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# Evaluation of the NHS England 'Op COURAGE' High Intensity Service for military veterans with significant mental health problems

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## ABSTRACT

**Introduction** In November 2020, The NHS for England launched a pilot High Intensity Service (HIS) programme for treating military veterans complex mental health problems. Seven regional grants were awarded to manage the HIS, including NHS Solent, in South East England. This paper details an evaluation of the HIS, which was conducted from February 2021 to August 2022.

**Methods** This mixed-methods study gained quantitative data from a specifically designed questionnaire that included a number of validated psychometric questionnaires. These were completed by either HIS staff or beneficiaries at entry and exit from the HIS, and qualitative data were gained from semi-structured interviews with the HIS staff.

**Results** Data were sourced from 45 pre-questionnaires, 25 post programme questionnaires and 11 interviews. This evaluation identified reductions in situational stressors, symptoms and reported illnesses for veterans in crisis. There were reductions in depression, anxiety and post-traumatic stress disorder following programme exit. Staff reported that there was no notable changes in stress levels which appeared to remain high at programme exit. Staff interviews highlighted the importance of simultaneously understanding the social and psychological needs of veterans in mental health crisis. The benefits of integrating veteran staff members into military veteran health services were identified, demonstrating improvements in education around military culture in civilian services.

**Conclusions** The importance of collaboration between clinical and veteran staff members in veteran health services was noted, demonstrating the positive impact social care provision has on veteran's overall health and well-being. Veteran engagement with the service was advocated as a result of veterans accessing the service feeling understood. This first independent evaluation of the HIS provides a positive reflection, and adds to the limited empirical evidence exploring veteran engagement in health services.

## INTRODUCTION

The number of British Armed Forces veterans residing in Great Britain is estimated to be 2.07 million,<sup>1</sup> representing 5% of the population aged 16 years and over. Of these, approximately 317 082 veterans are based in South East England.<sup>2</sup> In March 2021, NHS England launched Op COURAGE; The Veterans Mental Health and Well-being Service.<sup>3</sup> This included a

## WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Timely, service user sensitive and competent support within an environment where participants feel safe appear to be key.

## WHAT THE STUDY ADDS

- ⇒ The High Intensity Service (HIS) appears to be delivering palatable benefits with reductions in situational stressors, symptoms, depression, anxiety, post-traumatic stress disorder and alcohol misuse.
- ⇒ Improvements appear aligned to attending to service users' social needs prior to addressing their psychological needs, resulting in greater engagement with the service.

## HOW THE STUDY MIGHT AFFECT MILITARY PRACTICE OR POLICY

- ⇒ The findings provide evidence for the long-term sustainability of the HIS, further development of clinical provision and evidence to inform policymakers.
- ⇒ There has to be a level of consistency in the pivotal aspect of the referral, assessment, support and treatment.

Transition, Intervention and the Liaison Service as a single point of contact for veterans requiring mental health (MH) support. For those with more complex needs, there is a complex trauma service including community/voluntary and third services. To support veterans with complex MH issues who may require inpatient services, a High Intensity Service (HIS) was introduced in November 2020. This service is part of a New Care Models for MH services,<sup>4</sup> delivered by MH care collaboratives, comprising organisations from the NHS, independent area and third sectors. The Solent NHS Trust well-being model (figure 1) details initial partnerships and support for the introduction of a HIS pilot programme in early 2020. 'All Call Signs' withdrew in April 2022.

The HIS was designed to offer veterans support during inpatient stays, guidance and help to identify appropriate local services and support for family members and/or carers. The HIS includes: NHS clinical staff such as psychologists and MH practitioners. Also, Veteran Liaison and Support Officers (VLSO) and peer support workers (PSW), some of whom were veterans themselves. Walking With The



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Figure 1 Partners of the submission for the South East England Pathfinder (High Intensity Service) bid.

Wounded<sup>5</sup> provided the peer support roles and offered social support.

The HIS has three referral routes. These are self-referrals; those from professionals and third sector organisations. Veterans accessing HIS undergo a needs assessment and a referral is then made to the wider HIS team. MH leads were responsible for coordinating clinical care for veterans and lead the multidisciplinary team meetings, which ensure a collaborative approach to meeting veteran's needs. A PSW is allocated within 8 hours; and

he/she will make initial contact with the veteran, manage their expectations and offer guidance about the service and what they are able to offer. The VLSO's role is to remove social barriers and improving well-being and independence. The South East HIS pathway model is shown in figure 2.

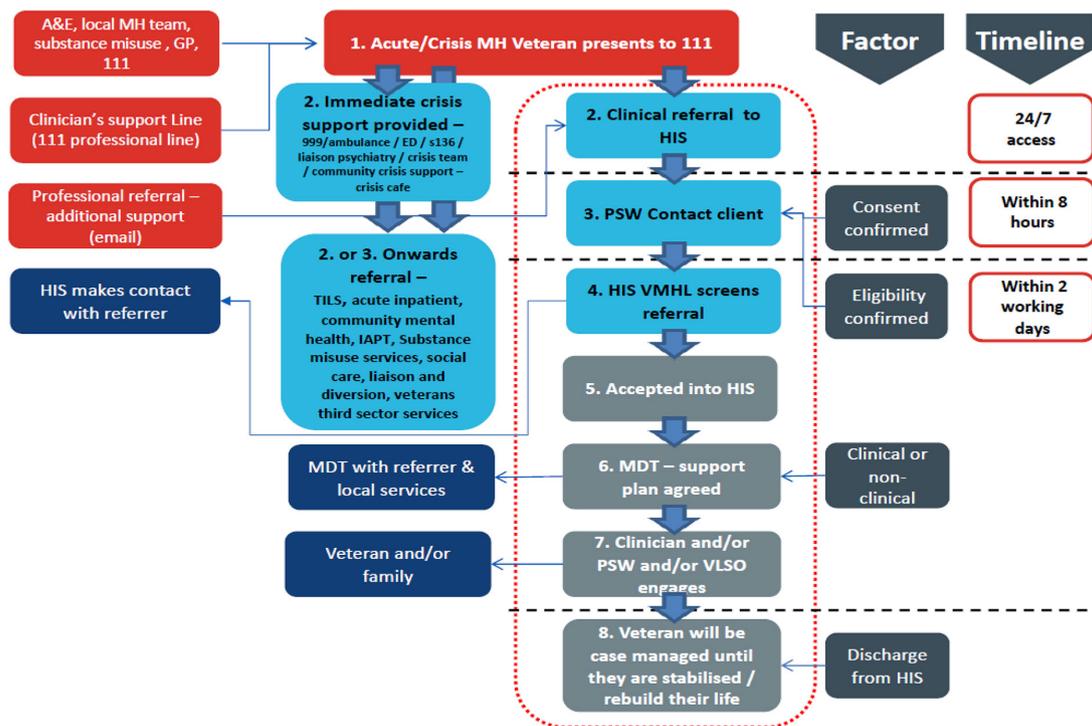


Figure 2 High Intensity Service (HIS) pathway in conjunction with the crisis pathway. A&E, accident and emergency; ED, emergency department; GP, general practitioner; MDT, multidisciplinary team; MH, mental health; PSW, peer support workers; TILS, Transition, Intervention and the Liaison Service; VLSO, Veteran Liaison; VML, veterans mental health lead and Support Officers. VMHL, Veterans Mental Health Lead.

## Help-seeking behaviour

While the majority of veterans leave the Armed Forces in good health, there are a small but significant minority who delay help-seeking.<sup>6,7</sup> Poor help-seeking is often a result of stigma; the military culture of stoicism and self-reliance and difficulties accessing health services such as not knowing where to seek help. There are also barriers concerning trust with the perception that civilian health services are unable to meet the needs of military veterans.<sup>7</sup> Despite primary healthcare (PHC) initiatives to improve veteran engagement,<sup>8</sup> >50% experience MH difficulties and fail to access MH support.<sup>9</sup> The University of Chester's Westminster Centre for Research in Veterans (The Centre) completed an independent evaluation of the HIS in South East England.

## Aims and objectives

The study aim was to explore the effectiveness of the NHS HIS across South East England, and advance knowledge and understanding of the predisposing factors and symptoms of veterans accessing the service.

The objectives were to:

1. Identify the effectiveness of the HIS.
2. Identify trends regarding age, gender and marital status in those accessing the service.
3. Determine whether aspects of civilian and past military life, the support previously received, operationally linked stressors and stigma were significant contributing factors in accessing the service.
4. Provide experts' views of the challenges, why they exist and how they can be positively addressed.
5. Distinguish the potential for transferability to a larger national initiative.

## METHOD

Between February 2021 and August 2022, the Centre conducted a mixed-methods evaluation of the effectiveness of the HIS from both veterans and South East of England HIS staffs perspectives. During this period, 233 veterans entered the HIS and 113 received an entry survey, while 41 participants received an exit survey.

Service users could either independently complete a survey or gain assistance from a member of the HIS staff at entry (pre) and following exit (post) of the HIS service. The Centre designed a 38-item evaluation survey to capture a range of demographics and military-specific details. The quantitative data was downloaded via the Jisc Online Surveys tool<sup>10</sup> and entered into SPSS V.26.0.<sup>11</sup> Descriptive statistics were used to summarise demographic information, predisposing factors and symptoms, help-seeking behaviour, social networks, employment status and living arrangements; also the motivators that encouraged participants to engage with the HIS. Validated psychometric questionnaires captured data on depression, alcohol use, anxiety, post-traumatic stress disorder (PTSD) and well-being. Paired-samples t-tests facilitated comparisons between surveys at programme entry and exit, and the Spearman's rank correlations for identification of relationships among variables. The surveys offered the opportunity to include free-text responses which were coded using the NVivo software package V.12<sup>12</sup> and analysed using Content Analysis.<sup>13</sup>

For the qualitative component, the decision was reached to interview staff as a new service would by its very essence change during the initial phases and staff could provide that longitudinal oversight. Eleven of the HIS staff were interviewed via Microsoft

**Table 1** Veteran demographic data

Serial	Veterans accessing the HIS		
1	Age	Mean 48	
2	Gender	Male 100% (n=40)	
3	Ethnicity	White British 93% (n=37) Do not know 7% (n=3)	
4	Service history	British Army 83% (n=33) Royal Navy 17% (n=7)	Regular 87% (n=35) Reservist 10% (n=4) Do not know 3% (n=1)
5	Operational tours	Yes 78% (n=31) No 18% (n=7) Mean of 2	Northern Ireland 30% (n=12) Afghanistan 30% (n=12) Iraq 30% (n=12)

Teams and audio-recorded using a Dictaphone. Interviews were transcribed manually, coded and anonymised. Interviews lasted for a total of 5 hours and 10 min (mean=28.19, range=23.48–39.23) with data analysed using a modified Grounded Theory approach.<sup>14–16</sup> This permitted a structured and systematic approach to understanding participant perspectives with categories developed by constructing analytical codes.

## RESULTS

### Quantitative findings

Forty entry surveys (35% response rate) and 25 exit surveys (61% response rate) were completed by veterans or HIS staff on behalf of veterans. Veteran demographic data are reported in [table 1](#).

Descriptive statistics showing premeasure and postmeasures are shown in [table 2](#).

The results demonstrate reductions in predisposing factors and symptoms following exit from the HIS. Veterans were more likely to socialise post-intervention, and increases in employment were also reported, although this was not statistically significant ( $t(12)=9.22$ ,  $p=0.684$ ), ( $t(11.07)=3$ ,  $p=0.011$ ). A significant correlation was found between the self-reported Visual Analogue Scale (VAS) stress levels (low, medium and high) and social networks, indicating that veterans who reported higher stress levels reported fewer social interactions. ( $r(-0.020)$ ,  $p=0.904$ ,  $n=38$ ).fa

### Participants' voice and service feedback

Over 96% (n=24) of respondents provided a score of very good and good for overall satisfaction. This score of 96% (n=24) was matched for support received, programme information, project administration, facilities and how to make a complaint. Regarding the impact on quality of life, the HIS was rated 9 out of 10 (0 indicates no impact to 10 indicating maximum impact). The three most positive aspects of the HIS were: support provided (n=32), programme provided (n=22) and positive impact on health, well-being and social networks (n=11).

### Psychometric scores

The studies' psychometric questionnaires show a sample with moderate to moderately severe depression and anxiety on programme entry. The mean scores at entry and exit are presented in [table 3](#).

Psychometric scores validated the self-reported health findings; veterans exhibited moderate-to-severe depression and anxiety at programme entry, with hazardous alcohol use and probable PTSD. The HIS successfully improved veterans' health as measured by the Patient Health Questionnaire-9 ( $t(5.29)=24$ ,

Table 2 Presurvey and postsurvey results

Serial	Premeasure/Postmeasures	Entry (n=40)		Exit (n=25)		
		N	%	N	%	
<b>Factors</b>						
1	Previous unresolved trauma	30	75	13	52	
2	Traumatic exposure	24	60	9	36	
3	Relationship problems	20	50	2	8	
4	Family stress	16	40	4	16	
5	Alcohol/Substance abuse	16	40	5	20	
<b>Symptoms</b>						
6	Low mood	33	83	14	56	
7	Self-harm	29	73	7	28	
8	Loss of confidence	22	55	3	12	
9	Sleep disturbance	21	53	7	28	
10	Lack of interest	21	53	3	12	
<b>Social networks</b>						
11	Relying on people	Yes	5	13	4	16
		Some	12	55	19	76
		No	22	30	2	8
		Do not know	1	3	/	/
	Meet with people	Three times a week or more	4	10	5	20
		Once or twice a week	16	40	16	64
		Once or twice a month	11	28	3	12
		Every few months	1	3	/	/
		Other	3	8	1	4
	Active members of clubs, organisations or societies	Do not know	5	13	/	/
		Yes	7	18	7	28
		No	28	70	17	68
		Do not know	5	12	/	/
	Taking part in social activities	Prefer not to say	/	/	1	4
		More than most	1	3	/	/
		About the same	3	5	7	28
Less than most		18	45	15	60	
Much less than most		14	35	2	8	
Do not know	5	13	1	4		
<b>Employment</b>						
12	Employment status	Employed	10	25	11	44
		Unemployed	23	58	14	56
		Retired	4	10	/	/
		Other	1	3	/	/
		Do not know	2	5	/	/
<b>Housing</b>						
13	Housing status	Home owner	9	23	9	36
		Rented accommodation	18	45	11	44
		Residential accommodation	/	/	1	4
		Homeless	3	8	/	/
		Other	2	5	2	8
		Do not know	8	20	/	/
		Prefer not to say	/	/	2	8
<b>Cohabitation</b>						
14	Living arrangements	Alone	16	40	11	44
		Spouse/Partner	14	35	10	40
		Family	5	13	3	12
		Friends	3	8	1	4
		Professional house share	1	3	/	/
		Other	1	3	/	/

**Table 3** Psychometric mean scores across programmes on entry and exit

Serial	Psychometric questionnaire	Score range	Mean scores at programme entry	Mean scores at programme exit
1	PHQ-9 <sup>23 24</sup>	<i>Depression:</i> 1–4 minimal; 5–9 mild; 10–14 moderate; 15–19 moderately severe; 20–27 severe.	20	13
2	GAD-7 <sup>25</sup>	<i>Anxiety:</i> 0–5 mild; 6–10 moderate; 11–15 moderately severe; 15–21 severe.	15	11
3	WEMWBS <sup>26</sup>	<i>Mental health:</i> scores <40 are associated with a higher risk of major depression.	32	36
4	AUDIT <sup>27</sup>	<i>Alcohol:</i> a score of 8 or more is associated with hazardous or harmful alcohol use.	15	9
5	PCL-5 <sup>28</sup>	<i>PTSD Checklist:</i> scores between 31 and 33 is indicative of probable PTSD.	53	38

AUDIT, Alcohol Use Disorders Identification Test; GAD-7, General Anxiety Disorder-7; PCL-5, PTSD Checklist for Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition; PHQ-9, Patient Health Questionnaire-9; PTSD, post-traumatic stress disorder; WEMWBS, Warwick-Edinburgh Mental Well-Being Scale.

$p < 0.01$ ), General Anxiety Disorder-7 ( $t(3.51) = 24$ ,  $p < 0.01$ ) and the PCL-5 ( $t(4.61) = 23$ ,  $p < 0.01$ ).

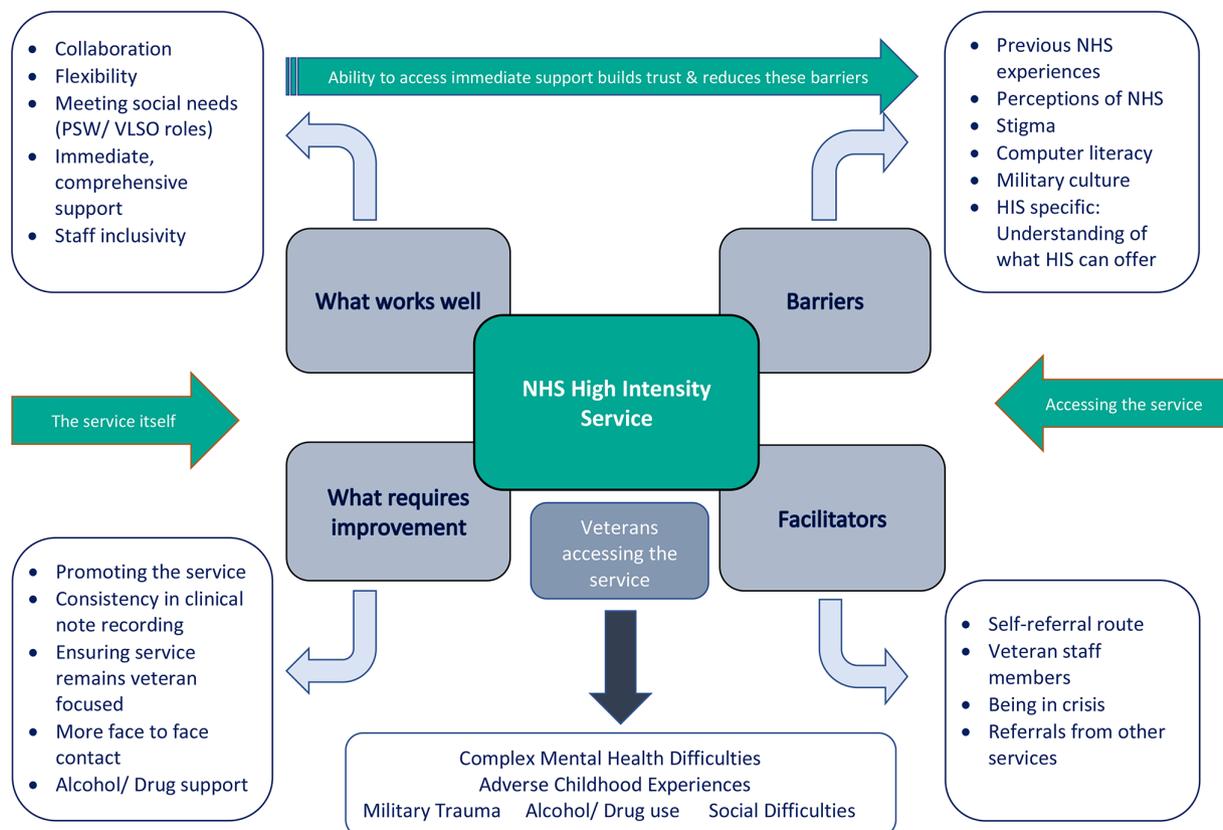
### Qualitative findings

Analysis of interviews demonstrated two themes: (i) the service itself and (ii) service access. These were encased in the four categories of: (a) what works well, (b) barriers, (c) what requires improvement and (d) facilitators. These are influenced by the overarching issues of the complexity of the service users' MH problems and help-seeking behaviour in this community. The theoretical model is shown in figure 3. Quotes extracted from the interview data are included in the 'Discussion' section to demonstrate the themes. Identifiable information has been anonymised. To protect the anonymity of the respondents they are referred to as AA, BB etc. and no further information is disclosed.

### DISCUSSION

The poor uptake of completed pre-evaluation and post-evaluation surveys may in part be due to computer literacy and access to appropriate IT. The questionnaires were from male veterans which may reflect that men experienced severe MH issues and women did not, or that women did not want to access the service or complete the study questionnaire. The HIS staff highlighted the need for better promotion of the service, and female veterans may have been unaware of the HIS, perpetuated by low female veteran registration in PHC.<sup>17 18</sup> Without data, it is impossible to state exactly what the cause was. Still, the evaluation reinforces the requirement to further explore initiatives to engage with female veterans, and research is needed to examine the impact of gender-related experiences during military service on female veterans' help-seeking behaviour.

The interview participants reported that the HIS was the first service to specially support veterans in MH crisis. Participants



**Figure 3** Theoretical model showing themes associated with the High Intensity Service (HIS). PSW, peer support workers; VLSO, Veteran Liaison and Support Officers

described a ‘*joined up 360° approach*’ with veterans’ social needs being met before their MH needs were addressed. This overall approach was considered to be transformative in terms of how veterans were managed.

*I've gone to see veterans before and they've had no food, no clothes, no ID or anything. But because we've got Walking With The Wounded and All Call Signs, they've got access to money, so we can buy people food and we can help out in those sort of basic ways ... we address the fundamental building blocks of life that people need.* (BB)

Some interviewees were veterans who felt that their understanding of military culture/terminology laid the foundations for a trusting relationship, resulting in more positive engagement with the HIS. In their opinion, this integrative working approach improved education within the whole HIS service and promoted inclusivity. While clinical staff members believed having veteran support staff was beneficial; being a veteran was not considered essential.

### Referrals and team structure

Most interviewees reported that the option for service users to self-refer by completing an online form was a positive means to reduce the poor MH determinants among veterans while addressing barriers to help-seeking behaviour.

*There's very comprehensive, intensive support from very early on and we don't have a waiting list, it's all very quick.* (FF)

However, some participants reported that the self-referral route could pose difficulties, for reasons such as human resource capacity issues, especially when new service users were not already associated with other veterans’ services. Within the HIS team, inconsistency in work-load, human resources, experience, skill sets and competencies was described as a ‘*postcode-lottery*’ when translated into the support provided. This ‘*postcode-lottery*’ concept receives attention in civilian NHS healthcare given differences in resource allocation,<sup>19</sup> and the HIS team’s structure should be consistent across locations. Participants felt that they could still provide timely and comprehensive support that was making a positive difference, but it highlights the need for a level of consistency in this pivotal aspects of referral, assessment, support and treatment. The timings defined for each factor should be included as key performance indicators, and a root cause analysis (such as capacity issues) should be completed when the service fails to comply.

After an initial assessment, support was offered via telephone calls and face-to-face and delivered through a personalised care plan (including social needs). The intent was to provide a stepped approach with extensive support, then gradually reducing as the service user gained stability and confidence. This was perceived to improve engagement and build positive relationships.

### IT systems and team structure

Interviews highlighted problems regarding the compatibility and consistency of recording clinical notes, not just across different NHS Trusts but within the different roles in the HIS team. Examples included incompatible IT systems resulting in difficulties in sharing communication and replication in inputting the information onto different systems. These issues should be explored and the process simplified, and a means found for having to only input the data once. This extends to sharing information with an inclusive service users’ electronic information record so there is less reliance on having to be present at team meetings.

HIS staff identified that some service users became over-reliant on the support being offered and resisted being discharged/transferred to another service. Feedback from the HIS staff indicated that stress levels did not notably improve between entry and exit from the programme. Contradictory to this finding, there was evidence to indicate a reduction in predisposing factors and symptoms, and the reason could be that the participants were anxious about what comes next. If someone has undergone prolonged MH issues, often perpetuated by extremely difficult life experiences, and then found a programme that offers help, then they may be fearful of losing that support. Then there were indications of poor social networks when they entered the HIS, and there were no notable improvements, although the COVID-19 pandemic would have played a significant role. This finding reinforces the requirement for ensuring a staged and sustainable programme of support that includes planned co-produced discharge planning including a protocol for maintaining contact with disengaged clients and ensuring safe onward transmission. However, another explanation is that veterans with complex MH disorders need more time to fully engage.

*There have been a number of notable cases of veterans being suicidal, being homeless, being really at the end of their tethers really, alcohol misuse problems, really complex problems and we've turned their life around.* (FF)

Interviewees identified that despite having no formal alcohol or drug worker employed within the service, the HIS team were helping veterans with alcohol and drug problems. With onward referrals difficult, the participants recommended that an alcohol/drug employee within HIS would significantly benefit veterans.

### Stigma and help-seeking

Stigma was viewed as a barrier to accessing HIS. Feelings of shame, embarrassment, guilt and the idea that other veterans might be ‘*worse off*.’ Participants revealed how military culture becomes ingrained in veterans, and the characteristics of self-reliant ‘*macho-like*’ image is well-established,<sup>7</sup> and further work is required to improve help-seeking behaviour within the military community.

*They come to us as a last call...they'd battled for so long on their own, not knowing where to go or what to do then they've come to and suddenly their life is dramatically different within three months because we are such intensive support.* (EE)

However, service users who had previously sought help was high at 90% (n=36), with most having previously accessed NHS support (73%, n=29) and MH services (35%, n=14). Poor previous experience of NHS services was perceived to be the main barrier to accessing HIS, and participants described working hard to change perceptions and build trust of NHS services:

*Bad experiences, lack of engagement is normally because they've felt let down in the past, broken/false promises, lack of trust.* (AA)

Importantly, the staff believed that the HIS was reducing the perception that NHS services are unable to meet the needs of veterans. Their view was that improved help-seeking behaviour could be improved by employing veteran support staff who provide that initial peer contact.

### Participant feedback and veterans’ narrative comments

The shortfall of completed survey questionnaires somewhat undermines the very positive results. Psychometric questionnaires provided evidence of reductions in depression, anxiety

and PTSD and palpable improvements in the service user's well-being. There was evidence in a reduction in physical and MH illnesses, situational stressors and symptoms. Ninety-six per cent of participants were satisfied with the HIS; pleased with the support they received, programme information, programme administration and facilities. The impact on quality of life was constructively graded at 9 out of 10. The participants provided constructive feedback, including help with their personal affairs and positive impact on their social networks. Service users' recommendations for improvement centred around more face-to-face interactions, follow-up, information packs and residential courses.

A clear situational stressor was that only 23% (n=9) of the participants were homeowners, with 45% (n=18) living in rented accommodation and 8% (n=3) were homeless. These percentages are much lower than the Gov UK's Annual Population Survey,<sup>20</sup> which estimated that 76% of UK Armed Forces veterans residing in Great Britain owned property or had a mortgage, with 23% living in rented accommodation. Only a small minority of veterans have been reported as homeless (3%–6%).<sup>21</sup> Following exit from the programme, none of the veteran participants were homeless. Also, although not statistically significant, veterans' employment had marginally improved. Nevertheless, research should be conducted into the long-term sustainability of employment and housing outcomes for veterans. The Armed Forces Covenant sets out the nation's commitment to the Armed Forces Community,<sup>22</sup> and while a veterans' employment gap still exists, that commitment is yet to be fully met.

### Limitations

While the results from this study are predominately positive, this needs to be addressed with caution for two reasons. First, the low number of veterans accepting the option to complete evaluation questionnaires, while recognising that some veterans were inappropriately referred, declined support or disengaged. However, those participating in this evaluation could suggest that these service users offer a more positive view of the service. Second, the interviews were with staff and not service users.

### Conclusions

While mindful of the limitations itemised above, the HIS appears to be delivering palatable benefits with reductions in situational stressors, symptoms, depression, anxiety, PTSD and alcohol misuse. These improvement appeared aligned to attending to the service users' social needs prior to addressing their psychological needs, resulting in greater engagement with the service. Timely, service user-sensitive and competent support within an environment where participants feel safe and able to engage appear to be key. Of note, these achievements were obtained despite the significant challenges presented by the COVID-19 pandemic.

There is now a requirement for a national evaluation, ideally co-produced with service users. This evaluation would be enhanced with a cost-benefit analysis to determine any improvements in the participants' quality-adjusted life years to demonstrate incremental savings from both the societal and healthcare cost perspectives. A longitudinal study would have given an indication of improvements over time, and connectivity with primary healthcare could help identify positive outcomes or areas for development. Future research should also consider recruiting a sample that can reflect potential health inequalities such as access to the HIS by minority veteran groups.

Importantly, there are recommendations on how to progress the HIS and redress any outstanding issues, which include improving help-seeking and engaging with female veterans. This HIS evaluation indicates the benefits of building collaborations between statutory and non-statutory services. Significantly, it offers those veterans who need help with appealing options to access the appropriate provision to improve their health and well-being.

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**Contributors** AF: conceptualisation, methodology, validation, formal analysis, resources, writing—original draft, writing—review and editing, funding acquisition, guarantor. KS: formal analysis, investigation, resources, data curation, writing—original draft, writing—review and editing, visualisation, project administration. NG: formal analysis, investigation, data curation, writing—original draft, visualisation. LA-M: resources, visualisation, project administration. MG: writing—review and editing, visualisation, funding acquisition.

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**Data availability statement** Data are available on reasonable request. NA.

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