



**Liverpool
Public Health
Observatory**

Health needs assessment for ex-armed forces personnel aged under 65, and their families Cheshire and Merseyside

**Cath Lewis, Louise Holmes and Alex Scott-Samuel
Liverpool Public Health Observatory report series number 93**

March 2013

PROVIDING INTELLIGENCE FOR THE PUBLIC HEALTH

Authors:

Cath Lewis, Louise Holmes and Alex Scott-Samuel, Liverpool Public Health Observatory

With input from the Working Group:

Scott Aldridge, NHS Liverpool CCG

Margi Butler, NHS Cheshire

Tom Knight, NHS Liverpool

Emma Leigh, NHS Cheshire, Wirral and Warrington Commissioning Support Services

Captain Jon Price, SO3 Merseyside Garrison

Hayley Todd, Liverpool City Council.



**Liverpool
Public Health
Observatory**

Liverpool Public Health Observatory was founded in the autumn of 1990 as a research centre providing intelligence for public health for the five primary care trusts (PCTs) on Merseyside: Liverpool, St.Helens and Halton, Knowsley, Sefton and Wirral. It receives its core funding from these PCTs.

The Observatory is situated within the University of Liverpool's Division of Public Health. It is an independent unit. It is not part of the network of regional public health observatories that were established ten years later, in 2000.

Contact e-mail obs@liv.ac.uk.

Contents

1. Executive Summary	1
2. Health Needs Assessment Overview	4
3. Background and Context.....	8
4. Health & Healthcare needs	16
5. Wider determinants of health and the ex-Armed Forces population.....	21
6. Current Service provision both nationally and locally	28
7. Discussion.....	30
8. Recommendations.	31
9. Conclusion.	32
10. References.....	33
11. Appendices.	37

1. Executive Summary

1.1 Background and context

This is a health needs assessment for ex-Armed Forces personnel, aged under 65, and their families, on Merseyside and in Cheshire. On Merseyside, this includes Liverpool, Sefton, Knowlsey, St Helens, Halton, and Wirral. In Cheshire, it includes Central and Eastern Cheshire, Western Cheshire, and Warrington. Although the term 'Veterans' may be used when referring to studies, for the purposes of this report we decided to use the term 'ex-Armed Forces personnel', as many ex-Armed Forces personnel, especially younger people, do not see themselves as Veterans.

There is a great deal of variation in estimates of how many ex-Armed Forces personnel there are, both nationally, and in Merseyside and Cheshire. However, in 2007, the Royal British Legion (RBL) estimated that there were 4.8 million Veterans in the UK, with 3.9 million in England. NHS Wirral, based on this data, estimated that there were around 42,659 ex-Service personnel in Merseyside, and 26,637 in Cheshire. Combined with the Armed Forces Redundancy Programme, this means that there is a clear need to address the health needs of this population. Under the Armed Forces Redundancy Scheme, nearly 30,000 personnel are due to leave the Service, through a combination of natural wastage, redundancy and reduced intake. The bulk of the reduction will be in the army, which aims to reduce its Regular force by almost 20,000 to 82,000 by 2020. At the same time, following the publication of the Future Reserves Healthcare Programme 2020, the number of reserves in the Armed Forces is set to increase significantly. Over 90% of personnel currently serving in the armed Forces in the UK are men, while around 10% are women. Of ex-Service personnel, a slightly higher proportion, 13%, are women – the slightly higher proportion of women is due to the World War II conscription of single women in their 20s during 1941-1945. There is a lack of data relating to ethnic background of Veterans, but the Royal British Legion¹ estimate that 99% of Veterans are white, and less than 1% are from ethnic minority groups. In terms of serving personnel, 2.4% of officers and 7.6% of other ranks are from ethnic minority groups.

1.2 Health needs of ex-Armed Forces personnel

There are health benefits from serving in the armed Forces. Armed Forces personnel need to be physically fit and benefit from regular exercise and from regular medical checks. A high proportion of UK recruits come from more deprived backgrounds, and have limited education and work prospects, which makes comparisons with the population as a whole more difficult. However, Service in the armed Forces may therefore have a positive impact on the health of individuals who might otherwise have had a poorer diet, limited exercise, and been at risk of unemployment and criminality. However, Service in the military is a physically dangerous job – a study conducted by the Royal College of GPs found that the risk of death for those in the Army was 1 in 1000, for example, which is 150 times higher than for the population

as a whole, although this rate is lower for those in the Navy and the RAF. Conflicts in Iraq and Afghanistan have also increased the risk of injury that results in amputation. In addition, there is some evidence, including a study by the RBL, that ex-Armed Forces personnel aged under 65 were more likely to report long term health problems than their peers in the general population.

There is limited research on the lifestyle behaviour of ex-Armed Forces personnel, although there is some evidence that alcohol misuse is a problem. A long-term study that is being conducted by King's College London (KCL) found no major differences between deployed and non-deployed Regulars: although Regulars reported more alcohol misuse on their return home. They found that if personnel 'broke Harmony' (were deployed for more than 13 months in 3 years), or ended up being deployed for longer than they had been told, they reported more stress related problems. For those who seek help in Service, there is a high quality and effective mental health Service available. However, many people experiencing mental health problems don't ask for help, as they don't want to admit they have a problem. KCL also found that Reservists were more likely to experience psychological impact of deployment than Regular Forces. However, the overall rates of common mental health problems and PTSD remain low.

1.3 Wider health needs

Following Service, the majority of Service personnel adapt to civilian life without any problems. Homelessness is one issue that is faced by a minority of ex-Armed Forces personnel. Although research on homelessness has tended to be on a small scale, and has focused on homeless personnel in London, several studies have shown that the characteristics and experience of homeless ex-Armed Forces personnel are broadly similar to the homeless population as a whole. However, ex-Service personnel are older, and may be homeless for longer. There is some research that they are more likely to misuse alcohol than the homeless population as a whole, but less likely to misuse drugs. For the vast majority, homelessness was not directly related to Service.

Another area which needs to be examined is the experiences of ex-Armed Forces personnel in the criminal justice system. A recent, large scale study, published in The Lancet, looked at almost 14,000 serving and ex serving armed Forces personnel, and found that the rate of offending among military personnel was lower than in the population as a whole, but that younger members of the armed Forces returning from duty were more likely to commit violent offences than the rest of the population. 20% of males aged under 30 had been convicted with violence, compared with 6.7% of civilians. Military Service in itself was not associated with an increased risk of committing violent offences once confounding factors, including age education, and pre-Service history, were taken into account, although serving in combat was.

1.4 Health needs of the families of ex-Armed Forces personnel.

There is a relatively small body of research on the impact of families and children of deployment. One study found that 30% of children who had a currently deployed or recently returned parent showed clinical levels of anxiety, which persisted for up to a year after the deployed parent returned home. A study published in the Journal of

American Medicine found that incidents of child maltreatment were 42% higher in the period where soldiers were deployed, than in the period where they were not deployed. An American study of 1,500 children in military families concluded that having a parent deployed for longer periods of time, and having a non-deployed parent who has experienced emotional problems, were important predictors of whether or not a child would experience problems. Health problems of parents, such as increased incidence of alcohol misuse amongst those who had been deployed that was identified in one study, are likely to have an impact on the health of children. In terms of education, a Department for Education (2010) survey found that Service children out-perform their peers at GCSE level, although around half of this difference is explained by prior attainment, and the rest by demographic factors related to prior attainment. King's College London has recently begun a large scale study, looking at the impact of military Service upon families.

1.5 Recommendations

The following recommendations have been produced based upon the national and local evidence, as well as best practice of what is effective in improving the health and well-being of ex-Armed Forces personnel.

Transition from DMS to the NHS and identification of ex-Armed Service personnel

- Facilitate GP registration prior to discharge.
- Use DMS Record Transfer.
- Encourage GPs to ask about previous Service.
- Encourage wider use of the military Service read code.
- Improve connectivity between DMS and NHS computer systems

Health Services for ex-Armed Forces personnel

- Increase understanding of prioritisation among GPs and ex-Armed Forces personnel.

Future planning

- Conduct research on the needs of the families of Armed Forces and ex-Armed Forces personnel.

2. Full Report.

Health Needs Assessment Overview

2.1 Aims

The aim of this research is to assess the level of health needs of the military veteran community, and their families, in Cheshire and Merseyside, in order to inform CCG/LA/AT commissioners in future commissioning arrangements.

2.2 Objectives

The key objectives of this report are to identify:

- To provide an indication of the health needs of ex-Armed Forces personnel aged under the age of 65 across Cheshire and Merseyside
- Gaps in current Service provision (or where no Service provision exists at all)
- An overview of the particular health needs faced by the veteran armed Forces community, relevant to each locality in the North West
- The types of Services that this cohort of people could benefit from accessing in the future

2.3 Scope

The health needs assessment will cover the Cheshire & Merseyside sub-region, including Local Authority and locality information where it is possible to do so. It will include those who have served in the army, the navy, and the RAF, covering Regular Forces as well as Reservists.

2.4 Key Steps

- Defining the scope of the project within the allocated timescale.
- Scoping the literature for relevant studies and reports.
- Compiling a description of the ex-Armed Forces personnel and their families resident in Cheshire and Merseyside.
- Collating the evidence of best practice from UK and international studies.
- Making evidence based recommendations for future resource allocation.

2.5 Project Vision

The report should inform future commissioning decisions for ex-Armed Forces personnel and their families. The output for the report should:

- Identify which health issues are important after leaving military Service
- Identify the impact on family health, in particular the impact of Service life on children's health
- Identify best practice for tackling health issues which are directly and indirectly related to a person's military Service.

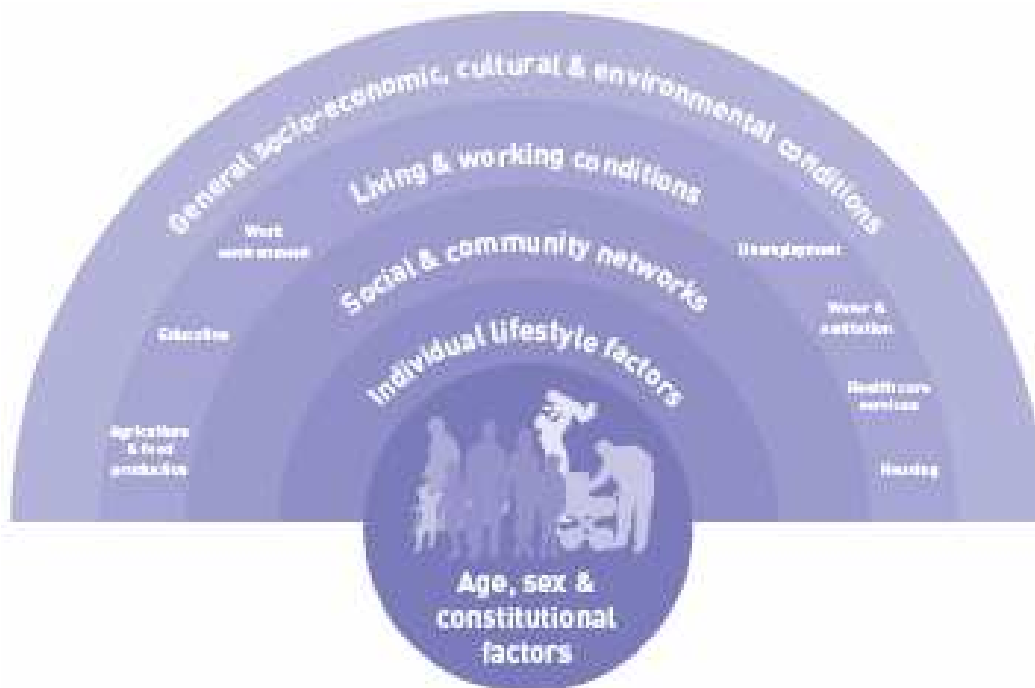
2.6 What is a health needs assessment?

Health Needs Assessment (HNA) is an in depth analysis of health needs of a specific population group. NICE (2005) defines HNA as ‘a systematic method for reviewing the health issues facing a population, leading to agreed priorities and resource allocation that will improve health and reduce inequalities’.

The principle activities involved in a health needs assessment are:

- The assessment of the level of need, using epidemiological and other data and information. This will usually involve using data and epidemiological techniques such as disease forecast modelling, to determine how many people are at risk of developing the condition(s) of interest now and in to the future and how many people may have the condition compared to how many are already diagnosed with the condition. Needs can be defined differently from different viewpoints and HNA should take different viewpoints into account. It is also important to understand the behaviour and influences that lead to poor health outcomes. Dahlgren and Whitehead’s rainbow model illustrates this.

Figure 1: Determinants of Health²



- Identifying the effective and cost effective interventions that could be implemented to address the issues of concern.

² Dahlgren G, Whitehead M (1991) Policies and strategies to promote social equity in health. Stockholm: Institute of Futures Studies. <http://tinyurl.com/cpcl2wv>.

- Documenting what current Services are available and how well they match with both levels of need and best practice i.e. are they delivered in line with evidence of effectiveness and cost effectiveness.

This “triangulation” enables an assessment of where gaps exist and improvements should be made. These may relate to the total resources needed or the spatial distribution of current provision, or both. It is also likely to relate to the quality of current provision.

2.7 Definitions – ex-Armed Forces and their families.

This is a health needs assessment of ex-Armed Forces personnel. It includes personnel from the three main organisations - Army, Navy and RAF. The particular focus in this health needs assessment is the health issues which are important after leaving military Services and the impact that these health issues have on family life, particularly children’s health and well-being. The geographical focus is the Merseyside and Cheshire area of North West England.

Veterans and their dependants, taken together, make up the whole ex-Service community. This term is used throughout the report to describe both Veterans and their dependants combined.

- **Veterans** – The Ministry of Defence (MOD) defines a veteran as “anyone who has served in HM Armed Forces, at any time, irrespective of length of Service (including National Servicemen and Reservists)”. This definition clearly encompasses a wide range of people, from different backgrounds, with different experiences of working in the Armed Forces, for differing lengths of time and who will have different needs. Some Veterans will have engaged in prolonged combat recently, some will have been in the Armed Forces for most of their working life, while others may have served in the Reserve Forces or perhaps in the Second World War, over 60 years ago. This health needs assessment will focus on ex-Armed Forces personnel who are under the age of 65. This means that personnel are likely to have been involved in conflict in, including but not exclusive to, Malaysia, Kenya, Cyprus, Korea, Northern Ireland, Falklands, Bosnia, Sierra Leone, Afghanistan and Iraq. The Directors of Public Health in Cheshire & Merseyside feel that this groups’ health needs have not been sufficiently identified, particularly in the light of the recent Armed Forces Redundancy Programme. However, some literature and information will also be applicable to other groups of Veterans. This includes;

- **Regular Personnel** – Individuals currently serving as members of the Naval Service (including the Royal Navy and Royal Marines), Army or Royal Air Force.
 - **Reservists** – Volunteer Reservists, who form the Royal Naval Reserve, Royal Marine Reserve, Territorial Army and the Royal Auxiliary Air Force, and Regular Reservists, who comprise the Royal Fleet Reserve, Army Reserve and Royal Air Force Reserve.
-
- **Dependants.** This includes dependent spouses/partners, dependent divorced/separated spouses, dependent widow(er)s and dependent children.
 - **Families of Regular Personnel, Reservists and Veterans.** The immediate family of those in the categories listed above. This is defined as spouses, civil partners, and children for whom they are responsible, but can where appropriate extend to parents, unmarried partners and other family members.
 - **Bereaved.** The immediate family of Service Personnel and Veterans who have died, whether or not that death has any connection with Service.

3. Background and Context

3.1 The Nations Commitment: Cross Government Support to our Armed Forces, their Families and Veterans (Ministry of Defence, 2008).

The Command paper recognises the demands and obligations placed on those serving in the Armed Forces and the sacrifice they make. The two aims of the command paper are:

- To end disadvantage that the armed Services imposes on families and Veterans ex-Armed Forces personnel as a result of moving around the country or around the world.
- It describes how we can better support and recognise those who have been wounded in the Service of their country.

Many of the new measures introduced as part of the Command Paper are outside the scope of this needs assessment. They include housing, education and skills, transport support for families and building careers. Measures that are specific to health for Veterans and their families include introducing six pilot schemes to improved access to community mental health Services for ex-Armed Services personnel prior to national roll-out. The Command Paper also recognises Veterans as a vulnerable group and acknowledges how their needs should be assessed and awareness of the particular health care needs should be raised.

3.2 The Armed Forces Covenant (Ministry of Defence, 2011)

“An Enduring Covenant Between
The People of the United Kingdom
Her Majesty’s Government
– and –

All those who serve or have served in the Armed Forces of the Crown
And their Families

The first duty of Government is the defence of the realm. Our Armed Forces fulfil that responsibility on behalf of the Government, sacrificing some civilian freedoms, facing danger and, sometimes, suffering serious injury or death as a result of their duty. Families also play a vital role in supporting the operational effectiveness of our Armed Forces. In return, the whole nation has a moral obligation to the members of the Naval Service, the Army and the Royal Air Force, together with their families. They deserve our respect and support, and fair treatment. Those who serve in the Armed Forces, whether Regular or Reserve, those who have served in the past, and their families, should face no disadvantage compared to other citizens in the provision of public and commercial Services. Special consideration is appropriate in some cases, especially for those who have given most such as the injured and the bereaved. This obligation involves the whole of society: it includes voluntary and charitable bodies, private organisations, and the actions of individuals in supporting the Armed Forces. Recognising those who have performed military duty unites the

country and demonstrates the value of their contribution. This has no greater expression than in upholding this Covenant.”

Particularly important with regards to this health needs assessment is the scope of the covenant in relation to healthcare. The Covenant states that, “Veterans receive their healthcare from the NHS, and should receive priority treatment where it relates to a condition which results from their Service in the Armed Forces, subject to clinical need. Those injured in Service, whether physically or mentally, should be cared for in a way which reflects the Nation’s moral obligation to them whilst respecting the individual’s wishes. For those with concerns about their mental health, where symptoms may not present for some time after leaving Service, they should be able to access Services with health professionals who have an understanding of Armed Forces culture.”

In 2011 a number of legislative initiatives were proposed that ensured continued support for Veterans. They included:

- Armed Forces Act 2011³: Annual duty to report on progress against the Military Covenant to Parliament including health
- Health & Social Care Bill (Department of Health, 2011). Includes duty of the NHS Commissioning Board to commission Services on behalf of the Armed Forces.
- NHS Mental Health Strategy (HM Govt. 2011). Includes a specific provision for Veterans.

3.3 Future Reserves 2020

When the Prime Minister announced the outcome of the Strategic Defence and Security Review to the House of Commons in October 2011 he commissioned a separate Review of the Reserve Forces⁴. The Review recommended a shift in the Regular Reserve balance as being in the interests of national security and the overall resilience, utility and sustainability of the Armed Forces. The Review found that, by national historic standards, and by comparison with other nations, the Reserves form too small a part of overall national military capability. The Proposition currently offered to Reservists has also declined. The Review also found that there was a need to modernise Reservist Roles - the purpose for which we hold Reserves and the roles to which they are attributed, have not been updated to match the demands of the new security environment. It also found that the utility of Reserves in the context of Homeland Security, UK Resilience, wider specialist capabilities such as stabilisation and cyber, and as a formal mechanism for regeneration, had not been fully assessed, and the potential of Reserves was not being fully exploited. The Review found that there are opportunities to adopt a far more cost-effective manpower balance across the Armed Forces.

³ <https://www.gov.uk/government/news/armed-forces-covenant-recognised-in-law-for-first-time>

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/28394/futurereserves_2020.pdf

3.4 Army 2020

The 2010 Strategic Defence and Security Review⁵ set out the nation's Defence requirements to meet the security challenges of an increasingly uncertain future beyond the current operation in Afghanistan. For the Army, this requires a generational change in its vision, structure, composition and capability to ensure that it can meet the challenges of 2020 and beyond⁶. Army 2020 is the concept for transforming the British Army for the 2020s and beyond in response to future strategic challenges. The Army must be capable of contingent capability for deterrence and defence, overseas engagement and capacity building, UK engagement and military aid to homeland resilience as a UKbased Army. The Army must also meet the direction set out in the Future Reserves 2020 Review⁷, that the Reserve element should be integrated within the Army structure with more clearly defined roles. The change in emphasis to a more adaptable and flexible Army, capable of undertaking a broader range of military tasks has required a significant change to the current structure of the Army which has most recently been optimized for enduring operations in Afghanistan. The need to maintain an Army which is structured and trained for an enduring operation is shifting to that of one held at graduated readiness for use in extremis on contingent operations, but persistently engaged at home with UK society and especially overseas, to deliver the full spectrum of upstream (conflict prevention) and downstream (post-conflict) engagement.

3.5 Armed Forces Redundancy Programme

The Armed Forces Redundancy Scheme was outlined in the 2010 Strategic Defence and Security Review. Nearly 30,000 personnel are due to leave the Service, through a combination of natural wastage, redundancy and reduced intake. The bulk of the reduction will be in the army, which aims to reduce its Regular force by almost 20,000 to 82,000 by 2020⁸.

3.6 Key Issues relating to health Services for the armed Forces and Veterans

In the 'Nation's Commitment: Cross-Government Support to our Armed Forces, their Families and Veterans' (Ministry of Defence, 2008), there is a commitment from the Government to address the health needs of those serving in the Forces and Veterans. Taken directly from the document, they specifically include:

- **Continuation of the Military Ward in Birmingham.** We will establish a military ward within the Birmingham New Hospital, building upon the military-managed ward at Selly Oak established in 2007. The new military ward will offer the best possible care to Service casualties and support to their families, recognising that their needs are often distinct from those of civilian patients. We will continue to invest in Headley Court, building on the recent announcement of £24M to expand its facilities.

⁵http://www.direct.gov.uk/prod_consum_dg/groups/dg_digitalassets/@dg/@en/documents/digitalasset/dg_191634.pdf

⁶ http://www.army.mod.uk/documents/general/Army2020_brochure.pdf

⁷ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/28394/futurereserves_2020.pdf

⁸ <https://www.gov.uk/government/news/third-tranche-of-armed-forces-redundancies-announced>

- **Prosthetic Limb Provision.** The standard of prosthetic limb provision to injured personnel by the Defence Medical Services will as a minimum be matched post-Service by the NHS in Great Britain.
- **Access to NHS Dentistry.** Service mobility and the frequent need to find an NHS dentist in the new location can make access to dentistry difficult for Service families. We will address the needs of families in a variety of ways, including making use of facilities on military bases or providing mobile Services in those areas, or making use of spare capacity elsewhere. Trials will begin in England by December 2008 and complete by December 2009; results will be rolled-out as soon as possible. In addition to their wider programmes to improve access to dentistry, the health departments have highlighted the need to ensure that Service families can obtain the NHS dental Services they require. They will work with the NHS to ensure that health areas with significant Service populations plan with their military communities in mind to achieve this.
- **NHS Waiting List – Retention of Place.**
Service mobility can cause repeated loss of place on waiting lists. We will address this. When patients move across the UK, previous waiting time will be taken into account with the expectation that treatment will be within national waiting time standards. As with any person moving between hospitals in the UK, Service members and their families will be treated as quickly as possible in order of clinical priority. This could mean in practice that an individual sometimes has a different time to wait.
- **NHS-delivered IVF.** Mobility undermines IVF treatment. MOD will ensure that those undergoing IVF do not move until the cycle of treatment is complete.
- **Veterans' Health Needs.** We need to improve our information about how Veterans' health needs differ from those of the population generally. Most healthcare professionals do not have direct knowledge of the Armed Forces and may not be sensitive to their particular needs. We will look at whether more needs to be done to assess the healthcare needs of Veterans. We will raise awareness among healthcare professionals about the needs of Veterans so that these needs are met.
- **Roll-out of Community Mental Health following Pilots.** Mental health Services do not always fully address the needs of Veterans. We are establishing pilot schemes to provide community mental health Services for Veterans in 6 locations across Great Britain. These pilots concentrate on improving Veterans' access to mental health Services. Community Mental Health Services will be provided across Great Britain, taking into account the lessons learned from these pilots. In addition, meeting the needs of Veterans will be an important element in the selection of the next round of psychological therapies sites in England for 2009/10. In Northern Ireland, this commitment is met by the Royal Irish Aftercare Service

3.7 Department of Health (2008) Guidance

Guidance issued by the Department of Health in 2008 highlighted the importance of recognising Veterans as a group at risk of experiencing health inequalities. Particularly relevant to this health needs assessment is the focus on young Veterans. In this health needs assessment we focus on younger Veterans who we define as under the age of 65 years old, although much of it is likely to also apply to those over 65. The retirement age in the military is 55, and it is unusual for an individual to have been deployed beyond the age of 45, therefore looking at those under 65 should mean that the majority of those who have been deployed in the last 20 years are included. Due to the Second World War and National Service, a greater proportion of over 65s are Veterans than those amongst younger age groups. Including this cohort in an assessment in the number of Veterans with health needs is likely to result in an overestimation of need, due to this 'bulge' in numbers that is unlikely to be repeated beyond the National Service generation. Due to the naturally high mortality rate amongst older Veterans, their numbers are likely to diminish fairly rapidly over the next 10 years, and they will not be replaced by the next generation. The majority of health needs of Veterans aged over 65, including cardiovascular disease, cancer, stroke, dementia, and mobility problems, will be experienced by many older people in our society, but it is unlikely that incidence of these conditions will be higher in Veterans than the population as a whole.

The key issues relating to health Service use for younger Veterans include:

1. For people discharged with significant health problems, a small number of amputees will need their receiving NHS provider to maintain and replace MOD standard prostheses.
2. For people discharged with no significant health problems, better use of the systems in place to ensure that GPs can access past records for newly registering ex-Service personnel would be advantageous.
3. To enable Veterans to access mainstream mental health Services for Service-related mental health problems, even if these problems are developed a considerable period of time after discharge from Service.

3.8 Demography of Merseyside & Cheshire Military Veterans

In 2011, there were around 186,400 Regular Service personnel in the UK, according to the Royal British Legion⁹, a decrease of over 21,000 over the last ten years.

There are no definitive figures on the total number of Veterans in the UK at the present time. Several organisations have attempted to estimate this, but have arrived at different conclusions. A Command paper published by the Ministry of Defence in 2008 estimates the Armed Forces 'constituency' at 5 million nationally, including serving personnel, their dependents, and Veterans. A recent report by the Royal Marines fund (Royal Marines, 2009), estimated the number of Service children in the UK to be 174,341 Service children, which was derived from a question in a MOD survey. Estimating the number of Service children in the UK has been made easier with the introduction in 2008 of a 'Service flag' on school records. Numbers of children who are from Service families are now included in a census that all schools are required to complete. This indicates if a child has a parent or parents who are Service personnel, serving in Regular military units of all HM Forces and exercising parental care and responsibility. It is not compulsory for parents to disclose this information, so records may not be complete. However, this information enabled the DFE to produce a report which showed that there were just under 37,000 pupils identified as Service children in 2009; this represents 0.5% of all pupils in England in 2009. The highest numbers of Service children were seen in Year 1 and Year 2: the infant school years. This may be expected given the age distribution of Service personnel¹⁰. However, the current Service child identifier does not allow the Department for Education to differentiate between the various HM Forces a parent may belong to. The NPD holds information for pupils in all schools in England; however, information on pupils in independent schools is limited. In 2009, around 8,500 Service children were educated in overseas schools as their parents were on foreign postings.

A UK-based veteran charity, the Royal British Legion (RBL), on the basis of data from a 2005 nationally representative Research Surveys of Great Britain omnibus survey, recently estimated the size of the ex-Service community (Veterans and their dependents). They estimated that there are approximately 4.8 million Veterans currently living in private residential households in the UK¹¹, (Great Britain and Northern Ireland); of which approximately 3.9 million were residing in private households in England¹². This is approximately 8% of the UK population aged over 16 years and over. That report was used by NHS Wirral to extrapolate figures on the potential veteran population in North-West PCT's and reported below are the figures for the Merseyside and Cheshire area.

⁹ Gaskarth G, *Honouring The Armed Service Community* LGIU / Royal British Legion 2011

¹⁰ The broad age distribution of UK Regular forces by age and rank at 1st April 2009 are available in UK Defence Statistics: <http://www.dasa.mod.uk/modintranet/UKDS/UKDS2009/c2/table206.html>

¹¹ The Royal British Legion (2005) Profile of the ex-service community in the UK.

¹² www.ons.gov.uk/ons/.../an-estimate-of-the-veteran-population-in-en...

Table 1: Estimated numbers of Veterans by age band and PCT in Merseyside and Cheshire (2007)

PCT/ Age	16-24	25-34	35-44	45-54	55-64	<65's
Central & Eastern Cheshire	733	1500	3635	3676	4175	13718
Halton & St Helens	566	1082	2262	2346	2613	8870
Knowsley	323	527	1190	1214	1080	4334
Liverpool	1151	1901	3058	3275	3074	12460
Sefton	516	797	1996	2282	2400	7992
Warrington	349	709	1639	1568	1644	5909
Western Cheshire	436	781	1792	1876	2125	7010
Wirral	572	966	2231	2468	2765	9003

Source: NHS Wirral performance and public health intelligence team, October 2011.

The table above does not include Veterans who are older than 65 years old, due to the specific time constraints of this health needs assessment. The size of the veteran population depends on both the number of deaths in the existing veteran population, and numbers of people leaving the Forces. The numbers of people in the armed Forces has changed over time, and reflects the UK involvement in conflicts, as well as Government policy. The majority of Veterans in the UK are WWII Servicemen but this will change dramatically over the coming years as these Servicemen die and younger people return from more recent conflicts and tours. For both World War II and National Service, armed Forces personnel were from a wide socio-economic and geographic base, so the veteran population is likely to reflect the wider population. There is likely to be greater variation of the socio-economic backgrounds of younger Veterans.

The majority of personnel currently serving in the armed Forces in the UK are men, while 9.6% are women¹³. Of Veterans, a slightly higher proportion, 13%, are women – the slightly higher proportion of women is due to the World War II conscription of single women in their 20s during 1941-1945. There is a lack of data relating to ethnic

¹³ Ministry of Defence United Kingdom *Defence Statistics 2011* September (Table 2.8)
The Royal British Legion *Profile of the Ex-Service Community in the UK* November 2005 (Revised copy)

background of Veterans, but the Royal British Legion¹⁴ estimate that 99% of Veterans are white, and less than 1% are from ethnic minority groups. In terms of serving personnel, 2.4% of officers and 7.6% of other ranks are from ethnic minority groups. Approximately 10.2 million people are in the wider ex-Service community¹⁵

The Regular Forces locations in Merseyside are RAF Woodvale, Southport, and HMS Eaglet, Liverpool. In Cheshire, there is Dale Barracks, Chester. In the North West there is Wheeton Barracks, Blackpool.

¹⁴ The Royal British Legion *Profile of the Ex-Service Community in the UK* November 2005 (Revised copy)

¹⁵ Royal British Legion *Profile and Needs of the Ex-Service Community 2005-2020* Sept 2006

4. Health & Healthcare needs

4.1. Introduction

In general, the health of the military population is good compared with the general population, due to the expected physical fitness required to join the Armed Forces, social support networks, and access to health care and employment (Pinder et al, 2012, Smith et al, 2007). It has been reported that the Army tends to recruit young people from disadvantaged social backgrounds, and those with poor educational attainment. In 2008/9, only 9% of new soldier recruits had passed English at Grade A*-C, compared to 61% nationally (DCSF 2008). One report found that British Army recruiters visited 51% of schools in the most disadvantaged fifth of communities compared to 40% of schools in the wealthiest fifth (Gee 2010). Economic disadvantage and low educational attainment are both independently associated with lower life expectancy and poorer health (Marmot, 2010). Therefore, it is difficult to study the effect of military Service and its relationship to health as it is difficult to ascertain whether ill health is related to military Service or social circumstances. However, military Veterans and their families clearly do have health needs which need addressing.

War Disablement Pensions statistics and payments under the Armed Forces and Reserve Forces Compensation Scheme can be used to identify the most common conditions resulting from injury whilst serving in the armed Forces. Individuals receive a lump sum payment, or, for more serious injuries, a Guaranteed Income Payment (GIP), which is a regular payment for life¹⁶, or both. For the most recent time period,¹⁷ there were 10,950 lump sum payments and 1,185 recipients of GIPs. The most common reason for lump sum payments (42%) was musculoskeletal disorders, followed by fractures and dislocations (29%), injury, wounds and scarring (14%), ears and eyes (4%), physical disorders including infectious diseases (3%), neurological disorders (2%), and, amputations (1%).

Of the 18,000 UK personnel that the Royal College of GPs estimate leave the armed Forces each year¹⁸, they estimate that around 1% (2,000) leave on medical grounds, which means that a medical board have decided that their condition means that they cannot continue in the armed Forces. The rate of medical discharges varies across the armed Forces, with 4.4 per 1000 in the RAF, 7.1 per 1000 in the Navy, and 7.9 per 1000 in the Army. According to UK Defence Statistics from 2006-2011¹⁹, the most common reason for medical discharge in each of the armed Forces was

¹⁶ Source: DASA Armed Forces Compensation Scheme statistics.

http://data.gov.uk/dataset/armed_forces_compensation_scheme

¹⁷ 6th April 2005 to 31st March 2011

¹⁸ Meeting the healthcare needs of Veterans. Royal College of General Practitioners.

<http://www.rcgp.org.uk/PDF/Veterans.pdf>

¹⁹ UK Defence Statistics 2011. <http://www.dasa.mod.uk/modintranet/UKDS/UKDS2011/chapter3.php>

musculoskeletal disorders, with 62% in the Regular army, 60% in Naval Service and 51% in the RAF being discharged for this reason. Medical and behavioural disorders were the next most common reason (14%, 13%, and 25%), followed by nervous system disorders (4%, 5%, and 7%). There were higher rates of medical discharges among men than women, and higher rates in personnel from the ranks than in officers²⁰.

4.2 Physical health

Military Service is, in general, a physically active occupation and as such has health benefits. In many respects, the health of military Veterans is similar to the general population of the same age. A study conducted in 2007 (Woodhead et al, 2007) compared 484 National Service Veterans to 301 similar aged members of the general population, and found no difference in physical health outcomes – the only differences were in terms of mental health. However, a Royal British Legion (RBL, 2006) survey found that a number of conditions are significantly higher in the adult ex-Service community than the general adult population in Great Britain. These are musculoskeletal (21% in the ex-Service community, compared to 15% in the general population), Cardio-vascular (21% compared to 15%), respiratory (8% compared to 6%), mental health problems (4% compared to 3%), sight problems (4% compared to 2%), and hearing problems (4% compared to 1%). The survey also found that self-reported long term illness or disability was much higher in Veterans – 52%, compared to 35% for the population as a whole. Prevalence of long term health problems increases with age, for both Veterans and the population as a whole, therefore the fact that Veterans tend to be older than the general population may partly explain this. However, younger Veterans, aged 16-64, were more likely to report long term health problems than people of the same age in the general population. The study found that prevalence of self reported long term health problems in those aged 65-74 was slightly lower than in the general population.

The Royal British Legion survey (RBL 2006) found that younger Veterans (16-64 years) were significantly more likely to report long term health problems than their peers in the general population. The RBL also projected the future needs of those surveyed and found that for younger Veterans long term illness or disability and mental health issues will remain the most prevalent health concerns in 2020.

Service in the military is a physically dangerous job. Injuries during training are common, with one recent study (Williamson, 2011) finding that nearly 60% of British military recruits had experienced an injury during training, with ankle injuries accounting for 83% of these, and younger recruits at greatest risk of injury. The risk of death varies between the Forces, according to the Royal College of GPs (2011)

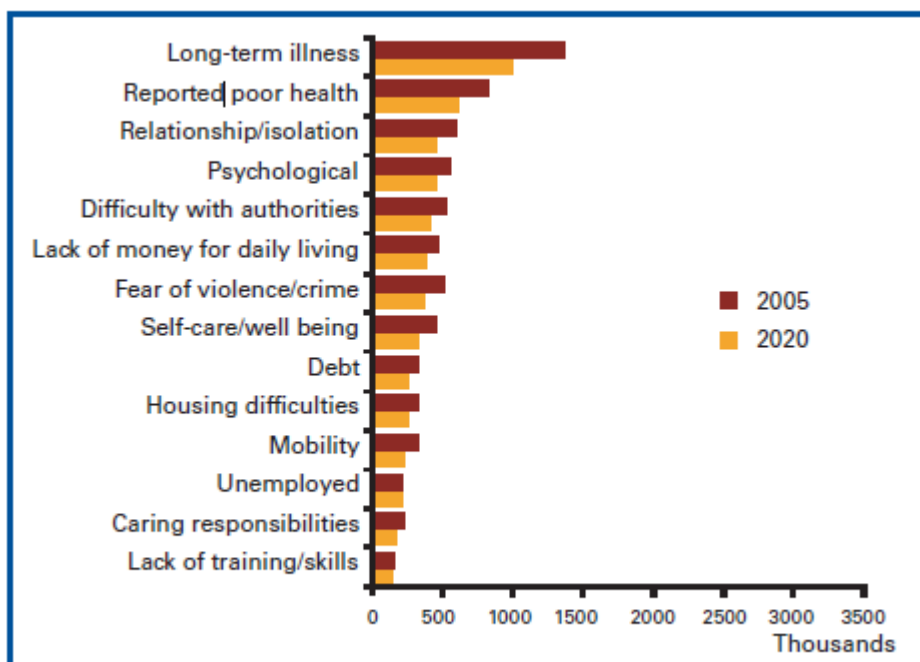
²⁰ 39 Defence Analytical Services and Advice. Medical Discharges in the UK Regular Armed Forces 2006/07-2010/11. 14th September 2011.

<http://www.dasa.mod.uk/applications/newWeb/www/index.php?page=66&pubType=0>

and according to rank and location. The risk for the army as a whole is one in 1000 per year, which is 150 times higher than for the general working population, although it is lower in the Navy and the RAF (DASA, 2011). The mortality rate varies from year to year. Risk of serious injury, including loss of limbs, eyes, and other body parts, is also substantially increased.

Conflicts in Iraq and Afghanistan have increased the risk, which is already heightened compared to the population as a whole, of injury during Service that results in traumatic amputation. The Defence Medical Services (DMS) provides military amputees with prosthetics of a high standard that will allow them to return to active duty in line with the 'no disadvantage' principle of the Military Covenant. Where prosthetics need to be refitted by personnel who are still in Service, this is done by the DMS.

Figure 2: Forecast welfare needs of Veterans aged 16-64 years, projected number 2005-2020



Source: RBL 2006

4.3 Mental health and lifestyle behaviours.

A large-scale study by Woodhead et al (2007), described above, compared military Veterans to the general population of a similar age, and found that Veterans were less likely to have 'any mental disorder' than non-Veterans.

There is limited research on the lifestyle behaviour of military Veterans. Alcohol consumption is considered an important part of military culture and can be used as a bonding tool for people in stressful situations, particularly after being in combat zones or an intensive period of training (Fear et al. 2007). Although research is limited, available research shows that alcohol misuse is a problem in UK Armed Forces personnel and Veterans and it is more frequent than problems in the general population with people of the same gender and age (Greenberg 2011). A study investigating alcohol consumption among Veterans of the Gulf and Bosnia conflicts found that heavy drinking was most common with younger personnel. Heavy drinking was also correlated with smoking and poorer subjective mental and physical health. However, those still serving were more likely to be heavy drinkers than Veterans (Iverson 2007).

King's College London (KCL) is conducting a large-scale ongoing investigation of the physical and psychological health and well-being of UK Armed Forces personnel²¹. The study initially looked at the health of those who had been deployed to Iraq, but it has since been expanded to also look at those who had been deployed to Afghanistan. It includes both Regular personnel and Reservists from all three Services, those that have left Service since the study began and those who are still serving. The study found no major differences between deployed and non-deployed Regulars²². Regulars reported more alcohol misuse on their return home. Most personnel did not return from deployment with a mental health problem, and, those who do are more likely to suffer from symptoms of anxiety or depression, or alcohol misuse, rather than PTSD, which is more common in the US. KCL also found that those who were deployed in combat roles, or in locations such as in FOBs, PBs, CPs, come back with higher levels of stress related symptoms. They found that if personnel 'broke Harmony' (were deployed for more than 13 months in 3 years), or ended up being deployed for longer than they had been told, they reported more stress related problems. For those who seek help in Service, there is a high quality and effective mental health Service available. However, many people experiencing mental health problems don't ask for help, as they don't want to admit they have a problem. The armed Forces are attempting to address this issue, by carrying out research and by bringing in systems like TRIM Trauma Risk Management.

The authors concluded that alcohol misuse and aggressive behaviour (and post-traumatic stress disorder, although this is less prevalent), might be appropriate targets for interventions, although they also felt that more research in this area was needed, in order to identify effective approaches to reduce offending.

²¹ <http://www.kcl.ac.uk/kcmhr/research/kcmhr/healthstudy.aspx>

²² <http://www.kcl.ac.uk/kcmhr/research/kcmhr/Newsletter2011.pdf>

Following KCL research findings from 2006, which showed that Reservists were more likely to return with health problems than Regulars, a number of changes were made, and the MoD set up a dedicated Service for Reservists deployed since 2003 - called the Reserves Mental Health Programme (RMHP) run from Chetwynd Barracks in Chilwell. KCL has recently shown that the RMHP is working effectively. The process of mobilisation for Reservists has also been transformed, and these efforts did make a difference. However, despite these efforts, the differences in the psychological impact of deployment between Reservists and Regulars had not changed up to 2009. KCL is now looking at why this is. However, the overall rates of common mental health problems and PTSD remain low.

5. Wider determinants of health and the ex-Armed Forces population

5.1 Housing needs

Research on homelessness tends to be on a small scale, and most of it has focussed on the homeless population in London. An early study by Randell and Brown, in 1994, estimated that one quarter of homeless people had served in the UK Armed Forces. However, a more recent study conducted by the University of York (Johnson et al, 2008), estimated that only 6% of London's homeless population, or 1,100, had served in the Armed Forces. Evidence of the size of the problem outside London is limited, although Glasgow Homelessness Partnership found that 12% of the local single homeless population were military Veterans. The National Audit Office, in a 2007 assessment of the effectiveness of the MoD resettlement Service, surveyed all those who left Service in 2005 and 2006, and found that just under 5% of respondents, mainly young and of junior rank, had been homeless at some point since leaving Service. Most of this 5% had been homeless for between one and six months.

The characteristics and experiences of the homeless population who have served in the Armed Forces are broadly similar to the homeless population as a whole. Johnson et al (2008), along with Rhodes et al (2006), found that the veteran homeless population was 100% male, and predominantly white, which is not surprising, as the military population itself is also predominantly male and white. However, there is some evidence that homeless Veterans are older than the homeless population as a whole – Johnson et al found that 44% of veteran clients of CHAIN, a hostel referral Service, were aged 50 or older, compared with only 18% of all clients. The researchers also carried out their own 12 month longitudinal study, which found that the average age of homeless Veterans was 52, and that only 22% of participants in the study were aged under 45. Many studies (Rhodes et al, Johnson et al), found the majority of homeless Veterans served in the Army, rather than the Navy or RAF, although this is partly explained by the fact that larger numbers have served in the Army. It may also be partly because the Army has tended to recruit personnel from educationally (Gee, 2010) and socially (DCSF, 2008) disadvantaged backgrounds, as discussed further in Section 4.1. It is often perceived that Early Service Leavers are more vulnerable to homelessness, but only one participant in Johnson's study had left before completing basic training, although one in six served less than three years. However, 60% of respondents in a study conducted by Dandeker in 2005 had been discharged without completing their contracted period.

Randell and Brown (1994) found that Veterans were more likely to have slept rough, and to have done so far longer, than the population as a whole. Homelessness

Service providers in Gunner and Knott's (1997) study thought this might be partly because Veterans were better at surviving on the streets, and they were less likely to engage with support Services. The latter finding was also echoed by Randell and Brown, and Gunner and Knot. Higate (2001) also reported that Veterans considered themselves, though their military experiences and training, better equipped for dealing with street homelessness than others. Johnson et al's more recent (2008) study found a similar reticence to ask for help among those that they interviewed, but felt this was due to Veterans feeling ashamed at having to ask for help.

The studies described above found that there were a number of reasons why people became homeless. Johnson et al found that around a quarter of respondents reported some negative experiences from their military career, including bullying, drinking, or a traumatic incident. The largest group in Johnson's study, around a third of respondents, were homeless for reasons that were unrelated to their Service history. They had made a successful transition from military to civilian life, and did not experience homelessness until much later in life. Homelessness was often preceded by a particular difficulty, such as financial crisis or relationship breakdown. The smallest group in Johnson's study had enjoyed a successful military career, but found the transition to civilian life difficult. Dandeker also found that, while the majority of Service leavers had a successful transition to civilian life, a minority were at risk of homelessness in the years following discharge. Johnson found that homeless Veterans vulnerabilities and support needs were similar to the population as a whole, although there was some evidence that the needs of Veterans may be more complex – Dandeker also found that Veterans were more likely to report physical health problems than the homeless population as a whole. A number of studies (Johnson, Gunner and Brown, Randell and Knot) also suggested that homeless Veterans were more likely to report alcohol-related problems, and reported links between the Armed Forces drinking culture and the alcohol problems of homeless Veterans. However, Gunner and Knot found that homeless Veterans were less likely to be drug users than the homeless population as a whole.

Mental health problems are commonly reported among homeless Veterans. There has been a popular feeling that PTSD is common among Veterans who find life difficult, but several studies (Johnson et al, Milroy, 2001), found that PTSD was a minority condition, and that mental health problems were more likely to have developed as a result of childhood or post-Service experiences. Johnson et al conclude that there is a need for more research on homelessness outside the London area, in order to identify need.

The armed Forces covenant, which was published in May 2011²³, sets out the relationship between the nation, the state and the armed Forces. In England members of the armed Forces are being placed at the top of the priority list for the

²³ <https://www.gov.uk/the-armed-forces-covenant>

government's £500 million FirstBuy scheme, which is designed to help first time buyers; and at the top of the priority list for all other government-funded home ownership schemes. The first FirstBuy purchase by a Service person has now taken place. This priority lasts for up to 12 months after active Service ends. In the event of a death in Service the priority passes to the bereaved spouse or civil partner. Our support to the Armed Forces Home Ownership Scheme continues: the pilot AFHOS scheme was a huge success in the first of its agreed 4 years of operation, with the agreed funding being used in full. Service personnel are now able to apply for Service families accommodation online.

5.2 Pay and benefits

Through the armed Forces covenant, the Ministry of Defence are continuing to provide a minimum £250 increase for the lowest ranks in the Armed Forces during the public sector pay freeze. Council Tax Relief has also been doubled twice by government and now stands at nearly £600 per Service person for a six month deployment. The Families Welfare Grant has also been doubled, and Rest and Recuperation leave for those on operations. Continuous automatic entitlement to Blue Badges is in place for seriously injured Service personnel and Veterans. The Ministry of Defence is also working with credit reference agencies to ensure Service people are not disadvantaged by mobility requirements in accessing credit.

5.3 The Criminal Justice System

A recent, large-scale, study, published in *The Lancet* in March 2013²⁴, looked at almost 14,000 serving and ex-serving UK military personnel, most of who had been deployed to Iraq and Afghanistan. They found that younger members of the armed Forces returning from duty were more likely to commit violent offences than the rest of the population. 20% of younger males (under 30) had been convicted with violence, compared with 6.7% of civilians. The rate of offending overall among military personnel was lower than in the population as a whole, but more of the offences were violent offences. The study found that military Service in itself was not associated with an increased risk of committing violent offences once potential confounders including age, education, and pre-Service violent offending were taken into account, but serving in combat was. Men who had been exposed to more traumatic events during deployment or misused alcohol after deployment were at increased risk, as were men with aggressive behaviour and those with post-traumatic stress disorder. Offences were most common in the post-deployment period (12.2%), than in the pre-deployment Service period (8.6%) and the pre-Service period (5.4%). The most common types of offences were violent offences - 64% of the offenders had committed a violent offence. Serving in a combat role was associated with an increased risk of offending (6.3%) compared to being deployed in a non-combat role (2.4%), even after taking into account the confounding factors of education, age, etc.

²⁴ [http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(13\)60354-2/abstract](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(13)60354-2/abstract)

On a local level, a study that is being conducted on behalf of Central and Eastern Cheshire Primary Care Trust involved interviews with 25 male Veterans in four prisons across Cheshire. 20 of these 25 Veterans were aged under 65. 16 of the 25 disclosed a mental health need, which was post-traumatic stress disorder in 8 of the 16. The researchers also found that wider health issues have a great impact, especially housing, marital breakdown / family issues and employment. A full report on this research will be available by April 2013. Please contact Astral Advisory to request a copy²⁵.

5.4 Families needs.

There is a relatively small body of research on the impact on families and children of deployment. In terms of education, it is difficult to isolate factors that impact on a Service child's education and learning. Evidence relating to the impact on Service children's education is mixed: some research finds that being a Service child can have a negative impact, other research finds no significant impact if the transition process is well-managed and other research suggests positive effects. It is generally felt that further research is needed to better understand the effects of parental deployment²⁶ King's College London have recently started a new study, looking at the impact of military Service on military families²⁷.

As discussed earlier in this report, the Institute for Military Health, based at the Institute of Psychiatry, King's College London, has undertaken a number of significant cohort studies looking at the long term effects of deployment to Iraq and Afghanistan. These studies provide evidence of any long term effects on psychological, emotional or social functioning as a result of deployment. These studies do not consider the effect of deployment on spouses and children. However, a parent whose physical health, or emotional or psychological well-being, is compromised is likely to impact on the well-being of their family. Fear et al (2010), looked at the reported prevalence of symptoms of common mental disorders, alcohol misuse and post-traumatic stress disorder, and found that the prevalence of common mental disorders among Service personnel was not apparently influenced by deployment, and that although there was some increase in post-traumatic stress disorder, the overall prevalence remained relatively low. However, the study did report a significant increase in alcohol misuse as a result of deployment, raising the prevalence of hazardous drinking to levels well in excess of the civilian population. 13% of the whole surveyed sample was found to have some level of alcohol misuse. Personnel who had been deployed to Iraq and/or Afghanistan were 1.2 times as likely to have problems with alcohol as personnel who had not been deployed. This has significant implications for the health needs of Service families, as a parent with alcohol problems can have an enormous impact on family life.

²⁵ For the full report, please contact Chris Pratt, Astral Advisory & Business Development Manager, by telephone on 0845 864 5201, or 07525 905211, or by email: chrisp@astralps.co.uk

²⁶ <https://www.education.gov.uk/publications/eOrderingDownload/DFE-RR011.pdf>

²⁷ <http://www.kcl.ac.uk/kcmhr/research/kcmhr/Newsletter2011.pdf>

A recently published study (Lester et al, 2010) interviewed two groups of children who had a currently deployed or recently returned parent. 30% of the children studied showed clinical levels of anxiety, which lasted for up to a year after the deployed parent returned home. For both groups, the parents' level of distress and the length of deployment predicted increased depression in children. Studies have also suggested that stress within the family caused by deployment can, in some circumstances, reduce parents' ability to cope and exacerbate the risk of child abuse. A recent study in the *Journal of American Medicine* (Gibbs et al, 2007) studied 1985 families in the American Army who had recorded incidents of child maltreatment. It found that incidents of child maltreatment were significantly more frequent when one parent was deployed. Overall, the rate of child maltreatment incidents was 42% higher in the period when soldiers were deployed than when they were not deployed. When only moderate/severe maltreatment incidents were considered, the rate of these incidents was 68% higher when parents were deployed than in the non-deployed period. The rate of incidents involving child neglect was almost twice as high when parents were deployed as in non-deployed periods (a relative risk of 1.95). The study is based on American definitions, and does not comment on the comparable rate of child maltreatment in the general population. However, it clearly suggests that deployment stress can place strain on families' ability to cope, and create an increased risk to children in already vulnerable families. The studies show that support for parents as key to improving outcomes for children. Lester's study (2010) showed that the parent's ability to cope was strongly related to whether the child became depressed or anxious – the greater the parent's distress, the more likely the child was to show increased depression or anxiety.

Several studies have found that children in military families face certain emotional challenges. For example, a RAND Corporation study²⁸ (2009) examined the well-being of 1,500 children from military families across America. The study concluded that children in military families may suffer from more emotional and behavioural difficulties when compared to other American youths. Older children and girls were found to suffer the most when a parent is deployed overseas. The study also found that having a parent deployed for a longer period of time and having a non-deployed parent who has struggled with emotional problems were important factors associated with whether military children would struggle themselves; 'the more time parents are away, the more likely it is that children will experience problems'. The RAND research found that, across all age groups, children from military families reported significantly higher levels of emotional difficulties than children in the general population. Also, about one-third of the military children surveyed reported symptoms of anxiety, somewhat higher than the percentage reported in other studies of children. In terms of school, older youths were found to have more difficulties with school and more problem behaviours such as fighting. Girls were found to have

²⁸ Taken from *Science Daily* (2009) <http://www.sciencedaily.com/releases/2009/12/091207095503.htm>

fewer problems in school and with friends, but reported more anxiety than boys. Other studies found that parental deployment alone did not directly impact children's emotional or behavioural problems. However, parental deployment along with other characteristics, such as age, length of deployment, parent well-being, did impact children's well-being (Flake et al, 2009; Lester, et al., 2010). Studies found that parental deployment is directly associated with more academic problems, a higher likelihood of child maltreatment, and increased family functioning problems (e.g., Barker & Berry, 2009; Engel, Gallagher, & Lyle, 2010; Mmari, Roche, Sudhinaraset, & Blum, 2009). Age of children had an impact – there is some evidence that younger children with deployed parents exhibited more emotional or behavioural problems than children whose parents were not deployed (Chantrand et al, 2008), while older children were more likely to experience academic problems than younger children (Chandra et al, 2010).

As discussed in section 3.7 above, schools are required to complete a census giving information about children on their roll, and, from 2008, this has included a 'Service flag, to identify children who are from military families. This only applies to Regular personnel, meaning that there is a gap in identifying children whose parents are Reservists.

The DfE (2010) study found that, at the end of Key Stage 2, there are high numbers of Service families located along the East of England, in the South West, in North Yorkshire, Surrey, Oxfordshire and Kent. At Key Stage 4, again there are high numbers along the South West of England, Kent, Lancashire, Surrey, Oxfordshire and North Yorkshire. At the end of both Key Stages, there are few Service children in Greater London and in the Midlands²⁹. The study also found that Service children are less likely to be deprived than their non-Service peers, as assessed by free school meal eligibility and IDACI: a measure of the deprivation of an area in which a child lives. Service children are less likely to live in the most deprived areas of the country compared with their non-Service child peers: no more than 5% of Service children at the end of any Key Stage live in the most deprived quarter of areas in England. Service children are generally less likely to be identified as having a special educational need: fewer Service children are identified as school action or school action plus across the Key Stages. However, similar proportions of Service and non-Service children are seen to have a SEN statement; Service children are more likely to change school than non-Service children in both Primary and Secondary School. 58% of Service children changed school during Key Stage 2 compared with 38% of non Service children; at secondary school 6% of Service children changed schools during their GCSE years compared with 2% of non-Service children.

Information from the school census is fed into the National Pupil Database (NPD), which is a database of all pupils including links with their attainment data from the Early Years Foundation Stage Profile to Key Stage 5, allowing Service children's background context to be linked with their attainment data³⁰. Evidence on how well children from military families perform in schools is mixed. A study conducted by the

²⁹ <https://www.education.gov.uk/publications/eOrderingDownload/DFE-RR011.pdf>

³⁰ <https://www.education.gov.uk/publications/eOrderingDownload/DFE-RR011.pdf>

National Foundation for Educational Research (NFER, 2007) found that mobile pupils tend to under-perform. However, other researchers have concluded that, despite the challenges faced by Service children, they can still perform well academically³¹ (SCE, 2008). The DfE report found that Service children outperform their peers at GCSE, although around half the difference is explained by prior attainment, and the rest by other demographic factors related to academic attainment. Moving schools in years 10 or 11 is associated with a massive fall in GCSE performance of about 80 points, which is the equivalent to dropping 2 grades in between 6 and 7 subjects. The DfE report shows that Service children still suffer academically if they move schools during their GCSE years, but that the impact of mobility on Service children is not as great as the impact on non-Service children. The report also showed that, in 2009, 8,500 Service children were educated overseas. Service children who are educated overseas tend to be younger than Service children educated in England - more than a quarter were in nursery and reception years and just over half were in Primary school. The attainment of overseas Service children is broadly similar, if not a little higher, than that of Service children in English schools.

The Royal Navy and Royal Marines Children's Fund (2009) cite figures from a 2006 survey: MoD Royal Navy and Royal Marines Families Continuous Attitude Survey. Some key findings from this survey include the fact that 43% of Naval families have experienced problems finding a place for their children at the school of their choice; 62% of Naval families have experienced problems with the difference in syllabus content when their child changes school.

However, several studies found that there were positive features of being part of the Service community. The Royal Navy and Royal Marines Children's Fund study, for example, found that children often take a great deal of pride, identity and belonging from their parent's role in the Armed Forces, and can build strong bonds and grow up quickly with the extra responsibility they shoulder while their serving parent is away. The report also explained how Service children often learn to be more adaptable, making friends quickly and having a sense of perspective gained from living in multiple locations and communities.

³¹ From *Providing Highly Mobile Pupils with an Effective Education* (2003) and *Mitigating Mobility – Guidance on Pupil Mobility* (2008)

6. Current Service provision both nationally and locally

6.1 National provision

The medical assessment programme is a national Service, provided by St Thomas's Hospital in London. The Service is aimed at anyone who has seen active Service since 1982, is now demobilised, and has mental health problems that are linked to Service. It offers advice to Veterans and their families, and provides diagnoses and management strategies to both individuals, and to medical professionals involved in their care.

Those leaving military Service should receive a copy of the Service Leavers Pack from the Service Personnel and Veterans Agency, which contains helpful advice. Ex-Armed Forces personnel and their families can also contact the free Veterans Helpline on 0800 169 22 77 or visit the Agency website at www.Veterans-uk.info³².

In terms of education, through the armed Forces covenant, a scheme has been delivered to provide scholarships to bereaved Service children. As of October 2011 a total of 22 Further Education and 61 Higher Education scholarships have been awarded for academic years 2010/2011 and 2011/12. More help has also been delivered for those leaving the Service to go on to higher / further education – not least through payment of tuition fees, which has been extended to the spouses or partners taking up the entitlement because of bereavement or extreme injury of a discharged Service person. The Pupil Premium has also been introduced, for the children of those currently serving. In addition, £3 million per year has been made available for state schools with Service children (including those of Reservists). Schools can now exceed the 30 pupil limit for infant classes in order to accommodate Service children. A Service child indicator is now part of the Annual School Census in England and DFE is now able to identify separately the children of parents in the Armed Forces.

6.2 Reserves Mental Health Programme

The Reserves Mental Health Programme³³ is open to any current or former member of the UK Volunteer and Regular Reserves who has been demobilised since 1 January 2003 following an overseas operational deployment as a reservist, who believes that this deployment has had an impact on their mental health. Defence Medical Services (DMS) liaise with the individual's GP, and offer a mental health assessment. Individuals who are diagnosed with mental health problems that are related to Service are offered out-patient treatment at one of the Ministry of Defence's Departments of Community Mental Health. The DMS will also assist access to NHS in-patient care where necessary. There is a national

³² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/28614/dh_091922.pdf

³³ <http://www.army.mod.uk/welfare-support/23247.aspx>

plan for implementation of the Murrison recommendations³⁴, in order to improve prosthetics and rehabilitation Services for Veterans in the UK. The Career Transition Partnership (CTP)³⁵, which is a partnership between the Ministry of Defence and the private sector, provide support to help ex-Armed Forces with the transition from military to civilian life. They provide a range of support including support into employment, including writing CVs, and support in accessing housing. The voluntary sector has a long history of providing support to ex-Armed Forces personnel and their families. Listing all this provision is beyond the remit of this needs assessment. However, available provision can be accessed via the Armed Forces Directory.

6.3 Local provision

Cheshire and Merseyside Clinical Commissioning Groups³⁶ (CCGs) are working towards establishing a lead for veteran health for each CCG. CCGs are already working towards addressing some of the areas for improvement identified in this health needs assessment. The new patient registration form asks about previous military Service, but this question is not always completed. For example, Liverpool CCG found that 6,986 ex-Service personnel were recorded on the IT system, far lower than would be expected based on the estimates made by NHS Wirral based on national data, Liverpool CCG are already working to address this issue. Again, the voluntary sector provides support, in Cheshire and Merseyside, to ex-Armed Forces personnel and their families. More information is available via the Armed Forces Directory.

³⁴ http://www.armedforceshealthpartnership.org.uk/media/1891104/11_126_murrison_prosthetics_briefing_final_jan_2012.pdf

³⁵ <https://www.ctp.org.uk/about-us/the-ctp>

³⁶ Clinical Commissioning Groups are groups of GPs that will, from April 2013, be responsible for designing local health services in England. They will do this by commissioning or buying health and care services including elective hospital care, urgent and emergency care, mental health and learning disability services and most community health services http://www.phorcast.org.uk/page.php?page_id=259.

7. Discussion

Transition from Defence Medical Services to the NHS is an area where there is scope for improvement. People usually leave the army in good health, and the main challenge is to ensure that they are then linked in with the NHS, in order to meet future health needs. Military personnel are usually discharged with 3 months supply of medication. They are also issued with a summary of their medical history, on a form that includes a detachable request form – if leavers give this to their new GP, the GP can request full records using this form. However, not all GPs are aware that they can request full records. In addition, leavers do not always register with a GP immediately on their return, with many waiting until they are unwell. Those who do register may not disclose that they have served in the armed Forces. Even if leavers do disclose this, not all GPs will have a system to record this information. It is often difficult for Service leavers to commit to a long-term address, making it problematic for them to register with a GP prior to discharge. However, a new system where Service leavers will have an ID number for both military and civilian health care, that was being introduced at the time that this report was published, should help to alleviate these issues.

Since 2008, all veterans have been entitled to ‘priority’ treatment within the NHS. This means that, for conditions related to military Service, at their first outpatient appointment Veterans would receive treatment more quickly than other patients who are the same level of clinical priority³⁷. However, a survey conducted in 2009 found that 81% of GPs surveyed knew very little about priority treatment³⁸.

³⁷ NHS Operating Framework 2008/9, paragraph 3.15, 2009/10 paragraph 66 and 2010/11 paragraph 2.55

³⁸ War Pensioners identified by RBL, survey undertaken by Ipsos-MORI

8. Recommendations.

The following recommendations have been produced based upon the national and local evidence, as well as best practice of what is effective in improving the health and well-being of ex-Armed Forces personnel.

Transition from DMS to the NHS and identification of ex-Armed Service personnel

- Facilitate GP registration prior to discharge.
- Use DMS Record Transfer.
- Encourage GPs to ask about previous military Service.
- Encourage wider use of the military Service read code.
- Improve connectivity between DMS and NHS computer systems

Health Services for ex-Armed Forces personnel

- Increase understanding of prioritisation among GPs and ex-Armed Forces personnel.

Future planning

- Conduct research on the needs of the families of Armed Forces and ex-Armed Forces personnel.

9. Conclusion.

In conclusion, research has demonstrated that there are health benefits to serving in the Armed Forces. Armed Forces personnel need to be physically fit, and benefit from regular exercise and from regular medical checks. However, Service in the military is a physically dangerous job. There is also some evidence that alcohol misuse amongst ex-Armed Forces personnel is a problem. King's College London found that Regulars reported more alcohol misuse on their return home, and that Reservists were more likely to experience psychological impact of deployment than Regular Forces. However, the overall rates of common mental health problems and PTSD remain low. Following Service, the majority of Service personnel adapt to civilian life without any problems. Homelessness is one issue that is faced by a minority of ex-Armed Forces personnel. Several studies have shown that the characteristics and experience of homeless ex-Armed Forces personnel are broadly similar to the homeless population as a whole, although ex-Service personnel are older, and may be homeless for longer. There is some research that they are more likely to misuse alcohol than the homeless population as a whole, but less likely to misuse drugs.

There is a relatively small body of research on the impact of families and children of deployment. One study found that 30% of children who had a currently deployed or recently returned parent showed clinical levels of anxiety, which persisted for up to a year after the deployed parent returned home. Health problems of parents, such as increased incidence of alcohol misuse, are likely to have an impact on the health of children. In terms of education, Service children out-perform their peers at GCSE level, although around half of this difference is explained by prior attainment, and the rest by demographic factors related to prior attainment. King's College London has recently begun a large scale study, looking at the impact of military Service upon families.

Recommendations of this report, along with a recommendation to conduct further research on the needs of the families of Armed Forces and ex-Armed Forces personnel, include improving the transition from Service to civilian life.

10. References

- Barker, L., & Berry, K. (2009). Developmental Issues Impacting Military Families With Young Children During Single and Multiple Deployments. *Military medicine*, 174(10), 1033-1040.
- Chandra et al, 2010. Children on the homefront: the experience of children from military families. *Pediatrics*, 125 (1)16. Doi: 10.1542/peds.2009-1180.
- Chantrand et al, 2008. Effect of parents 'wartime deployment on the behaviour of young children in military families. *Archives of Pediatric and Adolescent Medicine*, 162 (11), 1009-1014.
- Dandeker et al, 2005. Feasibility study on the extent, causes, impact and costs of rough sleeping and homelessness amongst ex-Service personnel in a sample of local authorities in England, KCMHR, Kings College.
- Defence and Analytical Services and Advice (DASA). Defence Analytical Services and Advice. Deaths in the UK Regular Armed Forces 2010. National Statistics Statistical Notice. 1st July 2011.
<http://www.dasa.mod.uk/index.php?pub=MORTALITY>
- DCSF, 2008. Department for Children, Schools and Families *DCSF+. (2008). 'Table 8: GCSE attempts and achievements in selected subjects of pupils at the end of Key Stage 4 in schools (percentages) Year: 2007- 08', available at
http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000815/SFR282008_Tables_Additional_Amended_121108.xls
- Department Of Health, 2008. Meeting the healthcare needs of Armed Forces personnel, their families and Veterans.
http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_091921
- Department of Health, 2011. Equality Analyses for the Health and Social Bill 2011.
<http://www.parliament.uk/documents/impact-assessments/IA11-039.pdf>
- Engel, R., Gallagher, L., & Lyle, D. S. (2010). Military deployments and children's academic achievement: Evidence from Department of Defense Education Activity Schools. *Economics of Education Review*, 29(1), 73-82.
- Fear et al, 2007. Fear N, Iversen A, Meltzer H, Workman L, Hull L, Greenberg N et al. Patterns of drinking in the UK Armed Forces. *Addiction* 2007;102:1749-1759
- Flake, E., Davis, B., Johnson, P., & Middleton, L. (2009). The psychosocial effects of deployment on military children. *Journal of Developmental & Behavioral Pediatrics*, 30(4), 271. doi: 10.1097/DBP.0b013e3181aac6e4.

Gee, 2010. Army recruiters visit London's poorest schools most often. Available at <http://www.informedchoice.org.uk/armyvisitstoschools.pdf>

Greenberg, 2011. Greenberg N, Jones E, Jones N, Fear NT, Wessely S. The injured mind in the UK Armed Forces. *Phil Trans R Soc B* 2011;366:261-267.

Gibbs et al, 2007. Child maltreatment in enlisted soldiers' families during combat-related deployments. *Journal of the American Medical Association*, 298(5), 528.

Glasgow Homelessness Partnership (2006), *Veterans Scotland Survey: Evaluation Report*, Glasgow Homelessness Partnership.

Gunner and Knot (1997). *Homeless on Civvy Street: Survey of Homelessness Amongst Ex-Servicemen*, Ex-Service Action Group.

Higate (2000), *Tough Bodies and Rough Sleeping, Embodying Homelessness Amongst ex-Servicemen*, *Housing Theory and Society*, 17(3): 97-108

HM Government, 2011. *No health without mental health: a cross-government mental health outcomes strategy for people of all ages*. 2 February 2011. http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_123766.

Iverson, 2007. Iversen A, Waterdrinker A, Fear N, Greenberg N, Barker C, Hotopf M, Hull L, Wessely S. Factors associated with heavy alcohol consumption in the UK Armed Forces: Data from a health survey of Gulf, Bosnia, and Era Veterans. *Military Medicine*. 2007 Sep; 172(9):956-61.

Lester et al, 2010. *The Long War and Parental Combat Deployment: Effects on Military Children and At-Home Spouses*. *J Am Acad Child Adolesc Psychiatry*. 2010 April; 49(4): 310–320.

Marmot, 2010. *The Marmot Review. Fair Society, Healthy Lives. Strategic Review of Health Inequalities in England post- 2010*. The Marmot Review: London 2010. www.ucl.ac.uk/marmotreview

Milroy (2001), *Pathways to the Street for Ex-Service Personnel; An Examination of Various Routes to Homelessness for Ex-Service Personnel*, University of East Anglia.

Ministry of Defence, 2008. *The Nation's Commitment: Cross-Government Support to our Armed Forces, their Families and Veterans*. <http://www.official-documents.gov.uk/document/cm74/7424/7424.pdf>

Ministry of Defence, 2011. *The Armed Forces Covenant Interim Report (2011)*. http://www.Veteransuk.info/interim_covenant/20111220Armed_Forces_Covenant_Interim_Report_2011-U.pdf

Mmari, K., Roche, K., Sudhinaraset, M., & Blum, R. (2009). When a parent goes off to war: Exploring the issues faced by adolescents and their families. *Youth & Society*, 40(4), 455-475. doi: 10.1177/0044118X08327873

National Audit Office, National Audit Office (2007), Ministry of Defence,: Leaving the Services, The Stationery Office.

NFER, 2007. Service Children and school performance: Key findings document: http://www.nfer.ac.uk/emie/detail.asp?id_content=5531&id_category=277&id_Ref=4583&level=3&detail=news

NICE, 2005. Health needs assessment: a practical guide. http://www.nice.org.uk/media/150/35/Health_Needs_Assessment_A_Practical_Guide.pdf

Pinder et al, 2012. Self-harm and attempted suicide among UK armed Forces personnel: results of a cross-sectional survey. <http://www.ncbi.nlm.nih.gov/pubmed/21693487>

Randell and Brown (1994), *Falling Out: A Research Study of Homeless Ex-Service People*, Crisis.

RBL, 2006. Royal British Legion 2006. Profile and Needs of the Ex-Service Community 2005-2020. Royal British Legion 2006. <http://www.britishlegion.org.uk/media/33526/summary%20and%20cons.%20report.pdf>.

Rhodes et al, 2006. The Numbers and Characteristics of Homeless Ex-Service People in London: A Review of the Existing Data, Centre for Housing Policy, University of York.

Royal Marines Fund, 2009. The overlooked casualties of conflict: a report commissioned by the The Royal Navy and Royal Marines Conflict Fund. November 2009. http://rnrnchildrensfund.org.uk/wpcontent/uploads/old/overlooked_casualties_of_conflict_report.pdf

Meeting the healthcare needs of Veterans. A guide for General Practitioners. Royal College of General Practitioners, Royal British Legion, Combat Stress. January 2011. <http://www.armedForceshealthpartnership.org.uk/media/31271/MeetingthehealthcareneedsofVeteransGPsguide.pdf>

National Audit Office (2007), Ministry of Defence: Leaving the Services, The Stationery Office.

Smith et al, 2007. The physical and mental health of a large military cohort: baseline functional health status of the Millennium Cohort. <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2212642/>

Wilkinson et al. Injuries and injury risk factors among British army infantry soldiers during pre-deployment training. *Inj Prev* 2011;17(6):381-7.

Woodhead et al, 2007. Health of national Service Veterans: an analysis of a community-based sample using data from the 2007 Adult Psychiatric Morbidity Survey of England. *Soc Psychiatry Psychiatry Epidemiology*. 2011 Jul; 46(7):559-66.

11. Appendices.

APPENDIX 1 – TA Centre locations leaflet. The leaflet lists Territorial Army Centres in North West England.



TA centre locations
leaflet Jan 15 latest.p

Liverpool Public Health Observatory

**Department of Public Health and Policy
Whelan Building
Quadrangle
University of Liverpool
Liverpool L69 3GB**

Tel: 0151 794 5570/81

Fax: 0151 794 5588

E-mail: obs@liv.ac.uk

WWW: <http://www.liv.ac.uk/PublicHealth/obs>



UNIVERSITY OF
LIVERPOOL