting their next episode at RCDM.

Defence Medical Rehabilitation Centre (DMRC), Headley Court

60. As at 1 September 2011 (date of data extract from the DPTS), 362 (89%) of the 407 patients have received subsequent treatment at **DMRC**, Headley Court. Patients may move straight from their in-patient or out-patient care at RCDM to DMRC or they may have a period of time on sick leave to enable time to heal before starting rehabilitation or they may be seen at one of the Regional Rehabilitation Units before requiring treatment at DMRC.

61. As at 1 September 2011, 209 (51%) of the 407 patients were currently receiving treatment at DMRC or awaiting their next episode of care at DMRC.

62. All patients attending DMRC are initially seen by a team of experts from different medical fields who together agree on the course of treatment. The team includes specialist medical officers, nurses, fitness instructors, physiotherapists, occupational therapists, speech and language therapists, cognitive therapists and social workers. The team also help prepare the casualties for a gradual return to active duty where possible.

63. Of the 362 patients that have attended DMRC:
    - 292 (81%) were seen as in-patients, 243 (83%) of which were admitted as an in-patient more than once.
    - 342 (94%) were seen as out patients.
    - 94 (26%) were seen as residential patients.

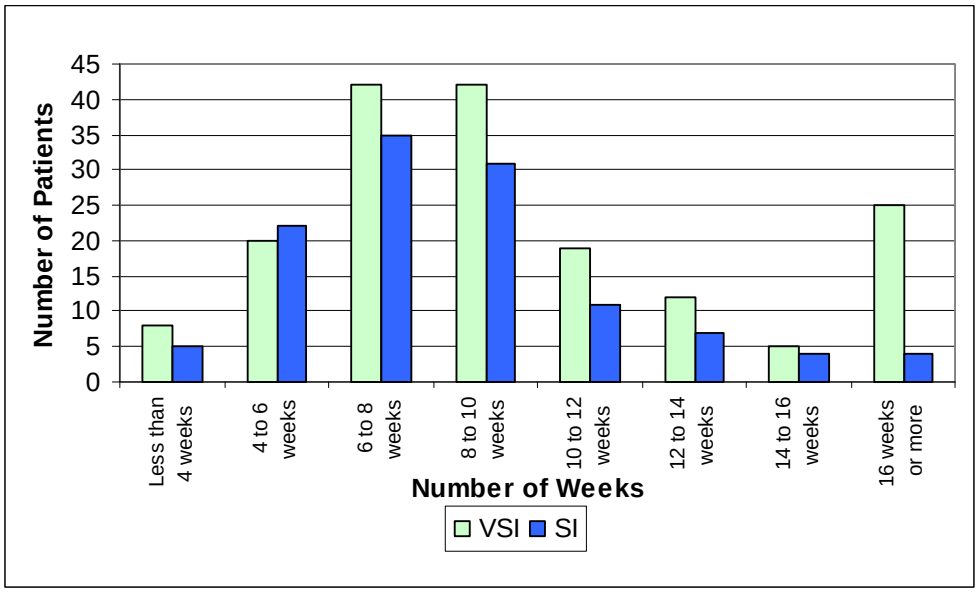
[f] Difference in distributions tested using The Mann Whitney U statistic for independent samples at the 5% significance level. Two patients have been excluded as they had not completed their first in-patient episode at RCDM.

[g] Includes one patient that initially received treatment at a US hospital in Germany for one month prior to their in-patient episode at RCDM

Length of time between Injury and In-Patient Admissions

64. **Figure 6** presents the length of time between injury and the first episode of care at DMRC.

Figure 6: Length of time between injury and first episode of care at DMRC, initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, Numbers[1]



[1] For the weekly categories, 4 to 6 weeks includes patients whose time between injury and arrival at their in-patient episode at DMRC is 4 or more weeks but less than 6 weeks.

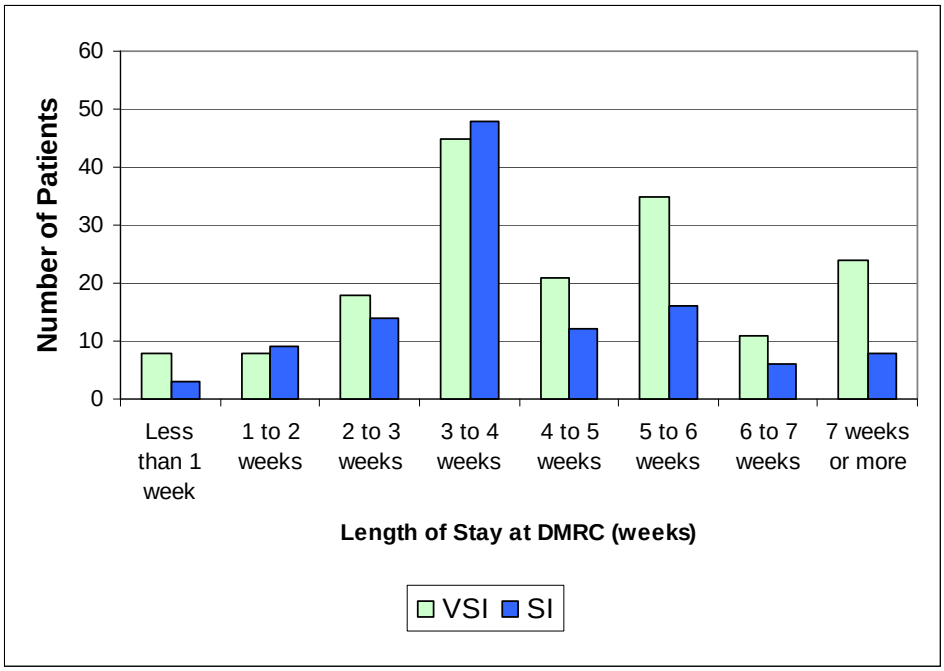
65. The length of time between injury and first episode of care at DMRC varied between 12 days (less than 4 weeks) and 570 days (16 weeks or more), with a median of 60 days (inter-quartile range of 30 days (lower quartile 46 days to upper quartile 76 days)). Therefore the impact of an increase in the number of VSI and SI casualties in theatre may lead to an increasing burden on DMRC 8 to 9 weeks after injury.

66. First in-patient admissions at DMRC show the smallest variation in the length of time between injury and admission. There are a few outliers in this data with some patients taking considerably longer than average to arrive at DMRC from their date of injury. Of these outliers, the majority were VSI patients indicating that they may need lengthier specialist care or longer recovery time prior to being admitted for rehabilitation. Subsequent admissions are more variable in nature (with larger inter quartile ranges) than the first admission:
    - On average (median) second in-patient admissions occur 17 weeks after injury, eight weeks after first admission.
    - Third in-patient admissions occur 25 weeks after injury, eight weeks after second admission.
    - Fourth in-patient admissions occur 32 weeks after injury, eight weeks after third admission.
    - Fifth in-patient admissions occur 40 weeks after injury, eight weeks after fourth admission.
    - Sixth in-patient admissions occur 50 weeks after injury, nine weeks after fifth admission.
    - Seventh in-patient admissions occur 62 weeks after injury, 12 weeks after sixth admission.
    - Eighth in-patient admissions occur 71 weeks after injury, 10 weeks after seventh admission.

Length of In-Patient Admissions

67. **Figure 7** shows that the median length of stay of first admission for both VSI and SI in-patients at DMRC was 3 to 4 weeks. Six of the 292 patients treated as an in-patient at DMRC were excluded from analyses as they have not yet been discharged from their first in-patient episode.

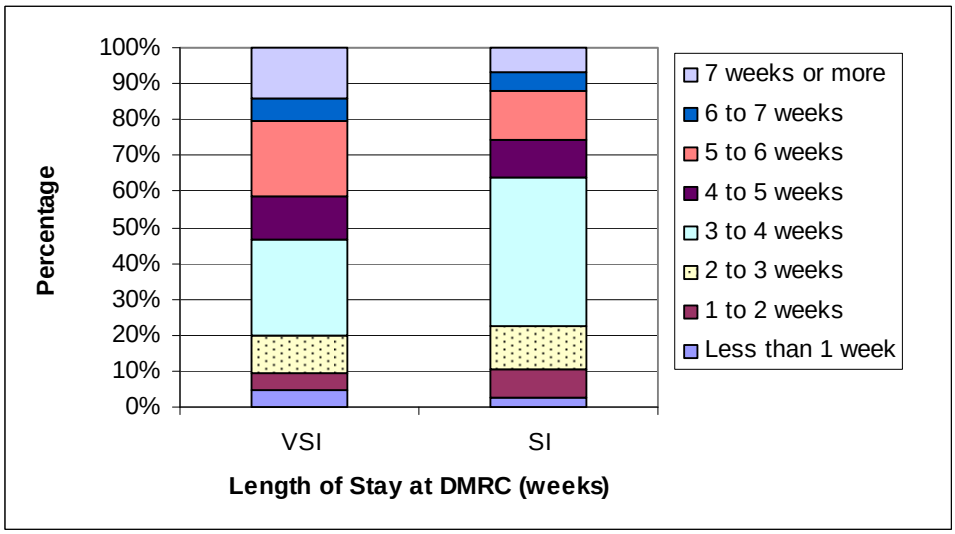
Figure 7: First In-patient length of stay at DMRC (Headley Court), initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, Numbers[1,2]



[1] For the weekly categories, 1 to 2 weeks includes patients at DMRC for 1 or more weeks but less than 2 weeks.
[2] Six of the 292 patients admitted as an in-patient at DMRC have been excluded as they have not yet been discharged from their first episode of care, leaving 286 patients represented in this graph.

68. **Figure 8** shows that the distribution of the length of in-patients first stay at DMRC was significantly different for VSI and SI patients[h]. The median length of stay for VSI patients (30 days, (4 to 5 weeks); inter-quartile range of 16 days (lower quartile of 23 days and an upper quartile of 39 days)) was longer than for SI patients (24 days (3 to 4 weeks); inter-quartile range of 15 days (lower quartile of 21 days and an upper quartile of 36 days)).

Figure 8: First In-patient length of stay at DMRC (Headley Court), initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, Percentage[1]



[1] Six of the 292 patients admitted as an in-patient at DMRC have been excluded as they have not yet been discharged from their first episode of care at DMRC, leaving 286 patients represented in this graph.

69. On average the first in-patient admission was the longest admission for these 286 patients (292 patients less the six patients not discharged from their first in-patient episode of care) with (median)

[h] Difference in distributions tested using The Mann Whitney U statistic for independent samples at the 5% significance level. Six of the 292 patients admitted as an in-patient at DMRC have been excluded as they have not yet been discharged from their first episode of care at DMRC, leaving 292 patients represented.

admission length of 25 days. There were some outliers in this data with two patients spending considerably less time than average during their first in-patient admission (approximately one day) and a number of patients spending considerably longer than average during their first in-patient admission (more than 50 days). Both VSI and SI in-patients have extreme outliers surrounding their average length of first in-patient admissions indicating that first in-patient length of stay is dependent on individual circumstances.

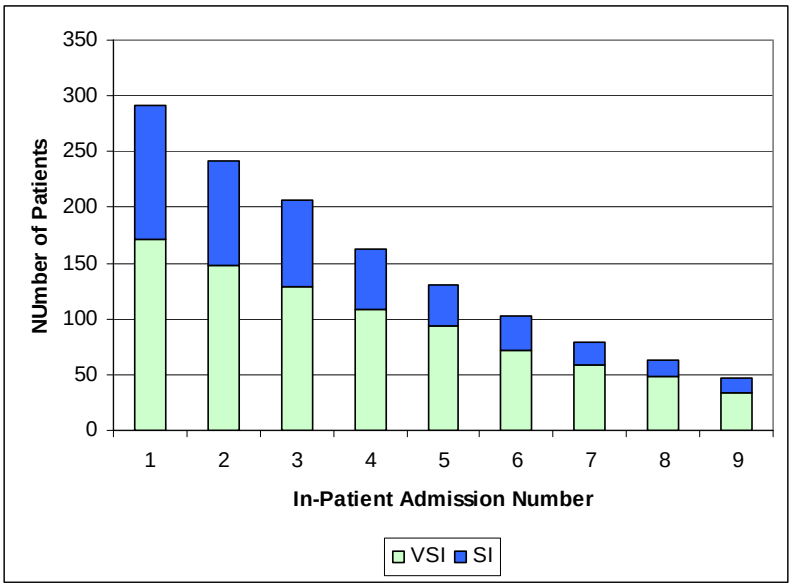
70. The median length of stay for each subsequent admission (admission number is incremental, first in-patient episode is admission 1, second in-patient episode is admission 2 etc) is less than the first but remains relatively stable at around 19 days.

Figure 9 presents the number of in-patient admissions by VSI and SI classification. The current maximum number of in-patient admissions is 18 (admissions 10-18 do not appear on the graph due to small numbers). However, these numbers are likely to change as many patients have yet to complete their care pathway.

71. The number of in-patients admitted decreases with every subsequent admission; of the 292 in-patients:
    - 243 (83%) went on to have a second admission,
    - 207 (71%) went onto have a third admission,
    - 164 (56%) went on to have a fourth admission,
    - 132 (45%) went on to have a fifth admission,
    - 104 (36%) went on to have a sixth admission,
    - 80 (27%) went on to have a seventh admission
    - 64 (22%) went on to have an eighth admission,
    - 48 (16%) went on to have a ninth admission,
    - 24 (Less than 8%) of all first in-patient admissions go on to have ten or more admissions.

72. The distribution of the number of admissions was significantly different for VSI and SI patients[i]. The median number of admissions for VSI patients (five admissions; inter-quartile range of six (lower quartile of two and an upper quartile of eight)) was higher than for SI patients (three admissions; inter-quartile range of four (lower quartile of two and an upper quartile of six)). This may reflect the more severe injuries that are sustained by VSI patients that require additional in-patient rehabilitation admissions.

Figure 9: In-Patient Admissions to DMRC (Headley Court), initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, Numbers



[i] *Difference in distributions tested using The Mann Whitney U statistic for independent samples at the 5% significance level.*

Regional Rehabilitation Units (RRUs)

73. As at 1 September 2011 (date of data extract from the DPTS):
    - 138 (34%) of the 407 patients had received subsequent treatment at one of the 15 **RRUs**. Of these 138; 135 had been seen at multi-disciplinary assessment clinics (MIAC) and 37 had been treated on three week rehabilitation courses (20 had been on one rehabilitation course, 16 had been on two rehabilitation courses and one had been on three rehabilitation courses).
    - In addition **one** patient who was SI and returned to unit in theatre and returned to the UK on a routine flight subsequently received treatment at a RRU. This patient was seen at a MIAC.
    - Four of the 408 patients (407 aeromed and completed treatment at RCDM and one returned on a routine flight) were currently receiving treatment at a RRU or awaiting their next episode at an RRU.

Other Locations

74. As at 1 September 2011 (date of data extract from the DPTS):
    - 40 (10%) of the 407 patients had received subsequent treatment at one of the five **Ministry of Defence Hospital Units.**
    - In addition **one** patient who was SI and returned to unit in theatre and returned to the UK on a routine flight subsequently received treatment at one of the five MDHUs.
    - One of the 408 patients (407 aeromed and completed treatment at RCDM and one returned on a routine flight) were currently receiving treatment at a MDHU or awaiting their next episode at a MDHU.

75. As at 1 September 2011 (date of data extract from the DPTS):
    - 138 (34%) of the 407 patients had received subsequent treatment at ***another hospital*** (including NHS and Independent Sector Hospitals).
    - In addition, **one** patient who was aeromed from Op HERRICK and returned to unit to receive treatment/care at primary health care subsequently received treatment at a NHS/Independent Sector Hospital.
    - Three of the 408 patients (407 aeromed and completed treatment at RCDM and one returned on an aeromed, received treatment at unit and later seen at a NHS hospital) were currently receiving treatment at ***another hospital*** or awaiting treatment at ***another hospital.***

76. As at 30 June 2011 (latest date for which mental health data are available)
    - 85 (20%) of all 419 VSI and SI casualties had been seen for assessment as new patients at the MOD's **DCMHs**, after their date of injury. Of these 85 personnel, 73 were assessed as having a mental disorder. Of the 73 personnel:
        - 65 were assessed with a neurotic disorder, of which 19 were assessed as having Post Traumatic Stress Disorder (PTSD).
        - Eight were assessed with a mood disorder or an other mental disorder.
    - Fewer than five of the 419 patients were admitted to the MOD's in-patient contractor for mental health care.

Amputees

77. As highlighted earlier 163 (39%) of the 419 VSI and SI casualties in 2008, 2009, 2010 and 2011 were identified as amputees by 30 September 2011, 160 of which were the result of hostile action.

78. As at 1 September 2011, 149 (91%) of the 163 amputees had open care pathways, indicating that they were still receiving specialist care. Of the 163 amputees:
    - All had been treated at RCDM (all 163 were seen as in-patients and 89 were seen as out-patients).
    - 160 had been treated at DMRC, 159 were seen as in-patients, 160 were seen as out-patients and 32 were seen as residential patients. All 160 patients were seen at more than one type of appointment (in-patient, out-patient and residential).
    - 33 had received treatment at a RRU; all 33 were seen at a multi-disciplinary assessment clinic and two were treated on a rehabilitation course.
    - 86 had received subsequent treatment at another hospital (including NHS, Independent Sector Hospitals and Ministry of Defence Hospital Units).

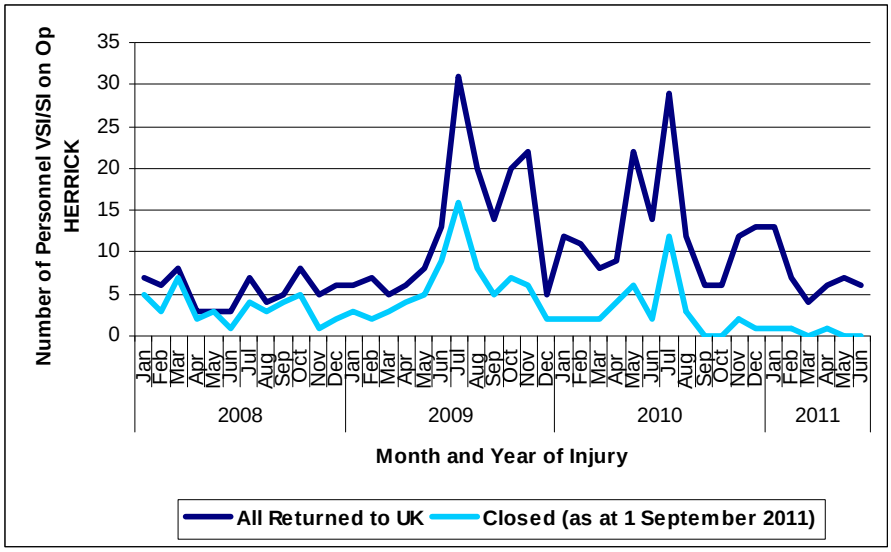
Care Pathway Length and Closed Pathways

79. As at 1 September 2011 (date of data extract from the DPTS), **156** personnel out of the **419** with an initial NOTICAS listing of VSI or SI had a **closed care pathway**. Of the 156, 150 returned to the UK for specialist care and six were returned to unit in theatre. The graphs and commentary produced in

this section only included those personnel returned to the UK for specialist care (the six personnel returned to unit in theatre were excluded from this section as they would skew the trends presented).

80. **Figure 10** presents the number of personnel returned to the UK for specialist treatment with an initial NOTICAS classification of VSI or SI on Operation HERRICK by month of injury and the number of these personnel with closed pathways as at 1 September 2011.

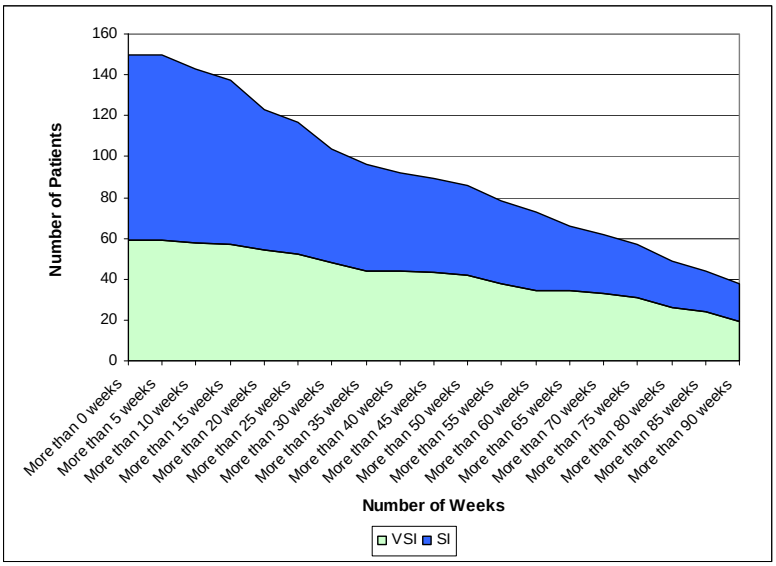
Figure 10: Personnel with an initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, returned to the UK by month of injury and closed care pathways, numbers



81. As at 1 September 2011 (date of data extract from the DPTS), 263 (64%) of the 413 VSI/SI patients returned to the UK for treatment in specialist care had open care pathways, Figure 10 highlights that many of those injured between 2008 and 2011 still have open care pathways. The remaining 150 had closed pathways indicating that no further specialist care was required (59 VSI and 91 SI; 41 who were injured in 2008, 70 who were injured in 2009, 36 who were injured in 2010 and three were injured in 2011). Of the 150 patients;
    - One had a new pathway initiated (nine months after the original closed pathway) as a result of their previous injury (SI). Their care pathway is now closed.
    - Two who required no further specialist follow-up for a VSI and SI were returned to duty, one later died in an unconnected incident and one was returned via aeromed for the same injury sustained in the original VSI incident and treated in Primary Health Care (their care pathway is now closed).
    - One patient later died as a result of their wounds with their care pathway still active.

82. **Figure 11** presents the length of care pathway as a cumulative frequency graph for the 150 patients returned to the UK for specialist care with **closed** pathways, calculated using the time between injury and date of pathway closure. For the patient with a subsequent pathway initiated only the length of time of the initial pathway has been calculated.

Figure 11: Length of care pathway for closed pathways (weeks), initial VSI or SI NOTICAS, 1 January 2008 – 30 June 2011, Cumulative Frequency



83. The length of **closed** care pathways[j] varied between 39 days (between 5 and 6 weeks) and 1,281 days (between 184 and 185 weeks), with an average (median) of 404 days (between 57 and 58 weeks) and an inter-quartile range of 471 days (lower quartile 189 days (between 26 and 27 weeks) and upper quartile 659 days (between 94 and 95 weeks)).

84. Please note, there are some patients with **open** care pathways who injured at the start of 2008 and thus at the 1 March 2011 (date of data extract from the DPTS) these pathways were over 43 months in length.

85. The analysis on length of care pathway is currently limited due to the small proportion of those who were VSI/SI on Op HERRICK in 2008, 2009, 2010 and 2011 with closed treatment pathways. This will be updated in future reports to enable a better understanding of the length of time that these patients are in treatment.

Personnel who have Redeployed

86. As at 1 March 2011, 15[k] of the 156 personnel with closed care pathways had subsequently redeployed on Operation HERRICK and/or Operation TELIC.

Current Joint Medical Employability Standard (JMES) for Personnel with Closed Pathways

87. **115 (74%)** of the 156 personnel with closed care pathways were still in Service on 1 September 2011. The latest Medical Deployment Standard (MDS) as recorded on the Defence Medical Information Capability Programme (DMICP) was identified;
    - 45 were medically full deployable (MFD)
    - 20 were medically limited deployable (MLD)
    - 40 were medically non deployable (MND)
    - 10 had no MDS recorded after their injury on DMICP

Discharged Personnel

88. As at 1 September 2011, 41 (26%) of the 156 personnel with a closed pathway were no longer in Service. The remaining 378 (115 with closed pathways, 263 with open pathways) remain in Service. Of the 41:
    - 39 had a closed pathway in the DPTS indicating that no further specialist care was required and had then been discharged from Service.
    - One personnel had a closed pathway in the DPTS and was returned to duty after recovering from his injuries then later died in an unconnected incident.

[j] Please note that DASA are aware of data issues with the date care pathways are closed and this is currently in the process of being validated and as such this data should be treated as provisional.

[k] Excludes Service personnel that returned to Unit in theatre after sustaining their injury (VSI/SI) and includes one personnel who redeployed and died in an unconnected incident.

- One personnel had a closed pathway in the DPTS following their death as a result of their injuries with their care pathway still active.

Medically Discharged

89. As at 31 March 2011, (the latest date for which medical discharge date are available) nine (22%) of the 41 VSI and SI casualties that had been discharged, had been discharged from Service due to medical grounds. It should be noted that the principal condition leading to discharge may not be related to the VSI/SI injury sustained.

90. Of the nine to have been medically discharged from Service, Musculoskeletal disorders and injuries was the most common principal cause of medical discharge (six cases).

91. If a decision has been taken to medically discharge an individual from the Military the specific Defence Medical Services health team who have been caring for that individual will begin a liaison with appropriate civilian healthcare providers (e.g. General Practitioner / Primary Health Care Team / civil mental health team / NHS Trust) to ensure the transfer of care and patient history takes place.

92. Additionally the MOD have specialist health social workers who manage the individual's wider resettlement issues, liaising with relevant civil agencies such as local housing authorities, financial authorities, service welfare and charitable organisations; again to endeavour that the individual's transfer into the civilian environment is as smooth and as seamless as possible.

Armed Forces Compensation Scheme (AFCS)

93. As at 31 March 2011 (the latest date for which AFCS data is currently available), 336 of the 419 casualties had claimed for compensation under the Armed Forces and Reserve Forces Compensation Scheme (AFCS). This resulted in a total of 439 claims, which includes multiple and/or additional claims for some individuals. Currently, individuals have up to seven years from the date of their injury to make a claim and as such, the remaining 83 individuals who have yet to claim may still do so in the future.

94. Individuals awarded at tariff levels 1-11 will receive a Guaranteed Income Payment (GIP), which is an index-linked, tax-free payment, in addition to their lump sum amount. Individuals awarded at tariff levels 12-15 will receive a lump sum amount only.

95. Where multiple claims are awarded under the AFCS, the most severe condition is awarded 100% of the tariff amount for that condition. The second most severe condition is awarded 30% of the tariff amount for that condition and the third most severe is awarded 15% of the tariff amount for that condition. Subsequent conditions are not allocated an award amount. The exception to this is when an individual is awarded at tariff levels 1-11 and is also allocated a GIP percentage of 100%. In these cases, all awarded conditions will receive 100% of the tariff amount.

96. As at 31 March 2011, 287 of the 336 individuals who have claimed under the AFCS have been awarded compensation for an illness or injury related to their Service.

97. Of the 287 individuals awarded, 74 had a claim awarded at 100% GIP percentage and therefore received 100% of the tariff amount for all claimed conditions. The two categories of conditions most frequently awarded for these 74 individuals were 'injury, wounds and scarring' and 'amputations'.

98. Of the 287 individuals awarded, 215 were awarded compensation for an injury or illness related to their Service at 100% of the tariff level (with a GIP percentage of 75% or less). Of these, 196 individuals were also awarded for a further condition at 30% of the tariff level, and 162 were also awarded for a further condition at 15% of the tariff level.

99. Please note that there were two individuals who each had a claim awarded at 100% GIP and another claim awarded at 75% GIP or less. Therefore these individuals are counted twice in the figures quoted in paragraphs 97 and 98 and these figures will not sum to the total number of individuals awarded (n=287).

100. Please note there was one individual where the claimed condition was accepted as being due to Service but did not meet the minimum tariff level. This claim was therefore rejected.

101. As at 31 March 2011, there was no outcome recorded on CAPS for the claims of the 48 remaining VSI/SI casualties who had registered claims under the AFCS.

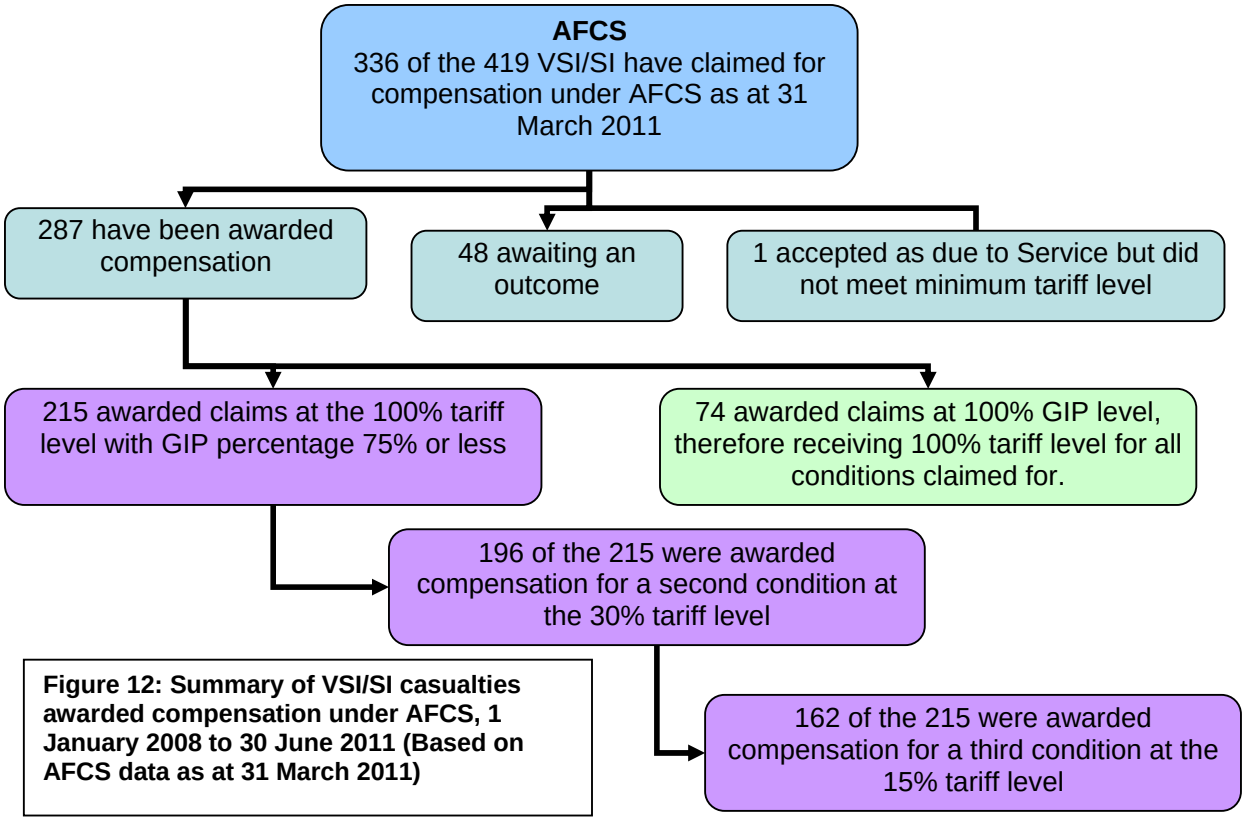


Figure 12: Summary of VSI/SI casualties awarded compensation under AFCS, 1 January 2008 to 30 June 2011 (Based on AFCS data as at 31 March 2011)

Notes on AFCS data:

1. Conditions are assessed against a tariff of injuries table where the lower numerical values (i.e. 1-4) reflect the more severe conditions that are awarded at the highest tariff level. Full details of the tariff can be found at http://www.veterans-uk.info/pdfs/afcs/tariff.pdf.
2. All claims counted in this report occurred after the date of injury. The claim made under AFCS may not be attributable to their VSI or SI sustained on Op HERRICK.

Discussion and Future Developments

102. A large proportion of the casualties that had a classification of VSI or SI on the initial NOTICAS signal still remain in specialist care, with only 37% of patients completing their care pathway.

103. To fully understand the length of time that VSI/SI patients are in treatment and the broad long term outcome measures (including the number returned to unit, those medically discharged or those re-deployed), DASA will continue to track the remaining 63% of patients with open pathways and will add subsequent patients with a NOTICAS classification of VSI or SI on Op HERRICK. DASA will update this report every six months.

ANNEX A

Data Sources

NOTICAS

Notification of Casualty (NOTICAS) is the name for the formalised system of reporting casualties within the UK Armed Forces. It sets in train the MOD's next of kin informing procedure. The MOD's Joint Casualty and Compassionate Policy and procedures set out the guidance under which a NOTICAS report is to be raised. NOTICAS takes precedence over all but the most urgent operational and security matters.

The NOTICAS reports raised for casualties contain information on how seriously medical staff in theatre judge their condition to be. This information is used to inform what the next of kin are told. "VSI" and "SI" are the two most serious categories into which personnel can be classified:

a. Very seriously injured/ill or VSI is the definition we use where the injury/illness is of such severity that life or reason is imminently endangered.
b. Seriously injured/ill or SI is the definition we use where the patient's condition is of such severity that there is cause for immediate concern, but there is no imminent danger to life or reason.

The VSI and SI categories are defined by Joint Casualty and Compassionate Policy and Procedures. They are not strictly 'medical categories' but are designed to give an indication of the severity of the injury to inform the next of kin and the chain of command.

The NOTICAS was used to identify those personnel whose initial listing was VSI or SI during 2008, 2009 and 2010. In these figures we have excluded individuals categorised as VSI or SI whose condition was identified to be caused by illness.

The number of Service personnel VSI or SI as a result of Op HERRICK is published fortnightly, a fortnight in arrears, and can be found on the DASA website (www.dasa.mod.uk).

Aeromed

DASA routinely receive aeromedical evacuation records from the Aeromedical Evacuation Control Centre (AECC) at RAF Brize Norton for operations in Afghanistan.

Not all Service personnel aeromedically evacuated from Afghanistan will receive specialist medical treatment (i.e. in a hospital, rehabilitation centre or mental health facility) but will be placed under the care of their unit Medical Officer/Medical Centre.

Field Hospital Admissions from J97 Returns and OpEDAR

In 2008, 2009 and 2010 there was a UK Field Hospital at Camp Bastion where the more seriously ill and injured were treated. This has an intensive care and high-dependency facility, as well as surgical, medical, A+E, physiotherapy, and dental, mental health, x-ray, CT scanner and laboratory facilities.

DASA receive information on the patients who are admitted to the UK Field Hospital at Camp Bastion from the J97 Returns. This J97 return also includes those patients admitted to the following two locations:

- The HQ of Multinational Brigade (South) in Kandahar also maintained a Field Hospital which provides support for ISAF and Coalition personnel. This facility includes additional capabilities to that of the Role 2 including specialist diagnostic resources and specialist surgical and medical capabilities.
- In Kabul, UK Personnel may be admitted to either the French or Greek Field Hospital. There is also a US facility which provides physiotherapy and dentistry. In total, the UK deploy some 300 medical staff to support the operation.

DASA also receive information on admissions and attendances at the UK Field Hospital at Camp Bastion from the Operational Emergency Attendance Register (OpEDAR)).

These two data sources have been used to report on length of stay in the field hospital and outcome from that admission.

Whilst most of the data is captured via drop down menus, some fields, including diagnosis, are free text, thus the quality of medical information captured is variable.

The OpEDAR system records all patients who have attended or have been admitted through the A&E department of a UK Operational hospital. The treatment classification broadly groups the data by injury treatment type. OpEDAR captures information at the initial assessment. It is possible for this to change over the course of treatment or for a patient to have multiple conditions; however, this information is not captured.

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Amputation Data

The VSI/SI casualties in Afghanistan in 2008, 2009, 2010 and 2011 were linked with amputation data which are compiled from four sources:

- The Joint Theatre Trauma Register (JTTR), which commenced during 2003 to improve the care of the seriously injured patient from the point of injury to the point of discharge from hospital treatment.
- The Complex Trauma Database managed by the Defence Medical Rehabilitation Centre, Headley Court which commenced in June 2008 to record information on patients receiving in-patient care on the complex trauma ward.
- The Prosthetics Database managed by the Defence Medical Rehabilitation Centre, Headley Court which commenced in June 2006 to record information on patients fitted with a prosthetic limb(s).
- The Defence Patient Tracking System (DPTS) which commenced on 8 October 2007. The DPTS was set up to enable the capture of tracking data for aeromedically evacuated patients at the place where healthcare is being delivered along the care pathway.

An amputee is defined as live UK Service personnel who have an injury coded in the JTTR as Amputation (traumatic), partial or complete, for either upper or lower limbs using the Abbreviated Injury Scale (AIS) Dictionary 2005 (Military Edition), and live UK Service personnel who had a surgical amputation performed either at the field hospital or at a UK hospital (the majority of these will be at the Royal Centre for Defence Medicine). A traumatic or surgical amputation can range from the loss of part of a finger or toe up to the loss of entire limbs.

Live personnel are defined as those being discharged from hospital after receiving treatment for the injuries that resulted in an amputation(s).

The data from the JTTR is cross referenced with the Complex Trauma Database, the Prosthetics Database and the DPTS. Doctors may recommend and/or patients may elect to have an amputation at any point during their care pathway, thus any additional live UK Service personnel identified as an amputee from these data sources have been included in this report.

The number of amputations sustained as a result of Op HERRICK are released on a quarterly basis, one month in arrears, on the DASA website (www.dasa.mod.uk).

The Defence Patient Tracking System (DPTS)

The DPTS was set up to monitor the progress of Armed Forces patients undergoing specialist treatment in the UK to ensure that their care is delivered promptly and coherently, and to coordinate clinical, administrative and welfare aspects of their support. The DPTS was set up as previously this information was not stored centrally. This data source has therefore been used to track the VSI/SI casualties through their specialist care pathway.

The DPTS is not a medical or welfare record system; medical records are held on the Defence Medical Information Capability Programme (Primary Health Care) and by the National Health Service (Secondary Health Care); welfare records are held in single Service welfare databases. The DPTS is not an authoritative record of personnel and demographic details, these details are held on Joint Personnel Administration system.

The number of patients treated at RCDM and DMRC as a result of Op HERRICK are released on a monthly basis, one month in arrears, on the DASA website (www.dasa.mod.uk).

Medical Discharge Data

Medical discharges are the result of a number of specialists (medical, occupational, psychological, personnel, etc) coming to the conclusion that an individual is suffering from a medical condition that pre-empts their continued service in the Armed Forces. Statistics based on these discharges do not represent measures of true morbidity or pathology. At best they indicate a minimum burden of ill-health in the Armed Forces. Furthermore, the number and diversity of processes involved with administering a medical discharge introduce a series of time lags, as well as impact on the quality of data recorded.

The information on cases was sourced from electronic personnel records and manually entered paper documents from medical boards. The primary purpose of these medical documents is to ensure the appropriate administration of each individual patient's discharge. Statistical analysis and reporting is a secondary function.

Although Medical Boards recommend medical discharges they do not attribute the principal disability leading to the board to Service. A Medical Board could take place many months or even years after an event or injury and it is not clinically possible in some cases to link an earlier injury to a later problem which may lead to a discharge. Decisions on attributability to Service are made by the Service Personnel and Veterans' Agency.

The number of UK Service personnel medically discharged from the Armed Forces by financial year is released annually on the DASA website (www.dasa.mod.uk). Medical discharge data for 2011/12 are currently being validated and will be available from July 2012.

Mental Health Returns

DASA receive and collate mental health returns covering all new episodes of care 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. DASA also receive 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.

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).

Records submitted were excluded from the main analysis if they were duplicates or repeat attendances in the same episode of care. Civilian or non-UK military personnel are not covered by this report.

A rigid pseudo-anonymisation process, and other measures preserving patient confidentiality, has enabled full verification and validation of the DCMH returns, importantly allowing identification of repeat attendances.

This data source has been used to identify the VSI/SI patients that have attended a DCMH or in-patient care contractor as a new referral after the date of their injury.

The number of Service personnel referred to the MOD's DCMHs for outpatient care, and new admissions to the MOD's in-patient care contractor are released on a quarterly basis, three month in arrears, on the DASA website (www.dasa.mod.uk).

Compensation and Pension System (CAPS)

The Compensation and Pension System (CAPS) holds the data regarding the Armed Forces and Reserve Forces Compensation Scheme (AFCS). The AFCS came into force on 6 April 2005 to pay compensation for injury, illness or death attributable to Service that occurred on or after that date. It replaced the previous compensation arrangements provided by the War Pensions Scheme and the attributable elements of the Armed Forces Pensions Scheme.

Injury benefits include a tariff-based lump sum payment to compensate for injury and, where appropriate, to provide payment to assist with the immediate costs of disablement. For more severe injuries (tariffs 1-11), a further sum is paid in the form of a Guaranteed Income Payment (GIP), which consists of regular payments to provide a continuous income stream. For the first time, a claim can be made and awarded

while still in Service, although when a GIP is awarded in-Service, its payment is deferred until the individual has left Service.

Lump Sums: A tax-free lump sum payment is paid to a Service or ex-Service person as compensation for an injury or illness that is predominantly caused or made worse by Service. The tariff has 15 levels with a lump sum amount attached to each level; the lower numerical values (i.e. 1-4) reflect the more severe conditions that are eligible for higher monetary awards. Full details of the tariff can be found at http://www.veterans-uk.info/pdfs/afcs/tariff.pdf. Lump sums may be awarded as a result of an in-Service claim, a medical discharge claim or a post Service claim. The table below shows the tariff level amounts.

Tariff Level	Amount (£)
1	570,000
2	402,500
3	230,000
4	172,500
5	115,000
6	92,000
7	63,825
8	48,875
9	34,100
10	23,100
11	13,750
12	9,075
13	5,775
14	2,888
15	1,155

Guaranteed Income Payments: A Guaranteed Income Payment (GIP) is payable when an award has been made and the illness or injury is in tariff levels 1 to 11. A GIP is a tax free monthly payment intended to be paid as compensation for loss of earnings capacity so is not payable whilst in-Service. Therefore if a GIP is awarded as the result of an in-Service claim it will be deferred until the claimant has left the Services. Once awarded, a GIP is payable for life and uprated annually in line with inflation to the Retail Price Index (RPI).

Tariff levels 1 to 11 are divided into four bands and they refer to the percentage used to calculate the annual amount of the GIP; 100% for Band A (tariff levels 1-4), 75% for Band B (tariff levels 5-6), 50% for Band C (tariff levels 7-8) and 30% for Band D (tariff levels 9-11).

In February 2010, the review of the AFCS, announced last year by the Defence Secretary, was completed. The main areas that need some adjustment to ensure the Scheme delivers as effectively as it can are:

a. **Multiple injuries**: every person who sustained multiple injuries arising from a single incident will now receive some recognition for each injury.
b. **GIP calculations:** the average number of promotions that an injured Service person may have achieved that they are no longer able to as a result of their injury will be reflected in the tax-free index-linked GIP that those with serious injuries receive.
c. **Lump sum amounts:** all lump sum levels, with the exception of the top amount, will be increased.
d. **Time limits increase:** time limits to claim will be increased and a new 'fast' payment introduced so claimants can receive some compensation without having to go through the whole claim process.

All those who have already made a claim will benefit from the Review and will be contacted once their case has been reviewed. This will happen after the changes have been implemented through new legislation, which is likely to be early 2011, with claims being re-visited throughout 2011.

This data source was used to identify how many of the VSI/SI casualties have registered claims under the AFCS, and the outcome of the claim. Individuals were included in the figures if the date of their claim was registered on CAPS was on or after their date of incident.

The number of claims registered and awarded under the AFCS are reported on a quarterly basis, three months in arrears, on the DASA website (www.dasa.mod.uk).

Joint Personnel Administration (JPA)

JPA (the Armed Forces personnel system) has been used to identify if the Service personnel remains in Service and to identify if an individual has been re-deployed once their care pathway is complete (using JPA move and track).

Defence Medical Information Capability Programme

DMICP is the source of electronic, integrated healthcare records for primary healthcare and some MOD specialist care providers. This source has been used to obtain an individuals medical deployability status (MDS) after injury, which provides an indication of their Medical Deployability status. Once downgraded, Service personnel will be assessed as Medically Fully Deployable (MFD), Medically Limited Deployable (MLD) or Medically Non-Deployable (MND).

ANNEX B
Specialist Treatment Locations

Hospital Treatment

The Royal Centre for Defence Medicine (RCDM)

1. Since 2001, the Royal Centre for Defence Medicine (RCDM), based at the University Hospital Birmingham Foundation Trust (UHBFT), has been the main receiving unit for military casualties evacuated from an operational theatre. In the Birmingham area, military patients can benefit from the concentration of five specialist hospitals (including the new Queen Elizabeth Hospital) to receive the appropriate treatment. The Queen Elizabeth Hospital is at the leading edge in the medical care of the most common types of injuries (e.g. polytrauma) our casualties sustain, and the majority of casualties will be treated there, but others may be transferred to another hospital (in Birmingham or elsewhere) if that is where the best medical care can be given.

Ministry of Defence Hospital Units (MDHUs)

2. There are five Ministry of Defence Hospital Units (MDHUs) where Defence Medical Services personnel work alongside civilian colleagues in NHS hospitals. As well as contributing to the care provided by these hospitals, they gain the depth and range of experience necessary to be able to administer first class treatment when deployed on Operations. When clinically appropriate, military patients are kept together and treated by military staff at these units. They are located at: Deriford, Frimley Park, Peterborough, Portsmouth and Northallerton.

National Health Service (NHS) and Independent Sector Hospitals

3. Patients may also receive treatment at other NHS hospitals or independent sector hospitals. This may occur if the patient requires treatment at a particular specialist unit or to be nearer their home.

Rehabilitation

4. If military patients require further rehabilitation care following initial hospital treatment, they may be referred to the Defence Medical Rehabilitation Centre (DMRC) at Headley Court in Surrey, which provides advanced rehabilitation and includes in-patient facilities. Less serious cases may go on to one of MOD's 15 Regional Rehabilitation Units (RRUs) in the UK and Germany, which provide accessible, regionally based assessment and treatment, including physiotherapy and group rehabilitation facilities.

Psychiatric Treatment

5. Psychiatric patients in the UK Armed Forces are seen for out-patient care at one of the 15 Departments of Community Mental Health (DCMH) across the UK, at the MOD's in-patient care contractor, or by one of the Community Psychiatric Nurse (CPN) when they are receiving treatment at RCDM or DMRC Headley Court. Patients may also receive treatment at one of 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.

6. Mental health services are configured to provide community-based mental health care in line with national best practice, providing assessment and treatment consistent with the guidelines and standards set by the National Institute for Health and Clinical Excellence and the National Service Frameworks.

7. The DCMHs are staffed by Community Mental Health Teams comprising psychiatrists and mental health nurses based on the catchment area population of the DCMH, with access to clinical psychologists and mental health social workers.

8. Until 1st March 2009, in-patient care has been provided regionally in specialised psychiatric units under a contract with the Priory Group. In November 2008 it was announced that the South Staffordshire and Shropshire NHS Foundation Trust network (in partnership with 5 other Foundation Trusts and one NHS Scotland Trust) has been awarded a three year contract for the provision of in-patient mental health services. The transfer of inpatient care from Priory Group occurred from 1st March 2009, at which point Priory Group ceased to admit patients. To ensure appropriate procedures

were in place by 1st March 2009, selected patients were admitted to the South Staffordshire and Shropshire NHS Foundation Trust network from January 2009.