Reviewing the efficacy of case management for veterans with substance misuse problems.

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Overview of report

Background

- Substance misuse problems have been found to be higher in the military, in particular in veterans than civilians.
- The efficacy of a case management approach for veterans was examined in the UK with Combat Stress running it as a pilot study.
- This pilot service was set up in 2014 and was called the Veterans' Substance Misuse Service (VSMS), which used specialist veteran substance misuse nurses to case manage veterans into appropriate services.

Clinical activity

- As part of their treatment, veterans were referred to appropriate health services that met their needs.
- These services included either Combat Stress or another mental health service.
- 67.3% of the veterans referred to Combat Stress then went on to engage with the service.
- A greater number of service users engaged in other mental health services than were referred by the substance misuse nurse, suggesting that some may have self-referred.

Description of treated population

- Data were available for 743 veterans using the VSMS.
- It was found that 36.6% of service users were aged over 55 years, 96% were male and 98.3% were white.
- The majority of service users did not have any physical disabilities (69.5%) and did not have any caring responsibilities (84.9%).
- In regards to health difficulties, 28.6% had posttraumatic stress disorder and 57.5% had a diagnosis of another mental health problem.
- The majority of veterans had alcohol problems (81.6%), with only a minority using drugs (16.8% using illegal drugs and 2% prescription drugs).

Treatment outcomes

- Following treatment, service users improved in: managing their mental health, physical health and self-care, living skills, social networks, work, relationships, addictive behaviour, responsibilities, identity and self-esteem and, trust and hope.

- The greatest improvements were seen for addictive behaviours, managing mental health and identity and self-esteem. The most modest improvements were seen in responsibilities, work and social networks.

Service user feedback

- Overall, between 99-100% of service users reported being satisfied with the service they had received.
- Service users reported being particularly satisfied with seeing health improvements, staff input, the accessibility of the service and the fact it was tailored to their individual needs.
- Very few negative aspects of the service were reported with a few veterans reporting they could have done with the service in the past and were beginning to go backwards.

Limitations

- It must be acknowledged that there are several limitations concerning the data used in this report. The data were incomplete as some services were unable to share their data, therefore, it may not represent all services users.

Contents

1. Background on substance misuse in the military

1.1. Substance misuse in the military

Veterans with mental health problems have been highlighted as a high-risk group for substance misuse difficulties. Compared to civilians, those who have served in the military are almost twice as likely to suffer from alcohol problems, with 67% of men and 49% of women in the UK military classifying as having a drinking problem, compared to only 38% of men and 16% of women in the general population (Fear et al., 2007). UK veterans are also more likely to present with substance misuse problems relating to drugs, with 5.2% reporting drug dependence compared to only 3.5% of civilians (Woodhead et al., 2011).

1.2. Possible explanations

The reasons behind this increased substance misuse in military populations are unclear, however, may be due to a range of pre, during and post-service factors. Research has suggested that the conditions of military service such as the constant relocation, having to work overseas and being separated from family play an important role in alcohol and drug misuse as a coping strategy (Bray et al., 1991). During service, research also emphasises the influence of military culture on fostering substance misuse problems, including the 'macho sub-culture' (where competitiveness and masculinity are encouraged) as well as the use of alcohol for team bonding and dealing with distress (Jones & Fear, 2011; Keats, 2010). Consequently, following deployment, rates of substance misuse appear to increase, with many military personnel using substances to deal with the violence and horror they witnessed instead of confronting or talking about their trauma (Jacobson et al., 2008). Indeed, mental health difficulties

are associated with substance misuse, with evidence showing that veterans with depression or posttraumatic stress disorder (PTSD) are twice as likely to report alcohol misuse as those without depression or PTSD (Jakupcak et al., 2010). To support this, following the conflicts in Iraq and Afghanistan, 11% of US soldiers were found to meet criteria for either a drug or alcohol disorder (Seal et al., 2011).

1.3. Substance misuse in Veterans

In addition to military culture, distressing service experiences and mental health difficulties, veterans are at an even greater risk of substance misuse compared to serving personnel due to problems adjusting back to civilian life (Thompson et al., 2011). Studies have demonstrated that only a small proportion of veterans with mental health difficulties actually seek help due to not knowing where to go, believing civilian services will not help and, the stigma surrounding mental health (Mittal et al., 2013). Not getting appropriate treatment often worsens veterans' problems and leads to poor outcomes. Moreover, veterans who misuse drugs or alcohol have been shown to drop out of treatment before completing it (Van Minnen et al., 2002). A recent study by Combat Stress discovered that the average time it took veterans to seek help for their health difficulties was 11 years after leaving the military (Murphy et al., 2015). As veterans wait for longer to access national statutory alcohol services, they are more likely to seek support at an older age than civilians and be admitted for longer (Murphy et al., 2016).

1.4. Consequences of substance misuse

The consequences of misusing substances are severe. In the general UK public, it was found that alcohol contributes to 32% of liver cirrhosis cases, 29% of oesophageal

cancer, 25% of liver cancer, 19% of mouth cancers, 10% of haemorrhagic strokes, 18% of poisoning and 18% of epilepsy cases worldwide (Room et al., 2005). The consequences of substance misuse also impact family, friends and national health resources, with an estimated annual cost of £488 million to the National Health Service (NHS) for problems associated with drug misuse and £3.5 billion for alcohol misuse (Singleton et al., 2006; Public Health England, 2013). The exact costs to the NHS for veterans alone still remain unknown, however, due to the increased risk, are expected to account for a high proportion of these costs.

Worryingly, a study has found that even after treatment, veterans struggle with their mental health and substance misuse difficulties (Drescher et al., 2003). In fact, 14.7% of veteran deaths occurring after receiving mental health treatment were found to arise from chronic substance misuse, including drugs, alcohol and smoking (Drescher et al., 2003). On top of this, 13.8% of the deaths resulted from suicide and, as depression and suicide are linked to substance misuse, this highlights the need for a greater focus of treatments on substance misuse reduction (Head et al., 2016; Murphy et al., 2017; Regier et al., 1990). Without specialised interventions to address substance misuse, costs to the NHS and the individual will remain high.

1.5. Summary

Military personnel are more likely to suffer from substance misuse problems than civilians. Alongside difficult experiences and a 'macho culture', many veterans find it hard to transition from military to civilian life and veterans are, therefore, more likely to use substances as a way of coping with their problems. As the health consequences associated with substance misuse are severe for not only the individual but family,

friends and national health resources, strategies are needed to reduce it. However, because veterans are less likely to seek help and more likely to drop out of services, specialised military substance misuse treatments are needed.

2. The case management approach

In light of the unique difficulties faced by military veterans and poor treatment adherence, a greater level of support and more assertive approach is needed. Researchers have highlighted the importance of clinicians having specialist knowledge on military culture and traumatic experiences when treating veterans, as opposed to the standardised treatment given by statutory services (Hoge, 2011). Case management has been suggested as an option due to its person-centred nature, adapting to the needs of the individual and, therefore, being able to accommodate the specialised needs of veterans (Mohamed et al., 2009).

Case management involves a health care professional assessing, planning and coordinating treatments for the individual, such as referring them to the right services and working with them throughout the entire process. Combining military knowledge with individualistic care is proposed to help veterans feel more comfortable accessing support, which will encourage them to get help sooner and improve their overall outcomes (Neale & Rosenheck, 1995). Case management is expected to help veterans stay engaged with the treatments and reduce drop-out rates.

Evidence has previously shown that case management produces positive results in individuals suffering from mental health difficulties and substance misuse as it is able to provide rounded care to address all difficulties (Essock et al., 2006). Compared to services offering interventions for single problems, case management has been found to improve all aspects of veterans' lives (Siegal et al., 1996). As such, a specialised military case management service could help to improve treatment engagement and reduce overall mental health and substance misuse difficulties in veterans.

3. The Veterans' Substance Misuse Service (VSMS)

In light of the need for specialised substance misuse help in veterans, the VSMS was set up by Combat Stress to use case management to treat veterans with mental health and substance misuse problems. The VSMS was funded for a three-year pilot study in 2014, spread across five sites in the UK. The aim of the service was to support veterans to engage with specialist substance misuse services through case management provided by clinicians with military knowledge. Specialised veteran substance misuse nurses were employed to carry out the case management.

The case management support offered to veterans comprised of three elements. The first was assessment, whereby the nurses determined the severity of the veteran's substance misuse and mental health difficulties. The second phase was the creation of a specialised care plan. Here, nurses were in charge of identifying the services most suitable to the individual's needs, meeting regularly with the individual as required, monitoring their progress, referring them to appropriate services and attending review meetings. Finally, the third stage was the review. Each case was individually evaluated at regular intervals including at six-weeks, three-months, six-months, 12-months and discharge.

As per the service model, veterans were deemed suitable for discharge once they had become abstinent from substances, successfully reduced or stabilised their intake, completed a course of treatment and did not want further help, or did not engage with the service.

4. Evaluation strategy

4.1. VSMS criteria

Eligibility for case management by the VSMS required participants to be veterans (defined as having served at least one full day in UK Armed Forces), have a current alcohol or drug misuse problem and live within the catchment area of one of the community bases set up by Combat Stress. Participants were excluded on the basis of being physiologically dependent on the substances and those who were were referred to specialist local detoxification services.

4.2. Assessment data

When veterans were referred to the VSMS, they completed an initial assessment with a substance misuse nurse. During this assessment, they completed a questionnaire about their personal information, including; sex (male/female), age, ethnicity, whether they had a disability (yes/no), whether they had any caring responsibilities (yes/no). Ethnicity was grouped into white, black, mixed, asian and other.

The veterans were asked a range of questions during assessment regarding their health. Service users indicated whether they had received a formal diagnosis of PTSD or any other mental health difficulty. In an interview, service users were asked about their substance misuse difficulties, including what was their primary substance of use. After data was collected, the researcher grouped substances into categories of alcohol, illegal drugs or prescription drugs.

4.3. Clinical activity

Substance misuse nurses recorded their activity with service users on a spreadsheet. Nurses indicated with 'yes' or 'no' responses as to whether the individual was referred to another mental health service or Combat Stress. The mental health services were typically specialist substance misuse services offered by statutory providers. Nurses then indicated whether the individual had engaged with each service or not in order to determine veterans' engagement rates. Engagement was defined as the individual completing an assessment and commencing treatment with a service.

4.4. Outcome data

Service users completed a measure asking about different aspects of their life during their initial assessment and then after they had completed treatment. The measure chosen was the Recovery Star which has been consistently used in clinical services throughout the UK to assess key-working outcomes and has shown high internal consistency and a specialised focus on recovery (Dickens et al., 2012). The Star assesses ten aspects of an individual's functioning on a ten-item Likert scale; managing mental health, physical health and self-care, living skills, social networks, work, relationships, addictive behaviour, responsibilities, identity and self-esteem and finally, trust and hope. A score of one to two represents the individual being 'stuck', three to four represents the individual beginning to accept help, five to six means the individual is 'believing' that things can be different or can change, seven to eight represents the individual learning to change and a score of nine to ten represents self-resilience, whereby the individual no longer needs support.

4.5. Service user feedback

Upon discharge, service user feedback was collected through standardised questions as well as free open answer questions. The service user feedback form comprised of eight questions (see appendix 1). The first five questions were closed answer questions with 'yes' or 'no' response, whereas the final three questions (6, 7 and 8) were open-ended, allowing service users to give detailed qualitative answers. These questions asked (1) When attending appointments are you made to feel safe and welcome? (2) Do you feel involved in deciding what support is best for you? (3) Are staff non-judgemental, respectful, kind and considerate towards you? (4) Do staff try to understand things from your perspective? (5) Do staff give you enough information to support your recovery? (6) Is there anything about your experience with the service that you found particularly satisfactory? (7) Is there anything about your experience with the service that you found particularly unsatisfactory? (8) Please tell us how the service can be improved.

4.6. Case studies

Veteran substance misuse nurses were contacted after data collection and asked to provide details of service users they had worked with within the VSMS for case studies. Information was gathered regarding the individual's background, the intervention they had received and their treatment outcomes. Case studies have been used to illustrate the types of interventions that were offered by the VSMS and the individual's treatment outcomes. Five randomly selected case studies have been presented in this report.

5. Evaluation outcomes

5.1. Assessment data

Of 743 veterans utilising the case management approach with the VSMS, 96% were male. Of these 743, 36.6% were aged over 55 years, with only a minority (14.2%) under the age of 35. In regards to the ethnicity of the service users, 98.3% were white. When asked about their lifestyle, the majority of the service users reported that they did not have a physical disability (69.5%) and did not have any caring responsibilities (84.9%). In terms of health problems, 28.6% of the service users had a formal diagnosis of PTSD and 57.5% had another mental health diagnosis, although the type of disorder was not specified.

On a closer examination of substance misuse difficulties, it was found that the majority of the service users had alcohol problems (81.6%). This rate was then followed by 16.8% of the sample using illegal drugs and 2.0% of the sample misusing prescription drugs. The description of VSMS service users is reported in Table One below.

Table 1. Description of service users

	N (%)
Descriptors (N)	
Sex (743)	
Male	716 (96.4)
Female	27 (3.6)
Age (732)	
<35	104 (14.2)
35-44	184 (25.1)
45-54	176 (24.0)
55+	268 (36.6)
Ethnicity (700)	
White	688 (98.3)
Black	4 (0.6)
Mixed	3 (0.4)
Asian	2 (0.3)
Other	3 (0.4)
Disability (610)	
Yes	186 (30.5)
No	424 (69.5)
Caring responsibilities (647)	
Yes	98 (15.1)
No	549 (84.9)
Health	
Mental health problems	
PTSD (633)	181 (28.6)
Other mental health (584)	336 (57.5)
Primary substance misuse (683)	
Alcohol	554 (81.1)
Illegal drugs	115 (16.8)
Prescription drugs	14 (2.0)

5.2. Clinical activity

Clinical data on referrals made via the case management approach were only available for 906 service users. For referrals to Combat Stress, data were only available for 467 service users. Of these 467 veterans, 21.0% were referred to Combat Stress and 14.1% then engaged with Combat Stress. Consequently, this means that 67.3% of those who were referred then went on to engage.

Additionally, of these 906 veterans, 31.0% were referred to another mental health service and 38.2% subsequently engaged with that service. As more participants engaged than were referred by the substance misuse nurse, this could indicate that some service users self-referred. These findings are shown in Table Two below.

Table 2. Clinical activity

Service referral	**Number (%)**
Combat Stress	467
Referred	98 (21.0)
Engaged	66 (14.1)
Other mental health service	906
Referred	281 (31.0)
Engaged	346 (38.2)

5.3. Outcome data

Significant improvements were seen across all ten domains of the service users' lives, as measured by the Recovery Star, comparing before and after treatment. The areas with the greatest improvements were addictive behaviour, followed by managing mental health and, identity and self-esteem. The areas found to have the most modest improvements were responsibilities, followed by work and then social networks. These findings are shown in Table Three.

Table 3. Star measure outcomes

	Before Mean (SD)	**After Mean (SD)**	**Mean change in score**	**Significance (P-value)**
Addictive behaviour	3.6 (2.2)	7.0 (2.1)	3.4	<0.001
Managing mental health	4.3 (2.6)	6.8 (2.1)	2.5	<0.001
Identity and self-esteem	4.4 (2.5)	6.8 (2.3)	2.4	<0.001
Trust and hope	4.9 (2.5)	7.2 (2.1)	2.3	<0.001
Physical health & Self-care	4.4 (2.2)	6.6 (1.9)	2.2	<0.001
Living skills	5.5 (2.7)	7.6 (2.0)	2.1	<0.001
Relationships	4.8 (2.7)	6.9 (2.5)	2.1	<0.001
Social Networks	4.1 (2.5)	6.0 (2.5)	1.9	<0.001
Work	3.7 (2.9)	5.2 (3.2)	1.5	<0.001
Responsibilities	6.1 (2.8)	7.5 (2.5)	1.4	<0.001
TOTAL	4.6 (1.8)	6.8 (1.7)	2.2	<0.001

*of 106 service users

A paired samples T-test was used to test the significance of the score changes. P is significant at a value less than .05

5.4.1. Satisfaction

Of those who used the service, 99 veterans completed measures on their satisfaction with the VSMS case management. Of these, 100% reported feeling safe and welcome during meetings, 100% felt they were involved in decisions, 100% thought the staff were considerate, 99% thought the staff understood their perspective and 100% reported they were satisfied with the amount of information they received. These findings are shown in Table Four.

Table 4. Service user satisfaction

	N (%)
Felt safe and welcome	
Yes	99 (100.0)
No	0 (0)
Involved in decisions	
Yes	99 (100.0)
No	0 (0)
Staff considerate	
Yes	99 (100.0)
No	0 (0)
Staff understand perspective	
Yes	98 (99.0)
No	1 (1.0)
Enough information	
Yes	99 (100.0)
No	0 (0)

5.4.2. Qualitative questions

In addition to the satisfaction feedback above, 70 service users answered questions on what aspects of the service they found particularly satisfactory, unsatisfactory and what they thought could be improved.

5.4.2.1. Satisfactory qualitative responses

In terms of positive aspects of the service, four themes appeared from the service users' responses. First, service users reported that they had seen health improvements following case management. In particular, 31.4% said it helped their problem, 8.6% found the referrals helpful and 7.1% felt better about themselves. Second, service users were particularly satisfied with staff input. 44.3% reported satisfaction with the staff being kind, supportive, trustworthy and non-judgemental, 12.9% found having someone to listen helpful and 10% said the staff understood them. The third theme involved the accessibility of the service. 14.3% supported the flexibility of location and being able to have home visits, in addition, 1.4% thought the response was quick. The fourth theme that arose from participant responses involved the service being tailored to their individual needs. 8.6% said that the staff understanding military problems or being a veteran themselves was helpful, 5.7% thought the service was personalised, and 2.9% thought they were set realistic goals and 2.9% liked that their family could be involved. These satisfactory responses are presented in Table Five.

Table 5. Satisfactory qualitative responses

Response	Number of individuals endorsing response (%)
Health improvements	
Helped problem / can cope	22 (31.4)
Referrals useful / helpful	6 (8.6)
Feel better about self	6 (8.6)
Staff input	
Staff - no judgement/ kind/ trust	31 (44.3)
Someone to listen	9 (12.9)
Being understood	7 (10.0)
Accessibility	
Home visits / flexible location	10 (14.3)
Quick response	1 (1.4)
Tailored to needs	
Understand military/fellow veteran	6 (8.6)
Personal service	4 (5.7)
Realistic goals	2 (2.9)
Involved family	2 (2.9)

(From 70 service users)

5.4.2.2. Unsatisfactory qualitative responses

In regards to unsatisfactory elements of the case management service, four service users gave responses and the rest left the answers blank. 50% (n=2) said they could have done with the service in the past and 50% (n=2) said they felt they were beginning to go backwards. These unsatisfactory responses are shown in Table Six.

Table 6. Unsatisfactory qualitative responses

Response	Number individuals endorsing
Could have done with service in past	2 (50.0)
Beginning to go backwards	2 (50.0)

(From 4 service users)

5.4.2.3. Improvements qualitative responses

In response to being asked what could be improved, eight service users provided answers, although 62.5% of these (n=5) said they couldn't think of anything. The majority of the improvements that were suggested surrounded accessibility of the VSMS. For example, one veteran (12.5%) said they wanted there to be more representatives or staff, one (12.5%) said they wanted more time to be allocated to each client and one (12.5%) wanted the service to be implemented in remote areas in Scotland. Other improvements regarded military specific suggestions. One service user (12.5%) suggested the service could collaborate with the Royal British Legion (RBL) for economic help and one (12.5%) thought the caseworkers should have a better understanding of the military. These improvement responses are shown in Table Seven.

Table 7. Improvements qualitative responses

Response	**Number individuals endorsing (%)**
Can't think of any	5 (62.5)
Accessibility	
More reps	1 (12.5)
More time per client	1 (12.5)
Service in remote Scotland	1 (12.5)
Military specific	
Collaborate with RBL for economic help	1 (12.5)
Key worker's understanding of military	1 (12.5)

(From 8 service users)

6. Case studies

Below, there are five randomly selected case studies of veterans who have utilised the case management approach offered by the VSMS. These cases illustrate the type of treatment that each person received as well as their outcomes.

6.1. Case study one: Rebecca

6.1.1. Background

Rebecca was medically discharged from the Army in 1998 after battling with long-term mental health issues stemming from her childhood. She had been diagnosed with Borderline Personality Disorder alongside Depression and Anxiety and had been in an extremely abusive relationship whereby her partner was sentenced to prison for this. Rebecca would drink up to a litre of vodka a day and was in denial. As a result, her son was taken out of her care. As she lived over an hour's bus ride away from her local services, she often found it difficult to access the help she needed.

6.1.2. Intervention

Rebecca was referred to the VSMS due to her difficulty accessing help. A key worker from the VSMS would regularly visit Rebecca in her home and worked with her to select the best services for her needs. Working together to reduce her alcohol consumption, the substance misuse nurse arranged for her to be treated by Turning Point. The key worker also referred Rebecca to SSAFA for welfare support and Alcoholics Anonymous for her drinking.

6.1.3. Outcome

Whilst this was an extremely difficult time for Rebecca, she engaged well and made progress with her alcohol. Where she had not engaged with statutory mental health services since childhood, she overcame this and was referred to a community mental health team and engaged in treatment. She soon found out she was pregnant with twins and whilst she had recently had a bad experience with Social Services she was cooperative and began engaging with all the classes and courses required of her. Rebecca has now given birth to her twins and has been abstinent for almost nine months. She has been successfully discharged from Turning Point and has now been referred to the Warrior Programme for the three-day veteran programme. She has high hopes for the future and is even considering a career as a support worker once the twins are older.

6.2. Case study two: Eric

6.2.1. Background

Eric is a 26-year old male who presented to the VSMS in 2015 via the emergency room, where he was admitted for liver cirrhosis, severe withdrawal, hallucinations and delirium tremens. Upon assessment with the VSMS, it was revealed that he had previously been diagnosed with PTSD following multiple deployments to the Gulf, the Falklands, Northern Ireland and Afghanistan and drank a 700ml bottle of vodka on a daily basis (approximately 30 units). Although he had tried several detoxes in the past, they had only resulted in short periods of abstinence and as a result, his wife had left him and he had since become homeless.

6.2.2. Intervention

When Eric first presented to the hospital, a member of the VSMS team collaborated with the doctors at the hospital to establish a medication and treatment plan. Eric was placed onto psychiatric medications and an alcohol detoxification programme. Following discharge, he was referred to a veterans' homeless project and to the Veteran Outreach Service to be seen by a psychiatrist for his PTSD. Following referral, the client engaged with the selected services, received Eye Movement Desensitisation and Reprocessing (EMDR) to treat his PTSD symptoms and moved into shared living accommodation.

6.2.3. Outcome

Eric struggled through the detox at first. He reported to the case management nurse that he felt weak, his legs were wobbly and he became very angry and agitated due to flashbacks and nightmares. However, after eight days he completed his detox and went to live in the shared house prepared by the homeless project. Eric settled into the house well, became friends with several of the other veterans and kept himself busy doing DIY, cooking, gardening and cleaning. Eric received EMDR with South Western Veterans mental health service which helped with his PTSD symptoms. Three months later he returned home and moved back in with his wife.

6.3. *Case study three: Joshua*

6.3.1. Background

Joshua is a 26-year-old man who self-referred himself to the substance misuse service after hearing about it from another veteran who received case management. Joshua suffered from severe anxiety, panic attacks, flashbacks and nightmares following his return from Afghanistan. He became addicted to Diazepam (street valium) to try to stop these problems from occurring but found himself having to take more and more to have the desired effect. He ended up taking roughly 60-70 tablets a day.

6.3.2. Intervention

A key worker helped refer him to his local GP to get support for a local Diazepam detox. The GP agreed to do this as long as Joshua had ongoing support. As such, the key worker visited Joshua every day for four weeks during the detox and worked as a liaison, communicating with the GP to update his care plan and review his treatments. The key worker helped to teach Joshua several grounding techniques to help him better deal with his flashbacks and panic attacks, as well as coping mechanisms to avoid a relapse. He was also referred to Combat Stress for treatment to address his posttraumatic stress disorder.

6.3.3. Outcome

Joshua completed the detox with the help of the VSMS and is no longer taking Diazepam. Due to his successful substance misuse outcomes, Joshua has seen a

psychiatrist at Combat stress and completed an Intensive Treatment Program for PTSD.

6.4. Case study four: Charles

6.4.1. Background

Charles is a 52-year-old male who served 14 years in the British Army. On leaving the Army in 1982 he worked for a transport company until 2011 but has since been medically retired due to physical health problems, including a fused spine and neck pain. Whilst serving in the military, he witnessed several traumatic events, but reports three specific events and one near miss as particularly prevalent in his mind and causing ongoing distress. He has lived in council accommodation at the same address for the past 30 years, bringing up two children and living with his wife. Sadly, his wife passed away in 2014 and both children have now grown and left home, living with their own families. Following his wife's death, Charles's drinking worsened to the point where he was having 80 units a day. As a result, he was admitted to the hospital numerous times. He experiences PTSD, depression and has tried to commit suicide twice by overdosing.

6.4.2. Intervention

Following referral to the VSMS, Charles completed a hospital detox and established a treatment pathway with a key worker. However, on return home, Charles relapsed and arrived at a meeting with his caseworker intoxicated. He also had an accident at home and ended up being taken back to the hospital. The VSMS liaised with the nursing

team and created a more assertive outreach approach. A single contact point was created for all of Charles's needs; mental and physical health, finance, social support, housing. Charles was referred to Combat Stress alongside a local peer support group.

6.4.3. Outcome

Charles engaged with the services he was referred to by his caseworker. With routine care and support, Charles now has a solid support network in place and has been able to abstain from alcohol for over a year. He will now be able to go on to complete residential treatment at Combat Stress for his PTSD symptoms.

7. Evaluation of the VSMS pilot study

7.1. Summary of results

The VSMS was set up in 2014 as a novel approach to support veterans with substance misuse difficulties via case management. Overall, these findings have shown positive outcomes for the case management approach, suggesting it helps veterans to engage with services earlier and stay engaged throughout the treatment. Service users have been shown to experience improvements in all areas of their life following intervention from the VSMS. These aspects vary from addiction to mental health to social support, as assessed by the Recovery Star measure. The areas with the greatest improvements were addictive behaviour, followed by managing mental health and, identity and self-esteem. The areas found to have the most modest improvements were responsibilities, followed by work and then social networks. These findings suggest that the VSMS case management programme is effective in reducing the primary health problems but more modest at improving social aspects of an individual's life.

Additionally, all service users who responded to the feedback questions reported being satisfied with the service they had received, with key reasons surrounding improvements to their health and lifestyles, staff input, the accessibility of the treatment and the fact that the service was tailored to their specific needs. Very few negative aspects of the service were reported, with only minor recommendations involving accessibility being noted, such as; service users wanting more time, more staffing levels and more locations to be accessible. Several other suggestions

surrounded military approaches, such as key workers having a better understanding of military issues.

The most commonly endorsed reasons for disengagement from the service, as reported by staff, were that the veteran did not feel the service met their specific need, they did not require any further help at the time or they did not attend appointments. As a result, these findings demonstrate successful outcomes for a case management approach to substance misuse problems in veterans, with only minor adjustments needed.

7.2. Limitations

Nevertheless, there are several inherent limitations that may affect the reliability of the data presented in this report. Data were only obtainable for a small number of service users, thus may have been biased. For instance, there was a large number of missing raw data, meaning there may have been bias in the type of data being reported. This bias and small quantity of data, therefore, limits our ability to evaluate the outcomes of the VSMS and generalise to all veterans who have used case management. Further, the data is inconsistent, with Recovery Star data reported for some service users, but then satisfaction data available for a different set of service users. As such, this limited the ability of the data to be used for different statistical analyses, i.e. to see how service user satisfaction or demographics affected the Star measure outcomes.

Furthermore, it must be acknowledged that rigorous, validated mental health measurement tools (such as the AUDIT and DUDIT tools) were not routinely used to gather data. The lack of validated measures may have introduced bias to the results of the study, as individuals may have over or underreported their problems.

Additionally, the specific details of each individual's mental health and substance misuse difficulties were not available and, therefore, cannot be assessed to see which areas have improved, declined or remained the same. For instance, it is unknown how the quantity and frequency of substance misuse have changed over time, as only an overall score was given by the Star measure. Indeed, the use of the Star measure introduces subjectivity into the data, whereby individuals may over-report or under-report improvements in behaviours, without the use of empirical data to support these findings.

7.3. Service recommendations

In light of the findings portrayed in this report, several recommendations are advised for the VSMS case management approach. These are presented below:

1. As substance misuse difficulties are common in help-seeking veterans, with around 43% found to suffer from alcohol misuse (Murphy et al., 2017), specialist support is needed to reduce the prevalence of these problems. In addition to this, veterans have shown poor engagement with statutory services and a reluctance to seek help, suggesting military awareness is key to treatment.
2. Veterans appear to suffer from multiple comorbid mental health issues with only 7.8% of individuals having substance misuse problems alone (Murphy et al., 2017). The most common overlapping problems in veterans appear to be PTSD, depression and anxiety, alongside alcohol misuse. As a result of these overlaps, it is clear that veterans need continued mental health and substance misuse support in the form of dual diagnosis work to address both substance misuse and mental health difficulties.

3. Taking into consideration the multiple health problems faced by veterans, it is important that links are maintained between Combat Stress and statutory substance misuse services. This sustained relationship will allow veterans to receive specialised treatment for both military-related PTSD and general substance misuse difficulties to improve their overall treatment outcomes and quality of life.
4. A case management approach appears to be effective at increasing veteran engagement rates both with the substance misuse service and with referrals to statutory mental health providers. Therefore, it would be beneficial for a case management approach to continue to be used to support veterans with comorbid health difficulties.
5. Given that case management has been found to be helpful, it is important that autonomous specialist substance misuse nurses are utilised to deliver the interventions, with a sole caseload of veterans suffering from substance misuse problems.
6. Given the limitations surrounding the accessibility of service data and subsequent quality of data collected by the VSMS, it could be beneficial for the service to be embedded into Combat Stress services. The merging of these services could not only help to provide a more thorough examination of the VSMS outcomes to highlight which areas could be improved, but it could also progress communication between services and accelerate the veterans' referral pathway.
7. Following the process of bringing the VSMS in-house, data regarding clinical activity, referrals and engagement should be stored internally on Carenotes.

Furthermore, procedures should be put in place to monitor data entry and flag if an individual has been referred to the VSMS independent of Combat Stress.

8. The measures collected by the Recovery Star highlighted that, although still a significant improvement, veterans witnessed lesser development in areas of their lives relating to social factors such as relationships, social networks, work and responsibilities. Therefore, it is important a holistic approach is provided by the VSMS to address these aspects of the veterans' lives in addition to mental health and substance misuse problems.
9. The accessibility of the VSMS was highly commended by the service users, with many saying they would not have sought help if the service hadn't been community-based, been flexible and allowed for home visits. As such, the VSMS should continue to support veterans with substance misuse problems in the community via a case management approach as this has shown to be effective and acceptable to veterans thus far.

8. Conclusion

Substance misuse difficulties have been found to be common in veteran and military populations. In 2014, the Veterans' Substance Misuse Service was set up to help reduce rates of substance misuse and increase the number of veterans engaging with treatments through the use of a case management approach. This report aimed to evaluate the efficacy of using case management by looking at the demographics of service users, clinical input by the VSMS, health outcomes and service user feedback. Overall, the outcomes showed positive results from the VSMS pilot, with case management appearing to be a successful and acceptable treatment. Participants improved in all aspects of their lives, with the biggest improvements seen in addictive behaviour, ability to manage mental health and identity and self-esteem. Service users appeared to be satisfied with the case management approach, in particular; improvements they had experienced, staff input, the accessibility of the service and the fact is was tailored to their individual needs. Nonetheless, several improvements have been suggested relating to accessibility, such as more time, more locations and more staff. It has been recommended that the VSMS continue to treat substance misuse difficulties in veterans, taking into account dual diagnoses, social factors and accessibility. To conclude, case management offers a suitable solution to the high healthcare costs and poor health of veterans with substance misuse problems.

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10. Appendix

10.1. Service user feedback questionnaire

COMBAT STRESS

Veterans Drug and Alcohol Support

Questions	Yes	No	Other
Date:			
When attending appointments are you made to feel safe and welcome?			
Do you feel involved in deciding what support is best for you?			
Are staff non-judgemental, respectful, kind & considerate towards you?			
Do staff try and understand things from your perspective?			
Do staff give you enough information to support your recovery?			

Is there anything about your experience with the service that you found particularly ;

Satisfactory

Unsatisfactory

Please tell us how the service can be improved

Thank you for taking the time to tell us your views