The provision of services in the UK for UK armed forces veterans with post-traumatic stress disorder (PTSD): Protocol for a rapid evidence review

Background and project aim

The background to this project arises from an initial research brief from HS& DR.[1] The brief sets out current thinking about anticipated rises in demand for psychological trauma services in England, with particular reference to armed forces veterans with post-traumatic stress disorder (PTSD). Importantly, the brief signals a need to explore the adequacy and suitability of current and planned mental health services to treat PTSD to meet the specific requirements of armed forces veterans.

Health care (including mental health services) for armed forces personnel whilst still in service is provided by the Defence Medical Services (DMS). Services upon discharge (where these have been initiated by the DMS) continue to be funded by the DMS for six months, after which responsibility for payment and provision transfers to the NHS. The transition of the individual from one service to another appears to bring with it an inherent reticence to present for help; indeed, it is reported that only 23% of UK veterans suffering symptoms of PTSD go on to access support services.[2]

In the UK, the Armed Forces Covenant exists as a formal commitment and moral obligation to the armed forces community that no one will face disadvantage compared to other citizens in relation to the provision of public and commercial services; special considerations are appropriate in some cases (for example, the injured or bereaved).[3]

It is thought the context, severity and complexity of PTSD in armed forces veterans may require different approaches[4] (i.e., treatments or models of care) to those offered to the general population, and these are as yet not fully understood. Veterans appear to have higher levels of adverse childhood events before they join, drink more alcohol than the general population, and are more likely to have been exposed to multiple traumatic events which may produce different challenges for treatment compared to treatment for single events or occasions of sexual/domestic abuse and rape.[1, 5]

Against this background, our research seeks to address the four aims set out below. Following discussion with HS&DR, we agreed to address these aims with a UK-wide perspective.

This project aims to:

1. Explore what is known about current provision of services in the UK for UK armed forces veterans with PTSD;

2. Establish which models of care* may be effective;
3. Indicate the particular types of treatments that show promise; and
4. Signpost where further research may be needed.

*We have adopted the following working definition: *"A 'Model of Care' broadly defines the way health services are delivered. It outlines best practice care and services for a person, population or patient cohort as they progress through the stages of a condition, injury or event. It aims to ensure people get the right care, at the right time, by the right team and in the right place".*[6]

The project is a rapid evidence review to be completed within 3.5 months. Therefore, we will adopt a pragmatic approach, undertaking regular reviews of progress with resultant adjustments to the scope and content of the work as necessary.

Brief overview of policy context, commissioning, and service provision for veterans' mental health care across the UK

In England, most NHS health care services (including mental health services) for veterans are currently commissioned locally by Clinical Commissioning Groups (CCGs). NHS England has specific duties (and separate funding) to commission a small number of specialised mental health services (such as online and specialised residential services and specific psychological therapies); prosthetic services; assisted conception; online psychological support for veterans and families; and inpatient post-traumatic stress disorder (PTSD) services.[7] A number of third sector organisations collaborate in service provision.

The NHS England strategic review of commissioning intentions for Armed Forces and their families for 2016-17 reports priorities to improve care for veterans with mental health issues, specifically in relation to: (1) people with complex PTSD, including co-morbidities linked to substance misuse; and (2) where stigma is a barrier to accessing care.[7] Alongside the strategic review, NHS England conducted a stakeholder engagement exercise between January and March 2016 focusing on mental health services for veterans currently provided across 12 sites in the UK.[8] The findings of this engagement were published in September 2016.[9] In the final report (p6), there is reference to three pilots for enhanced models of care for veterans' mental health services conducted between November 2015 and March 2016.

In general, mental health services for veterans in England, Scotland, Wales and Northern Ireland are provided by (1) the main stream NHS services ; (2) bespoke NHS funded specialist clinics (including those for PTSD) ; (3) the Veterans and Reserves Mental Health Programme (for those who have been deployed since 1982 and experiencing mental health problems as a result of military service) via the

Ministry of Defence and (4) third sector organisations, e.g. Combat Stress, Help for Heroes, Walking with the Wounded.[10] In Scotland, veterans are eligible for priority treatment as determined by their GP.[11] In Northern Ireland, medical and other support services for former full time and part time Ulster Defence Regiment and Royal Irish (HS) soldiers and their families are provided by the charity, Aftercare Service (Northern Ireland).[12] In Wales, each of its seven Local Health Boards appoints a Veteran Therapist (VT) with an interest or experience of military mental health problems. Referrals to the VT come from health care staff, GPs, veteran charities and self-referral.[13]

Veterans and PTSD

Definitions of 'veteran'

In the NHS England stakeholder engagement survey questionnaire, a veteran is referred to as follows:

> "We use 'veteran' to mean anyone who has been a serving member of the British armed forces for a day or more. It means the same as 'ex-service personnel'… when we say 'veteran' or when we talk about armed forces' experiences, this includes reservists as well as regulars'." (p 2 of the questionnaire)[8]

Other definitions exist. For example, in the United States, a veteran is " a person who served in the active military, naval, or air service and who was discharged or released under conditions other than dishonourable" (p 138 Title 38 of the Code of Federal Regulations).[14]

We will aim to capture definitions of 'veteran' in the international research literature and adopt a consistent approach to reporting in our work.

PTSD and 'Complex PTSD'

PTSD is an anxiety disorder following very stressful, frightening or distressing events. People with PTSD can experience nightmares and flashbacks; they can feel isolated, irritable and guilty. Various sequelae, such as insomnia and poor concentration can have a significant impact on day-to-day living. NHS standard treatments for PTSD currently include watchful waiting; psychotherapy; (trauma focussed) cognitive behavioural therapy (T-CBT); Eye Movement Desensitisation and Reprocessing (EMDR); group therapy and counselling; and medication (antidepressants).[15]

PTSD is not a static condition. Many people leave the armed forces with undiagnosed PTSD and the condition often manifests after they have left the service. Expert opinion suggests that veterans will commonly (around 50% of the time) suffer from 'Complex PTSD' (or complex presentations of

PTSD).[5, 16] There is currently no diagnostic code for this condition, and 'Complex PTSD' is not a universally agreed term in the research literature.

'Complex PTSD' is described by field experts as PTSD compounded by co-morbidities such as substance misuse and depression. It is linked to multiple (as opposed to single) traumatic events, though not always arising from active military service; for example, the condition may result from repeated trauma/sexual abuse in childhood.[5, 16] 'Complex PTSD' is interpreted by some medical professionals as PTSD with additional syndromes, such as pathological disassociation, emotional dysregulation, somatisation, and altered core schemes about the self, relationships and sustaining beliefs.[17] The United States Department of Veterans Affairs National Center for PTSD describes 'Complex PTSD' as a condition arising from repeated trauma over a number of months or years, manifesting as a cluster of symptoms that may require special treatment consideration.[4]

Despite the absence of a clear definition and a diagnostic mechanism for 'Complex PTSD', it appears to be distinguished from PTSD due to its link with exposure to multiple traumatic events. Therefore, for the purposes of our work we will assume that PTSD in the veteran population is synonymous with 'Complex PTSD'.

Ongoing research

Current NICE guidance on the management of PTSD (CG26, March 2005) is being updated and due for completion in August 2018.[18] Early in 2016, the National Institute of Health Research (NIHR) released a Health Technology Assessment (HTA) call: 'Treating mental health problems with a history of complex traumatic events'.

Research questions

1. What services are currently provided in the UK for UK armed forces veterans with PTSD?
2. What is the evidence of effectiveness on models of care for UK armed forces veterans with Complex PTSD (as described above), including impact on access, retention, clinical outcomes, patient satisfaction, and cost effectiveness.
3. What treatments show promise for UK armed forces veterans with PTSD?
4. What are the high priority areas for further research?

Scope of the project - Inclusion criteria

Population

We will include armed forces veterans with PTSD after repeated exposure to traumatic events. We will not generalise to PTSD caused by single trauma events.

Intervention

For Stage 2 (see below) we will include models of care for PTSD in armed forces veterans. To help explore the elements of care models, we will gather information on current service provision in the UK and use this as a guiding framework (see Stage 1 below).

For Stage 3 (see below) we will include treatments for PTSD in armed forces veterans.

Setting

We will focus on the NHS across the UK. We will consider models of care and treatments in the international literature (eg, United States Department of Veterans Affairs) if deemed applicable to the NHS in the UK.

Comparator

N/A

Outcomes

We will identify any outcomes reported in the included studies, but will focus on those considered relevant and important by stakeholders.

Study Design

For Stage 2 (see below) we will not restrict by study design, for Stage 3 (see below) we will only include systematic reviews. In Stages 2 and 3, systematic reviews will be included only if they meet the minimum quality criteria (see below) for entry to the Database of Abstracts of Reviews of Effects (DARE); produced by the Centre for Reviews and Dissemination.

Methods

This project is an overview of current practice in the UK; a rapid evidence review on models of care; and a rapid meta-review of treatments for UK armed forces veterans with PTSD. We have a limited timeframe (3.5 months) so we will adopt a pragmatic approach with regular reviews to adjust the scope and content of our work, as necessary.

We aim to conduct the work in four stages, as follows:

<u>Stage 1</u>

We will provide a brief overview of arrangements currently in place in the UK for the treatment of PTSD in UK armed forces veterans. Particular attention will be paid to peer support type interventions, including those supported by the third sector. Using a pro-forma list of questions (see Appendix) we will:

- Contact the 12 service providers[19] referred to in the NHS England stakeholder engagement survey; we will also contact service providers in Scotland, Wales, and Northern Ireland to find out what is provided specifically for armed forces veterans in relation to PTSD. We will contact (as appropriate) third sector organisations involved in the provision of services across the UK.
- Draw on the knowledge of expert contacts to help with information gathering. Individuals and organisations will be identified through existing links and contacts.

Stage 2

We will undertake a rapid evidence review of the effectiveness of models of care for armed forces veterans with PTSD. Whilst we will adhere to the principles of robustness and transparency, our approach is likely to be less exhaustive and outputs less detailed than would be the case in a full systematic review.

Searching: We will develop a search strategy to identify relevant systematic reviews, primary research, guidelines or grey literature. The search strategy will include terms for veterans, post-traumatic stress disorder and models of care. No geographical, language, date or study design limits will be applied unless the searches retrieve excessive hits. We will search the following databases: MEDLINE; MEDLINE In process; PsycINFO; and PILOTS (Published International Literature on Traumatic Stress database). In addition we will search for guidelines via NHS Evidence and the National Guideline Clearinghouse. We will also search the research publications sections of the following websites to identify additional relevant reports or grey literature:

- US Department of Veterans Affairs – Health Services Research & Development (http://www.hsrd.research.va.gov/);
- Australian Government Department of Veterans Affairs (http://www.dva.gov.au/about-dva/publications/research-and-studies);
- Government of Canada Veterans Affairs Canada (http://www.veterans.gc.ca/eng/about-us/research-directorate/publications/reports);
- National Academies of Sciences, Engineering and Medicine (http://www.nationalacademies.org/hmd/Reports.aspx);

- Forces in Mind Trust (FiMT) (http://www.fim-trust.org/reports/)
- King's Centre for Military Health Research (http://www.kcl.ac.uk/kcmhr/publications/Reports/index.aspx).

Study selection: We will include any study design relevant to models of care for armed forces veterans with PTSD, but only where it is possible to extract findings separately for this population. Particular attention will be paid to peer support type interventions, including those supported by the third sector. We will assess studies from the international literature where deemed relevant to UK armed forces veterans. We will prioritise evaluations (where available), followed by descriptive/observational research. Systematic reviews will be included only if they meet the minimum quality criteria for the Database of Abstracts of Reviews of Effects (DARE). As mandatory, they must demonstrate adequate inclusion/exclusion criteria, literature search, and synthesis. In addition, formal quality assessment of primary studies and/or sufficient study details must be reported. Full details of the DARE process are available.[20]

Data extraction: Data will be extracted on participants, models of care, outcomes (where applicable), and any other characteristics we consider helpful to our work.

Quality assessment: We will assess systematic reviews using the DARE critical appraisal process. Based on the quality criteria used to select studies (see above *Study selection*), a judgement will be made on the overall reliability of the review and its findings. For evaluative primary research, we will apply appraisal tools as appropriate to the study design. For descriptive studies, we will assess quality based on the adequacy and clarity of reporting on context, methods and impact. Guidelines will be examined for soundness of their underpinning methodology.

Synthesis: We will synthesise the evidence narratively and highlight potentially effective models of care.

Study selection and quality assessment will be carried out by two reviewers independently. Data extraction will be carried out by one reviewer and checked by a second reviewer. Disagreements will be resolved by consensus or by a third reviewer where necessary.

Stage 3

We will undertake a rapid meta-review of systematic reviews evaluating the effectiveness of treatments for PTSD in armed forces veterans.

Searching: We will develop a search strategy to identify relevant systematic reviews. The search strategy will include terms for veterans and post-traumatic stress disorder. No geographical, language, or date limits will be applied. We will search the following resources: Cochrane Database of Systematic Reviews (CDSR), Database of Abstracts of Reviews of Effect (DARE) and PROSPERO to identify any ongoing reviews. As DARE closed in 2014, we will also search MEDLINE, EMBASE, PsycINFO and CINAHL for any relevant systematic reviews published since 2014. If, in the course of searching for treatments, we find additional systematic reviews on models of care, we will assess them for inclusion in Stage 2 (see above).

Study selection: We will include systematic reviews on treatments for armed forces veterans with PTSD. We will assess studies from the international literature where this appears relevant to UK armed forces veterans. Systematic reviews will be included only if they meet the minimum quality criteria for DARE (see Stage 2).

Data extraction: Data will be extracted on participants, treatments, comparators, outcomes (where applicable), and any other characteristics we consider helpful to our work.

Quality assessment: We will assess systematic reviews using the Database of Abstracts of Reviews of Effects (DARE) critical appraisal process (see Stage 2).

Synthesis: We will present a brief narrative overview to highlight potentially effective treatments.

Study selection and quality assessment will be carried out by two reviewers independently. Data extraction will be carried out by one reviewer and checked by a second reviewer. Disagreements will be resolved by consensus or by a third reviewer where necessary.

Stage 4

We will synthesis the evidence narratively on potentially effective models of care (Stage 2) and treatments (Stage 3), using the overview of current practice (Stage 1) as a guiding framework. We will adopt a 'best evidence approach' (ie, highlighting the best quality and most promising evidence) to inform future research and practice.

Service user input

Due to the short timescale for this project, we will use findings from the NHS England stakeholder engagement survey to represent service user input.[9] Where gaps in the narrative are identified, we

will seek representation from other service users (where possible, these will be veterans) who can provide the input required.

Advisory Group

We will call upon existing links and contacts to establish an advisory group of people who have a specific interest in this topic area.

Dissemination Plan

We will produce a full report for the NIHR HS&DR Journals Library. If appropriate, we will summarise the research for publication as an academic journal article and develop an Evidence Summary with sufficient flexibility to cascade implications for practice to key audiences (eg, service users, providers, commissioners). As is standard practice in CRD, we will also use social media to disseminate our research activity.

Project timetable

The timescale for completion of the work is 3.5 months. We will undertake regular reviews of progress with resultant adjustments to the scope and content of the work as necessary.

A provisional timetable is given below.

	November 2016	December 2016	January 2017	February 2017
Stage 1				
Stage 2				
Stage 3				
Stage 4				
Prepare final report				

References

1. *Scope to be discussed with Evidence Synthesis Team: HS&DR project briefing document October 2016*.
2. Iversen AC, van Staden L, Hughes JH, Greenberg N, Hotopf M, Rona RJ, *et al.* The stigma of mental health problems and other barriers to care in the UK Armed Forces. *BMC Health Serv Res* 2011;**11**:31. 10.1186/1472-6963-11-31
3. *Armed Forces Covenant*. Ministry of Defence; 2016. URL: https://www.gov.uk/government/publications/armed-forces-covenant-2015-to-2020/armed-forces-covenant (accessed 25th November 2016).
4. *Complex PTSD*. U.S. Department of Veterans Affairs; 2016. URL: http://www.ptsd.va.gov/professional/PTSD-overview/complex-ptsd.asp (accessed 18th October 2016).
5. Bacon A. NHS England. [Personal communication, 18th November 2016].
6. Government of Western Australia Department of Health. *Models of care*. Government of Western Australia; 2012. URL: http://www.agedcare.health.wa.gov.au/home/moc.cfm (accessed 20th October 2010).
7. Ling A. *Armed forces and their families commissioning intentions – 2016/17*. Leeds: NHS England; 2016.
8. Armed Forces team, NHS England. *Developing mental health services for veterans in England*. Oxford: NHS England; 2016.
9. NEL Commissioning Support Unit. *Developing mental health services for veterans in England engagement report*. Oxford: NHS England; 2016.
10. *Healthcare for people injured in the Armed Forces and veterans*. Citizens Advice. URL: https://www.citizensadvice.org.uk/healthcare/armed-forces-and-veterans/healthcare-for-people-injured-in-the-armed-forces-and-veterans/ (accessed 8th November 2016).
11. *Have you served your country? Taking care of veterans*. Scottish Government; 2008. URL: http://www.gov.scot/Publications/2008/04/30100639/1 (accessed 8th November 2016).
12. *UDR and R IRISH (HS) Aftercare Service*. URL: http://www.aftercareservice.org/ (accessed 8th November 2016).
13. *Veterans NHS Wales*. URL: http://www.veteranswales.co.uk/ (accessed 8th November 2016).
14. *Code of Federal Regulations. 38 Parts 0 to 17. Pensions, bonuses, and veterans' relief*: Office of the Federal Register, National Archives and Records Administration; 2008.
15. *Post-traumatic stress disorder (PTSD)*. NHS Choices; 2015. URL: http://www.nhs.uk/Conditions/Post-traumatic-stress-disorder/Pages/Introduction.aspx (accessed 18th October 2016).
16. Greenberg N. King College, London. [Personal communication, 31st August 2016].
17. Coventry P. Centre for Reviews and Dissemination. [Personal communication, 2016].
18. National Institute for Health and Care Excellence (NICE). *Post-traumatic stress disorder: management*. NICE; 2005. URL: https://www.nice.org.uk/Guidance/cg26 (accessed 18th October 2016).
19. *Developing mental health services for veterans in England. List of the 12 mental health services.*: NHS England; 2016.
20. Chambers D, Wade R, Wilson P. *Training manual for selecting reviews and writing abstracts for the Database of Abstracts of Reviews of Effects (DARE)*. York: Centre for Reviews and Dissemination, University of York; 2012.

Appendix: Questions for service providers (by email)

THE UNIVERSITY of York
Centre for Reviews and Dissemination

The provision of services in the UK for UK armed forces veterans with post-traumatic stress disorder (PTSD): a rapid evidence review

Thank you for agreeing to participate in an information gathering exercise to inform our work on the above project.

Introduction

This project is being undertaken as part of a programme of work commissioned by the National Institute of Health Research (NIHR) Health Services and Delivery Research (HS&DR) Programme. For more information, see http://www.york.ac.uk/crd/research/service-delivery/.

We are requesting your help to provide information about the current provision of services in the UK for UK armed forces veterans with PTSD. This will inform the subsequent stages of the project where we aim to establish which models of care may be effective, indicate treatments that show promise and signpost where further research may be needed.

Please complete below and email to jane.dalton@york.ac.uk by (date).

Name: **Position:**

Questions

1. What services and treatments are currently provided by your organisation specifically for **UK armed forces veterans with PTSD**? (please list the services and treatments)

2. How are **UK armed forces veterans with PTSD** referred to your services and treatments? (eg, GP, other)

3. Within your organisation, who provides services and treatments specifically for **UK armed forces veterans with PTSD**? (Job titles; qualifications; not names of people)

4. Please indicate where and how services and treatments are delivered specifically for **UK armed forces veterans with PTSD.**

5. What factors affect the implementation of your services and treatments for **UK armed forces veterans with PTSD**?

6. Has any evaluation of your services and treatments for **UK armed forces veterans with PTSD** taken place? (Please provide details, including what outcomes were measured; eg, access; retention; clinical; patient satisfaction; cost-effectiveness).

7. Would you be willing to allow further contact from us, if necessary? If so, please provide the best contact details here:

8. Any other comments.

Thank you.