ORIGINAL ARTICLE

Unemployment and benefit claims by UK veterans in the new millennium: results from a record linkage study

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ABSTRACT

Objectives In the first study of its kind in the UK, we linked pensions data on benefit claims with data from the King’s Military Cohort to assess uptake of unemployment and disability benefits in military veterans of the UK Armed Forces.

Methods Benefits data were matched with data on the mental health, demographics and military-related variables for 7942 veterans who had previously served as regulars and transitioned to civilian life between 2003 and 2016. Associations between demographic and service-related factors and benefit claims were assessed using Cox regression to take into account period at risk.

Results Around 20% of veterans claimed unemployment benefits (UB) shortly after leaving, but this proportion drops rapidly to around 2% in the first 2 years post service. Receipt of disability benefits (DB) is less common (1.5%), but longer-term. The most consistent predictors of postservice benefit usage were: low rank (a proxy for socio-economic status while in service) (HR 1.42 (95% CI 1.23 to 1.65) for UB and 1.59 (95% CI 1.11 to 2.27) for DB); leaving service (HR 1.29 (95% CI 1.07 to 1.56) between unplanned leaving and UB, and 7.51 (95% CI 5.31 to 10.6) between medical discharge and DB); and having a history of claiming benefits before joining the Services (HR 1.62 (95% CI 1.34 to 1.95) between preservice and postservice UB, and 2.86 (95% CI 1.09 to 7.47) between preservice and postservice DB).

Conclusions Benefit claims by veterans are largely driven by socioeconomic, rather than military, factors. Additional employment-focused support to Service leavers may be particularly useful to lower-ranked personnel and those leaving in an unplanned way. Continuity of care and medical oversight is a key concern for those with medical discharges.

INTRODUCTION

Leaving the Armed Forces (AF) and becoming a civilian can be challenging for some Service personnel. The national costs of transition to civilian life are estimated at around £100 million per year in the UK, of which around half is linked to mental ill health and a quarter to unemployment. The UK Chief of Defence Staff recently drew attention to the fact that shortly after leaving 8% of veterans are unemployed, or about their welfare benefit use. Existing evidence is conflicting as to whether veterans are more likely to be unemployed than the general population. Reasons for this uncertainty include reliance on individuals self-identifying as veterans and utilisation of unrepresentative samples, such as those accessing mental health services.

In the USA, veterans are more likely to be unemployed than civilian comparators. However, historical evidence from the US shows that some groups benefit economically from service including officers, those from disadvantaged backgrounds, ethnic minorities and women. Furthermore, veterans who are employed tend to have higher incomes than civilians in occupations with military-civilian overlap.

In this paper we present the results of a novel record linkage between a large, representative sample of UK Service personnel transitioning from military to civilian life and comprehensive Department of Work and Pensions (DWP) data on welfare benefit claims—this was the first time the DWP purpose of the resettlement process. However, surprisingly little is known about unemployment among UK veterans, nor about their welfare benefit use. Existing evidence is conflicting as to whether veterans are more likely to be unemployed than the general population. Reasons for this uncertainty include reliance on individuals self-identifying as veterans and utilisation of unrepresentative samples, such as those accessing mental health services.

Key messages

What is already known about this subject?

Little is known about use of unemployment or disability benefit claiming by veterans, or factors driving such.

What are the new findings?

Unemployment benefits are mostly used in the two years after leaving the Services. Disability claims are more likely to be longer-term.

Post-service benefit claiming is largely associated with socioeconomic rather than military factors, except that unplanned discharge is associated with unemployment benefits and medical discharge with disability benefits.

How might this impact on policy or clinical practice in the foreseeable future?

Employment-focused support to veterans should concentrate on the early period after leaving, while longer-term care and health surveillance should be considered for those medically discharged.
has performed a health-related data linkage exercise outside intragovernmental analyses. Utilising administrative rather than self-reported data along with data from veterans within a representative sample of Service personnel from the King’s Centre for Military Health Research (KCMHR). The aims of this paper were to:

- Estimate the scale of unemployment and disability benefits usage among the veteran population.
- Assess the pattern of benefit claims over time since discharge from service.
- Investigate the predictors of welfare benefit usage, such as sociodemographic characteristics and preservice and service-related factors.

**METHODS**

### Study population

The KCMHR cohort was set up to determine the mental health consequences of deployment of UK AF to the Iraq, and subsequently Afghanistan, conflicts, and contains personal, military, and health-related data. The first phase of the cohort comprised a sample of 17 499 AF personnel stratified according to deployment status at the beginning of the Iraq war (Operation TELIC 1), and was collected June 2004–March 2006.12 Our sample did not include anyone who had not completed initial military training.

The second phase followed up 9335 of those in the first phase who had agreed to be re-contacted, as well as a new sample comprising 17 899 of those who had served in Afghanistan and 6628 who joined the Services April 2003–April 2007, collected November 2007–September 2009.13

The third phase included those who took part in either of the previous phases (n=12 283), as well as a sample of new personnel recruited August 2009–March 2013 (n=8 581)15; data were collected November 2014–December 2016.

The sample for this study included those who had responded at phase 1 and/or phase 2, as well as all those in the third phase irrespective of response (non-responders were not excluded as data collection was ongoing at the time of data linkage). Thus the study design represents the transition to civilian life for the period 2003 to 2016.

This analysis includes only those who had previously served as full-time regulars (n=7 942). Those serving as a reserve, and leavers who had only served as a reserve, were excluded. Where overall benefit claims are described this includes all those in the sample, irrespective of whether they responded to KCMHR questionnaires (as such analyses do not require the use of any data held by KCMHR). Those analyses which include socio-demographic or service factors require data from the KCMHR cohort database, and hence do not include those who were sampled but did not respond at phase 3.

### Data matching

KCMHR data necessary for linkage was sent to the DWP containing 9731 discharged Service personnel. Matching was based on National Insurance (NI) number, date of birth, name and gender. Once the linkage was complete, DWP data were transferred to KCMHR to merge with the full cohort data. Matching was non-probabilistic, but based on a schema of factors required for acceptable matching determined a priori. 70.8% were matched including a NI number, and 98.6% were matched overall when the other factors listed but NI matches were not possible.

### Generating variables

The KCMHR cohort contained self-report data on respondents’ AF service, demographics and a measure of childhood vulnerability. Furthermore, service-related variables were also provided by Ministry of Defence data, from which the original sample was selected. Where variables refer to matters which are liable to change with time (such as rank and education), this study used the most recent value. Cohort members did not necessarily fill all questionnaires at all three phases—some joined the cohort after the first phase, and others did not respond at later phases.

Rank was divided into private and private-equivalent ‘other ranks’, Non-Commissioned officers (from Lance Corporal-equivalent to Warrant Officer Class 1 equivalent), and Commissioned Officers. Roles were reduced to three for the purposes of this study following standard military categorisations: Combat (eg, front-line infantry and other direct combat roles), combat support (eg, bomb disposal) and combat services support (eg, infrastructure, training, logistics, and other ‘back office’ roles).

Length of service was determined by combining administratively-collected data on dates of joining and termination where available, supplemented by self-report data where administrative data were missing. An Early Service Leaver (ESL) was defined as an ex-Service member who did not complete their initial period of service, usually of 4 years (note that official definitions also include method of leaving in their definition of ESL, which is included as a separate variable in this study). Since most personnel joined the AF within a narrow age range, age at leaving is collinear with length of service and thus not included in this analysis (regression coefficient 0.81, 95%CI 0.80 to 0.83, R² 0.59).

To determine method of leaving, respondents were asked, “How did you leave?” A binary variable was then generated from the possible responses—‘planned leaver’ or ‘unplanned leaver’. Planned leavers were those who left after completing a term of service or applied to leave voluntarily before completing their current service term. Unplanned leavers included those discharged involuntarily due to administrative discharge, dishonourable discharge, compulsory redundancy or ‘tempo-mental unsuitability’. Those who left due to medical discharge were treated as a third category. ‘Planned’ is used rather than ‘voluntary’ as it was not possible to distinguish those who left in a planned way but would have preferred to stay.

Education was divided into those who achieved no academic qualifications, those who achieved GCSE (‘General Certificate of Secondary Education’, taken at the UK compulsory minimum age for school leaving) level or equivalent, A-level (taken at the UK compulsory minimum age for education), and those achieving degree-level or higher.

Childhood antisocial behaviour and family adversity variables were generated from a 16-item checklist using the root ‘When I was growing up…’.15 Those indicating any one or more of not coming from a close family, getting shouted at a lot at home, not feeling valued by family, regularly witnessing fighting or verbal abuse between parents, not having a family member they could talk to, being regularly hurt by a parent/caregiver, having a parent with substance abuse problems, and/or not doing things as a family, were classified as having experienced family adversity. Those who endorsed any of the following statements: playing truant from school, getting into fights at school, being suspended or expelled from school, or doing things that got them into trouble with the police, were classified as demonstrating childhood antisocial behaviour.
DWP provided lifetime data on benefits for all matched individuals censored at 31st October 2016. Data included the type of benefit being received and start/end dates of the benefit claim. By comparing dates of joining and leaving, preservice and postservice benefit receipt could be determined. ’Unemployment benefits’ (UB) comprised Job-Seeker’s Allowance (JSA) and Universal Credit (UC); ‘Income-replacing disability’ comprised Employment and Support Allowance (ESA), Incapacity Benefit (IB) and Severe Disablement Allowance (SDA); and ‘Extra costs disability’ comprised Personal Independence Payment and Disabled Living Allowance.

Analysis
Associations between demographics and time to benefit claim following discharge from Service were determined using survival time analysis via Cox regression. The observation period began at date of leaving and continued to 31st October 2016 (the last available date). First date of claiming benefits was the index event (ie, individuals were right-censored at this point), to take into account the varying period at risk of individuals in the sample population. Nelson-Aalen plots were used to check that the data conformed to the assumption of proportional hazards. Analysis was performed using Stata V.14.1. Three sets of analyses were performed: first, a univariate analysis which was response-weighted for factors associated with non-response at any phase (rank, Service arm, and method of leaving); second Model 1, which was intended to determine which factors were independently associated with benefit claiming by adjusting for those factors which were associated in the univariate analysis, but excluding socio-economic status factors which might be collinear (specifically rank, education, childhood vulnerability, preservice benefit claiming and method of leaving); and finally Model 2, which adjusted for all factors associated with outcomes in the univariate analysis.

RESULTS
Demographic and military characteristics of the sample are shown in table 1. The sample is predominantly male, ex-Army, former Non-Commissioned Officers who deployed to Iraq and/or Afghanistan and left the Services through a standard, planned exit method.

Table 1  Demographic and military characteristics of veteran sample

<table>
<thead>
<tr>
<th>Factor</th>
<th>n=7942</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td></td>
</tr>
<tr>
<td>Response</td>
<td>Number in group (% weighted)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>7239 (91.2)</td>
</tr>
<tr>
<td>Female</td>
<td>703 (8.8)</td>
</tr>
<tr>
<td>Rank</td>
<td></td>
</tr>
<tr>
<td>Other rank</td>
<td>2635 (33.1)</td>
</tr>
<tr>
<td>NCO</td>
<td>4064 (51.4)</td>
</tr>
<tr>
<td>OF</td>
<td>1243 (15.5)</td>
</tr>
<tr>
<td>Service arm</td>
<td></td>
</tr>
<tr>
<td>Naval Services</td>
<td>1342 (17.0)</td>
</tr>
<tr>
<td>Army</td>
<td>5076 (64.1)</td>
</tr>
<tr>
<td>RAF</td>
<td>1524 (19.0)</td>
</tr>
<tr>
<td>Method of leaving</td>
<td></td>
</tr>
<tr>
<td>Planned</td>
<td>6124 (77.8)</td>
</tr>
<tr>
<td>Unplanned</td>
<td>1025 (13.0)</td>
</tr>
<tr>
<td>Medical</td>
<td>722 (9.2)</td>
</tr>
<tr>
<td>Role</td>
<td></td>
</tr>
<tr>
<td>Combat</td>
<td>1586 (25.0)</td>
</tr>
<tr>
<td>Combat Support</td>
<td>786 (12.4)</td>
</tr>
<tr>
<td>Combat Services Support</td>
<td>3552 (55.9)</td>
</tr>
<tr>
<td>Not known</td>
<td>430 (6.8)</td>
</tr>
<tr>
<td>Deployment to Iraq/Afghan</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1346 (21.2)</td>
</tr>
<tr>
<td>Deployed</td>
<td>4371 (68.9)</td>
</tr>
<tr>
<td>Not known</td>
<td>637 (9.8)</td>
</tr>
<tr>
<td>Length of service</td>
<td></td>
</tr>
<tr>
<td>&lt;4 years</td>
<td>507 (6.4)</td>
</tr>
<tr>
<td>4–11</td>
<td>3568 (45.0)</td>
</tr>
<tr>
<td>11–23</td>
<td>2522 (31.8)</td>
</tr>
<tr>
<td>&gt;23</td>
<td>1335 (16.9)</td>
</tr>
<tr>
<td>Childhood vulnerability—family</td>
<td></td>
</tr>
<tr>
<td>No adversity</td>
<td>2029 (32.1)</td>
</tr>
<tr>
<td>Adversity</td>
<td>2478 (39.3)</td>
</tr>
<tr>
<td>Not known</td>
<td>1847 (28.6)</td>
</tr>
<tr>
<td>Childhood vulnerability—antisocial behaviour</td>
<td></td>
</tr>
<tr>
<td>No adversity</td>
<td>2382 (37.7)</td>
</tr>
<tr>
<td>Adversity</td>
<td>2125 (33.7)</td>
</tr>
<tr>
<td>Not known</td>
<td>1847 (28.6)</td>
</tr>
<tr>
<td>Education</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>437 (6.9)</td>
</tr>
<tr>
<td>GCSE</td>
<td>2416 (38.1)</td>
</tr>
<tr>
<td>A-level</td>
<td>2130 (33.5)</td>
</tr>
<tr>
<td>Graduate+</td>
<td>1013 (15.8)</td>
</tr>
<tr>
<td>Not known</td>
<td>38 (5.7)</td>
</tr>
<tr>
<td>Preservice unemployment</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>6969 (87.8)</td>
</tr>
<tr>
<td>Some</td>
<td>973 (12.3)</td>
</tr>
<tr>
<td>Preservice disability</td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>7885 (99.3)</td>
</tr>
<tr>
<td>Some</td>
<td>57 (0.7)</td>
</tr>
</tbody>
</table>

Table 2 gives the proportions of UK regular veterans in the KCMHR cohort who were in receipt of any amount of benefits at any time preservice or postservice. Unemployment-related benefits were the most commonly-drawn, increasing from 12.3% before joining the military to nearly a quarter (23.4%) claiming unemployment-related benefits after leaving. 5.3% received DB to substitute for income at some point after leaving. We did not carry out any further analysis of the small group receiving income support or extra costs disability payments, as it is more difficult to draw conclusions regarding the employment context in which these benefits are claimed. The remainder of this article will consider only ‘UB’, referring only to the first row of table 2; and ‘DB’, referring only to the third row of table 2. Note that some of those claiming such benefits income support and extra costs DB also received other forms of benefits at other times, so are not necessarily excluded from the following analysis.

Table 3 shows the number of days of benefits each individual claimed before and since leaving service (up to October 2016). Of those who claimed at least 1 day’s postservice UB, only 11.6% received more than a year in total (whether contiguous or not). However, a relatively larger percentage of those who received postservice DB did so for more than 1 year (42.9% of all postservice disability benefit users).

Figure 1A shows that the unconditional proportion of UB claims peaks in the first few months after leaving, and then
Table 2  Overall use of benefits by UK regular veterans

<table>
<thead>
<tr>
<th>Benefit type</th>
<th>Any preservice usage (%)</th>
<th>Any postservice usage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unemployment</td>
<td>973 (12.3)</td>
<td>1857 (23.4)</td>
</tr>
<tr>
<td>Income Support</td>
<td>70 (0.9)</td>
<td>82 (1.0)</td>
</tr>
<tr>
<td>Income-replacing disability</td>
<td>57 (0.7)</td>
<td>417 (5.3)</td>
</tr>
<tr>
<td>Extra costs disability</td>
<td>15 (0.2)</td>
<td>230 (2.9)</td>
</tr>
</tbody>
</table>

greatly decreases to less than 2% after 2 years. The proportion in receipt of DB is relatively consistent over time (figure 1B).

It is possible for an individual veteran to claim both UB and DB at some point in time. Preservice 0.6% claim only DB, while 0.1% claiming both DB and UB. Of all those who receive post-service DB (a combined total of 5.2%), around half (2.5%) also claim UB at some point postservice.

Socio-demographic and service-related factors which affect likelihood of postservice UB are shown in table 4 (only Model 2 is shown here; full analysis is presented in Online supplementary tables, but there are few substantial differences to Model 1). This analysis included 12 786 679 person-days at risk. Females were less likely than males to claim UB, and having higher educational attainment than GCSE-level resulted in fewer UB claims. Childhod antisocial behaviour was predictive of UB, while family adversity was not. Those who received UB before joining up were more likely to claim such benefits after leaving, but those with a history of preservice DB were not more likely to claim postservice UB.

In comparison to Non-Commissioned Officers, Commissioned Officers were less likely to claim UB, while private-equivalent ranked personnel were more likely to do so. Those in the Naval Services and RAF were less likely to claim UB than those in the Army. Unplanned leavers (but not medical discharges) were slightly more likely to claim UB than those with a planned discharge. Longer service was generally predictive of reduced UB receipt, but there was no difference between ESLs (who served less than 4 years) and those who, as a minimum, completed their first term of service (ie, those who left between 4 and 11 years). Overall, significant associations were of mild effect size (HR <2.0), with the exception of being a Commissioned Officer.

Factors associated with postservice DB differ from those associated with postservice UB. There were no differences between males and females, and no associations with childhood vulnerability measures or preservice UB, though there was an association with preservice DB. Lower ranks were more likely to claim DB, and those who had left the Naval Services were less likely to claim DB than those from the Army. Unplanned leaving was not predictive of claiming DB (after adjustment for educational attainment), but receiving a medical discharge was a strong risk factor. Those who remained in service for longer were at lower risk, and (as before) there was no elevated risk for ESLs. Most associations were relatively weak, with the exceptions of preservice DB (which only applies to a small number of recruits) and medical discharge.

**DISCUSSION**

The social outcomes of those returning from war has long been a source of concern. In recent times attention has focused on more concrete outcomes—one of which is the impact of military service on employment. Two mutually opposing themes have arisen. One is that those who have served, especially in small volunteer professional armies, are advantaged on the labour market—for example, they have acquired specific skills/training, shown themselves capable of discipline and attainment, and are the beneficiaries of public good will. Conversely, popular opinion is that the majority of those who have deployed to Iraq and/or Afghanistan in the recent conflicts come back physically or mentally damaged, and are more likely to be unemployed, homeless and incarcerated. These assumptions are a potential risk.
source of barriers for transition of veterans as well as a deterrent to recruitment.²

In this study we present for the first time a record linkage between a large representative sample of the UK AF, largely consisting of those who have served in the recent conflicts, and objective data held on receipt of benefits by the DWP. The main findings of this study were that a substantial proportion of veterans claimed UB support shortly after leaving service, but this decreased considerably over the next 2 years to around 2%. Long-term receipt of UB was rare. DB was less frequent (at only around 1.5% at any time), but likely to last longer.

Many sociodemographic and service-related factors were predictive of claiming benefits as a veteran; the most consistent predictors of both forms of postservice benefits use were low rank, method of leaving (with unplanned leaving associated with higher unemployment benefit receipt, and those medically discharged being at higher risk of disability benefit receipt); and having a preservice history of benefits. These findings suggest that, while economic transition may take some time for some individuals, most will either find a new career or otherwise cease claiming UB (eg, by re-entering education).

Several of the predictors of postservice benefit claiming were, to some degree, related to socioeconomic status. For example, one important preservice predictor of UB was having a history of childhood antisocial behaviour. Childhood antisocial behaviour may persist into adulthood and may be associated with personality characteristics such as aggression which may be more tolerated in a military than a civilian environment. However, such

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**Table 4  Associations between demographic and service-related factors and benefit claims**

<table>
<thead>
<tr>
<th>Category</th>
<th>Response</th>
<th>UB Model 2: HR (95% CI)</th>
<th>DB Model 2: HR (95% CI)†</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>1</td>
<td>1.00 (0.70 to 1.46)</td>
<td>1.00 (0.58 to 1.81)</td>
</tr>
<tr>
<td>Female</td>
<td>0.75</td>
<td>0.75 (0.60 to 0.93)</td>
<td>0.93 (0.58 to 1.49)</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other rank</td>
<td>1.00</td>
<td>1.00 (0.98 to 1.02)</td>
<td>1.00 (0.89 to 1.11)</td>
</tr>
<tr>
<td>NCO</td>
<td>0.72</td>
<td>0.72 (0.62 to 0.83)</td>
<td>0.72 (0.53 to 0.96)</td>
</tr>
<tr>
<td>OF</td>
<td>0.31</td>
<td>0.31 (0.23 to 0.41)</td>
<td>0.35 (0.17 to 0.71)</td>
</tr>
<tr>
<td><strong>Service arm</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Naval Services</td>
<td>0.75</td>
<td>0.75 (0.60 to 0.93)</td>
<td>0.75 (0.58 to 1.00)</td>
</tr>
<tr>
<td>Army</td>
<td>1.00</td>
<td>1.00 (0.98 to 1.02)</td>
<td>1.00 (0.89 to 1.11)</td>
</tr>
<tr>
<td>RAF</td>
<td>0.80</td>
<td>0.80 (0.68 to 0.95)</td>
<td>0.77 (0.52 to 1.15)</td>
</tr>
<tr>
<td><strong>Method of leaving</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planned</td>
<td>1</td>
<td>1.00 (0.70 to 1.46)</td>
<td>1.00 (0.58 to 1.81)</td>
</tr>
<tr>
<td>Unplanned</td>
<td>1.29</td>
<td>1.29 (1.07 to 1.56)</td>
<td>1.01 (0.63 to 1.63)</td>
</tr>
<tr>
<td>Medical</td>
<td>0.90</td>
<td>0.90 (0.70 to 1.16)</td>
<td>7.51 (5.31 to 10.66)</td>
</tr>
<tr>
<td><strong>Role</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Combat</td>
<td>1.00</td>
<td>1.00 (0.98 to 1.02)</td>
<td>1.00 (0.89 to 1.11)</td>
</tr>
<tr>
<td>CS</td>
<td>1.02</td>
<td>1.02 (0.82 to 1.28)</td>
<td>1.38 (0.90 to 2.14)</td>
</tr>
<tr>
<td>CSS</td>
<td>1.03</td>
<td>1.03 (0.88 to 1.19)</td>
<td>1.13 (0.80 to 1.58)</td>
</tr>
<tr>
<td>Not known</td>
<td>1.11</td>
<td>1.11 (0.88 to 1.42)</td>
<td>0.86 (0.46 to 1.62)</td>
</tr>
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<td><strong>Deployment to Iraq/Afghan</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>1.00 (0.70 to 1.46)</td>
<td>1.00 (0.58 to 1.81)</td>
</tr>
<tr>
<td>Deployed</td>
<td>0.83</td>
<td>0.83 (0.70 to 0.96)</td>
<td>0.93 (0.58 to 1.49)</td>
</tr>
<tr>
<td>Not known</td>
<td>0.80</td>
<td>0.80 (0.61 to 1.04)</td>
<td>0.99 (0.56 to 1.76)</td>
</tr>
<tr>
<td><strong>Length of service</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;4 years</td>
<td>0.90</td>
<td>0.90 (0.63 to 1.29)</td>
<td>0.93 (0.48 to 1.95)</td>
</tr>
<tr>
<td>4–11</td>
<td>1.00</td>
<td>1.00 (0.98 to 1.02)</td>
<td>1.00 (0.89 to 1.11)</td>
</tr>
<tr>
<td>11–23</td>
<td>0.78</td>
<td>0.78 (0.67 to 0.91)</td>
<td>1.02 (0.71 to 1.49)</td>
</tr>
<tr>
<td>&gt;23</td>
<td>0.48</td>
<td>0.48 (0.38 to 0.59)</td>
<td>0.48 (0.27 to 0.86)</td>
</tr>
<tr>
<td><strong>Childhood vulnerability—family</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No adversity</td>
<td>1</td>
<td>1.00 (0.86 to 1.17)</td>
<td>0.94 (0.65 to 1.35)</td>
</tr>
<tr>
<td>Adversity</td>
<td>1.01</td>
<td>1.01 (0.86 to 1.17)</td>
<td>1.33 (0.88 to 2.01)</td>
</tr>
<tr>
<td>Not known</td>
<td>1.14</td>
<td>1.14 (0.94 to 1.37)</td>
<td>1.33 (0.88 to 2.01)</td>
</tr>
<tr>
<td><strong>Childhood vulnerability—anti-social behaviour</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No adversity</td>
<td>1</td>
<td>1.00 (0.86 to 1.17)</td>
<td>0.94 (0.65 to 1.35)</td>
</tr>
<tr>
<td>Adversity</td>
<td>1.21</td>
<td>1.21 (1.04 to 1.42)</td>
<td>1.16 (0.81 to 1.66)</td>
</tr>
<tr>
<td>Not known</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td><strong>Education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>0.92</td>
<td>0.92 (0.72 to 1.16)</td>
<td>1.36 (0.87 to 2.13)</td>
</tr>
<tr>
<td>GCSE</td>
<td>1.00</td>
<td>1.00 (0.98 to 1.02)</td>
<td>1.00 (0.89 to 1.11)</td>
</tr>
<tr>
<td>A-level</td>
<td>0.82</td>
<td>0.82 (0.71 to 0.94)</td>
<td>0.78 (0.57 to 1.07)</td>
</tr>
<tr>
<td>Graduate+</td>
<td>0.72</td>
<td>0.72 (0.54 to 0.96)</td>
<td>0.66 (0.32 to 1.34)</td>
</tr>
<tr>
<td>Not known</td>
<td>0.72</td>
<td>0.72 (0.53 to 0.99)</td>
<td>0.94 (0.53 to 1.67)</td>
</tr>
<tr>
<td><strong>Preservice unemployment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>1.00 (0.86 to 1.17)</td>
<td>0.94 (0.65 to 1.35)</td>
</tr>
<tr>
<td>Some</td>
<td>1.62</td>
<td>1.62 (1.34 to 1.95)</td>
<td>1.40 (0.93 to 2.12)</td>
</tr>
<tr>
<td><strong>Preservice disability</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>1</td>
<td>1.00 (0.86 to 1.17)</td>
<td>0.94 (0.65 to 1.35)</td>
</tr>
<tr>
<td>Some</td>
<td>1.12</td>
<td>1.12 (0.62 to 2.01)</td>
<td>2.86 (1.09 to 7.47)</td>
</tr>
</tbody>
</table>

*p<0.05, **p<0.01, ***p<0.001.
†Adjusted for sex, rank, Service arm, method of leaving, role, deployment, length of service, childhood vulnerability, education and history of pre-enlistment benefit claims.
CS, Combat Services; CSS, Combat Services; GCSE, General Certificate of Secondary Education; NCO, Non-Commissioned Officer; OF, Commissioned Officer; RAF, Royal Air Force.
behaviour or associated personality traits may impact negatively on functioning in civilian life and employment. While it initially appeared that childhood family adversity was associated with UB, this effect was removed by adjustment for childhood antisocial behaviour and rank (a proxy for socioeconomic status), suggesting that the link between family adversity and postservice UB may be explained by socioeconomic status and childhood antisocial behaviour.

Another predictive factor related to socioeconomic status was education. Educational attainment higher than GCSEs reduced the risk of claiming UB, although there was no significant difference between those with GCSEs and those with no qualifications at all. This may be because skills obtained in service substitute for GCSE-level education. It may also be that higher levels of education are a proxy for other attributes associated with successful employment such as ability to express thoughts clearly, being able to assess evidence in a balanced way or being able to study when required.

Certain service-related factors also seemed to have an effect on postservice benefit receipt. Naval Service and RAF veterans were less likely to claim benefits; this may be a consequence of these broadly being the more ‘technical’ services, with strong emphasis on skills which are likely to be transferable to civilian life. Not surprisingly, higher rank (to some degree a proxy for socio-economic status) predicted higher employment. By contrast, role and deployment to Iraq or Afghanistan impacted little on post-service outcomes.

Those who serve for longer periods are less likely to claim benefits when they leave. ESLs (who are frequently considered as Individual Placement and Support, currently in use by some veterans claim welfare benefits outside a brief period after leaving. UB claims are mostly used for a short term after leaving, but DB claims tend to be longer-term. Most factors associated with postservice benefit claiming are socio-economic rather than military in nature (eg, rank, education, childhood adversity, and preservice benefit claiming), although method of leaving is also predictive of subsequent benefit usage. These findings imply that provision of employment-focused support to Service leavers transitioning to civilian life due to unplanned discharge may be helpful, and both continuity of care and surveillance for new presentations of mental ill health are advisable among those medically discharged to minimise disadvantage to these individuals.

Acknowledgements The authors would like to thank the Department of Work and Pensions for providing the data necessary for this study, and for their extensive work on performing the data linkage.

Contributors HB wrote the manuscript. NG oversaw the data linkage with the Department of Work and Pensions. NT, DM, SW, RR and NG contributed to the writing and revision of the paper. HB performed the analyses and all authors discussed the analysis and interpretation of the data.

Funding This project was funded by Forces in Mind Trust, award number FM16/0204K.

Competing interests Dr RJR and Dr HB report grants from Ministry of Defence (MOD), grants from Forces in Mind Trust (FiMT), during the conduct of the study. Dr NG reports personal fees from King’s College London, during the conduct of the study, and is the Royal College of Psychiatrists Lead for Military and Veterans Health and also a trustee for two military charities. He was not required to act in any particular way by these organisations in relation to the paper. Professor NF and Professor SW have nothing to disclose.

Patient consent for publication Not required.

Ethics approval The Ministry of Defence Research Ethics Committee (reference 448/MODREC/13), and the King’s College London Psychiatry Nursing and Midwifery Research Ethics Subcommittee (reference PNW/12/13–169) granted approval for the cohort study.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement No data are available.

REFERENCES
1 Forces in Mind Trust. The transition mapping study: understanding the transition process for service personnel returning to civilian life 2013.
5 Royal British Legion. The UK ex-service community: a household survey 2014.

Limitations The KCMHR cohort relies on self-report questionnaire data, with responses around 60% at each phase of data collection. There is always a concern that those who have not responded are more likely to be disadvantaged. However, the overall trends shown in figure 1 include the entire sample, irrespective of whether the individual responded to questionnaire in the KCMHR cohort; and analyses in the remainder of the document are adjusted to take account of non-response.

Findings regarding ESLs should be approached with some caution, as although there are a substantial number of ESLs in the sample (n=507), there were few with very short service terms; most had served the majority of their initial term (60% had served for at least 3 years), thus these findings may not be applicable to those who have very brief military careers or who leave during training.

The lack of academic literature on benefits usage among UK veterans explains the limited discussion related to other work in this field. The UK awards compensation to service members whose conditions occur in-service, but these data were not available to this study. Failure to account for these benefits could bias findings.

CONCLUSIONS Overall, this study indicates that only a small proportion of veterans claim welfare benefits outside a brief period after leaving. UB claims are mostly used for a short term after leaving, but DB claims tend to be longer-term. Most factors associated with postservice benefit claiming are socio-economic rather than military in nature (eg, rank, education, childhood adversity, and preservice benefit claiming), although method of leaving is also predictive of subsequent benefit usage. These findings imply that provision of employment-focused support to Service leavers transitioning to civilian life due to unplanned discharge may be helpful, and both continuity of care and surveillance for new presentations of mental ill health are advisable among those medically discharged to minimise disadvantage to these individuals.

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Workplace

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