

Lancaster
University



Understanding and improving treatment for veterans with co-occurring alcohol use disorder and mental health disorders

Dr Laura Goodwin (Lancaster University)
Dr Patsy Irizar (Liverpool John Moores University)
Dr Shumona Salam (Lancaster University)
Prof Steve Jones (Lancaster University)
Dr Deirdre MacManus (King's College London)
Dr Neil Roberts (Cardiff University)





Contents

Foreword	V
Acknowledgements	VI
1 Executive summary	1
1.1 Introduction	1
1.2 Aims	1
1.3 Study 1: A systematic review on the efficacy of interventions for co-occurring CMD and AUD for military and veteran populations	2
1.4 Study 2: Understanding treatment experiences of veterans with co-occurring CMD and AUD: a qualitative interview study	3
1.5 Study 3: Adherence to treatment and treatment outcomes in military veterans with co-occurring CMD and AUD	4
1.6 Study 4: Service providers' perspectives on treatment for co-occurring CMD and AUD in veterans: treatment pathways, challenges, best practices, and recommendations to improve care	5
1.7 Study 5: Generate consensus on recommendations to improve service provision for veterans with co-occurring CMD and AUD	6
1.8 Key Findings, Conclusions, & Recommendations	6
2 Introduction	9
2.1 What is the problem being addressed?	9
2.2 Treatment provision for veterans with co-occurring CMD and AUD	9
2.3 Barriers to access and engagement for veterans with co-occurring CMD and AUD	10
2.4 Gaps in the literature	10
3 Study 1: The efficacy of psychological interventions for co-occurring common mental disorders (CMD) and alcohol use disorders (AUD) in military and veteran populations: a Systematic Review and Synthesis Without Meta-analysis (SWiM)	13
3.1 Background & aims	13
3.2 Methods	13
3.3 Results	14
3.4 Key messages & conclusions	19
4 Study 2: Understanding treatment experiences of veterans with co-occurring mental health and alcohol problems: a qualitative interview study	21
4.1 Background & aims	21
4.2 Methods	21
4.3 Results	22
4.4 Key messages & conclusions	25
5 Study 3: Adherence to treatment and treatment outcomes in military veterans with co-occurring common mental disorder (CMD) and alcohol use disorder (AUD)	27
5.1 Background & aims	27
5.2 Methods	27
5.3 Results	28
5.4 Key messages & conclusions	31

6 Study 4: Service providers' perspectives on treatment for co-occurring alcohol and mental health problems in veterans: treatment pathways, challenges, best practices, and recommendations to improve care	33
6.1 Background & aims	33
6.2 Methods	33
6.3 Results	34
6.4 Key messages & conclusions	37
7 Study 5: Delphi survey generating consensus on recommendations to improve care for veterans with co-occurring CMD and AUD	39
7.1 Background & aims	39
7.2 Methods	40
7.3 Results	41
7.4 Key messages & conclusions	43
8 Discussion	45
8.1 Key findings	45
8.2 How the results fit with what is already known from research	46
8.3 How do the results align with current policy and practice?	46
8.4 Strengths and limitations of the research studies	47
9 Conclusions	49
10 References	51
Appendix 11.1	55
Appendix 11.3	55
Appendix 11.2	55
Appendix 11.4	56
Appendix 11.5	60

Abbreviations

AUD: Alcohol Use Disorder

CBT: Cognitive Behavioural Therapy

CMD: Common Mental Disorder

COMHAD: Co-Occurring Mental Health, Alcohol and Drugs

DNA: Did Not Attend

GAD: Generalised Anxiety Disorder

IES-R: Impact of Events Scale-Revised

NICE: National Institute for Health and Care Excellence

NHS: National Health Service

OHID: Office for Health Improvement and Disparities

PHE: Public Health England

PHQ: Patient Health Questionnaire

PTSD: Posttraumatic Stress Disorder

PPI: Patient & Public Involvement

PRISMA: Preferred Reporting Items for Systematic Reviews and Meta-Analyses

PTSD: Post-Traumatic Stress Disorder

RAF: Royal Air Force

RCT: Randomised Controlled Trial

SUD: Substance Use Disorder

SWiM: Synthesis Without Meta-Analysis

TAU: Treatment As Usual

Foreword

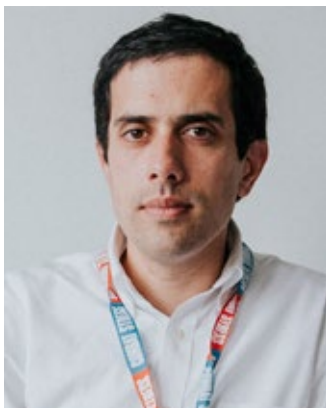
Co-occurring mental health and alcohol problems are more common in military personnel and veterans than civilian populations. Mental health is interlinked with alcohol use, especially in the Armed Forces, where traditionally alcohol is often central to social activities and may have been used to cope at times of stress, but this should not prevent veterans from getting the care they need. At Combat Stress, we believe that these issues should not ruin the lives of veterans and their families and that they can recover with the right support.

This important research shows that integrated interventions which target both mental health and alcohol use are more effective than usual care for improving symptoms of PTSD and reducing alcohol use. The research team conducted interviews with veterans, highlighting that aspects of military culture, such as norms around masculinity and heavy alcohol use, delayed help-seeking. Veterans with co-occurring problems faced barriers when seeking support, such as abstinence requirements for mental health treatment and a lack of military cultural awareness in mainstream services. Focus groups with service providers largely echoed this, as well as showing that fragmented services and poor information-sharing can make it difficult to provide support for veterans with co-occurring problems. Yet, this research also showed positive examples of support, such as care which is flexible, integrated, and aware of military culture and unique experiences. Additionally, this research showed that veterans with co-occurring mental health and alcohol problems show similar levels of improvement and recovery from mental health treatment compared to veterans with only a mental health problem, though those with co-occurring problems may face more challenges staying engaged in treatment.

The findings from these studies led to the development of 15 key recommendations, which call for integrated and accessible treatment to address issues around eligibility for services ("no wrong door" approach), ensuring that veterans with co-occurring mental health and alcohol problems are not left without support. They outline the need for approaches to increase awareness of available support and to reduce stigma and normalise help-seeking. Finally, these recommendations demonstrate the need for flexible, holistic, and person-centred support, which reflect the needs and preferences of veterans.

The findings and recommendations from this study are important in the context of current priorities, such as VALOUR's priorities to better co-ordinate services in a regional context (including mental health and alcohol support). The new UK clinical guidelines for alcohol treatment have now been published, outlining that mainstream services should provide co-ordinated care for people with co-occurring mental health and alcohol problems, and this research provides recommendations as to how this can be achieved for veteran populations.

Whilst the Ministry of Defence has prioritised approaches to reduce mental health stigma, this research shows that stigma still acts as a barrier for help-seeking. Our research at Combat Stress has shown that veterans wait a long time to access mental health support and this is likely to be longer for veterans with co-occurring alcohol problems. The recommendations from this work outline ways to reduce stigma and to ensure veterans receive timely access to appropriate care. A priority for Combat Stress is our campaign to reduce stigma, and it is important that these stories are represented by veterans with co-occurring mental health and alcohol problems.



Prof Dominic Murphy

Head of Research, Combat Stress Centre for Applied Military Health Research
President of the European Society for Traumatic Stress Studies

Acknowledgements

We would like to thank the Forces in Mind Trust for funding this piece of work and specifically to Kirsteen Waller and the Centre for Evidence for the Armed Forces Community, funded by FiMT, for their helpful advice on the draft report.

We are thankful to the members of the Project Advisory Group for their invaluable feedback during the project:

Kerry Taverner (Spider Project)

Annie Dunsmore-Dawson (Tom Harrison House)

Mary Keeling (RAND Europe, Centre for Evidence for the Armed Forces Community, funded by FiMT)

Chris Barnes (Change Grow Live)

Rachel McDonald (Pennine Care NHS Foundation Trust Military Veterans' Service)

Ellen Martin (NHS England Armed Forces).

We would also like to personally thank the public contributors and every respondent who participated in the interviews, focus groups and Delphi surveys.

1 | Executive summary

1.1 | Introduction

Most military personnel leave service with good mental health. However, veterans are more likely to have common mental disorders (CMD), such as depression and anxiety, and alcohol use disorders (AUD), than civilians (Rhead et al., 2022). People with co-occurring CMD and AUD face more challenges when seeking treatment than people with only one condition. Mental health support is typically provided by the NHS (including veteran specific services), while alcohol treatment is usually provided by third sector (or community) services. This means treatment for both conditions can be disjointed, even though guidance says that services should work together to provide treatment (NICE, 2016; PHE, 2017). People with a co-occurring AUD are often excluded from mental health services until they have stopped drinking. However, when people with co-occurring AUDs are included in mental health treatments, they can show similar improvements in mental health outcomes compared to those with only a mental health problem (Buckman et al., 2018; Halsall et al., 2025). Effective treatment for people with co-occurring CMD and AUD typically requires treatment of both conditions at the same time, in a co-ordinated way (NICE, 2016; PHE, 2017).

Despite comparatively higher rates of AUD (11% vs 6%) and CMD (23% vs 16%) in veterans compared to civilians (Rhead et al., 2022), help-seeking remains low. Less than 30% of veterans with an AUD seek help (slightly lower than the approximately 40% reported in the general population) (Gribble et al., 2024; Young et al., 2025). Similarly, only around half of veterans with a CMD access formal treatment (Stevellink et al., 2019). Veterans with co-occurring CMD and AUD can face additional challenges compared to civilian populations, such as lower self-recognition of how severe problems are, increased stigma and shame, and service providers not being aware of unique military experiences (Hitch et al., 2023). Evidence on what works for veterans with co-occurring CMD and AUD, outside of PTSD-focused research, is limited. New guidance for alcohol treatment has recently been published, which includes a chapter on care for military personnel and veterans (Department of Health and Social Care, 2025). However, guidance on the provision of care for veterans with co-occurring CMD and AUD is not captured in the new guidance.

1.2 | Aims

We aimed to understand current treatment experiences and provision of care for veterans with co-occurring CMD and AUD, and to develop recommendations to improve care.

Study 1

Aimed to review existing evidence on how well psychological interventions work for military personnel and veterans with co-occurring CMD and AUD.

Study 2

Aimed to understand veterans' experiences of receiving treatment for co-occurring CMD and AUD, through in-depth interviews.

Study 3

Aimed to compare differences in engagement with treatment and mental health treatment outcomes between veterans with only a CMD compared to those with co-occurring CMD and AUD, using data from an NHS veterans' mental health service.

Study 4

Aimed to understand service providers' views on current care for veterans with co-occurring CMD and AUD, challenges to providing care, examples of best practice, and recommendations for improving treatment.

Study 5

Aimed to gather agreement on recommendations to improve care for veterans with co-occurring CMD and AUD.

1.3 | Study 1

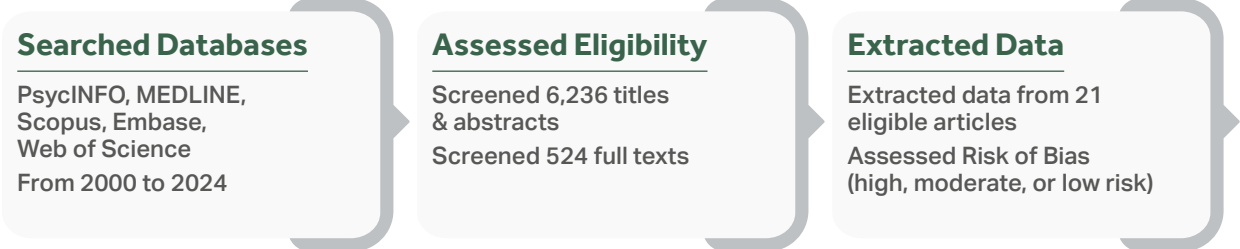
A systematic review on the efficacy of interventions for co-occurring CMD and AUD for military and veteran populations.

We conducted a systematic review of international research. We searched electronic databases and screened records against our eligibility criteria. Twenty-one studies met our eligibility criteria and were included. We analysed the studies using a Synthesis Without Meta-analysis (SWiM) approach.

We found that integrated interventions were better at improving mental health and alcohol outcomes than treatment-as-usual* (TAU, i.e., no change to usual care). Alcohol-focussed treatments were equally as effective as integrated interventions, and also better than treatment-as-usual, for improving alcohol outcomes (few of these studies looked at mental health outcomes).

The efficacy of psychological interventions for co-occurring CMD and AUD in military and veteran populations: a Systematic Review and Synthesis Without Meta-analysis (SWiM)

Identifying and Selecting Studies



Mental Health Outcomes

- Integrated interventions are better than treatment-as-usual (TAU, i.e., no change to care)
- Integrated interventions are more beneficial than alcohol-focused treatments
- Some integrated interventions work better than other integrated interventions for mental health

Alcohol Outcomes

- Integrated or alcohol-focused interventions are more beneficial than TAU
- Integrated interventions and alcohol-focused interventions are equally beneficial
- Comparisons between different integrated interventions show similar effects on alcohol outcomes

Pre-post studies (no comparison group)

- All studies that assessed outcomes pre- and post-intervention, without a comparison group, showed positive effects for mental health and alcohol use
- But these studies do not provide evidence that is as strong as trials with a comparison group

Risk of Bias

- Most of the 21 studies we reviewed had high or moderate risk of bias
- This means that the included studies have methodological limitations which impact the certainty of the findings

*Treatment-as-usual (TAU) also known as routine or standard care, is the healthcare or support a patient normally receives in a given setting. This varies across studies and contexts.

1.4 | Study 2

Understanding treatment experiences of veterans with co-occurring CMD and AUD: a qualitative interview study

We conducted interviews with 17 British veterans with co-occurring CMD and AUD, who had received treatment within the past two years. Participants were recruited through veteran-specific third-sector organisations and social media. Data were analysed using thematic analysis to identify common themes.

We found three key themes. First, military culture, such as norms around masculinity and the normalisation of heavy alcohol use (which masked mental health symptoms), was found to delay help-seeking. Second, veterans described turning points for accessing support, such as reaching crisis point, and highlighted the vital roles of family, peers, and professionals for signposting and support. Third, participants highlighted the need for flexible and integrated care, which understands the unique experiences of veterans. While some positive examples of integrated care were found, particularly through veteran-specific services – participants also stressed that care should reflect individual circumstances, including when difficulties are not linked to military service. However, barriers such as long waits, abstinence requirements, and lack of military cultural awareness in mainstream services, were common.

Understanding treatment experiences of veterans with co-occurring CMD and AUD



Key Messages

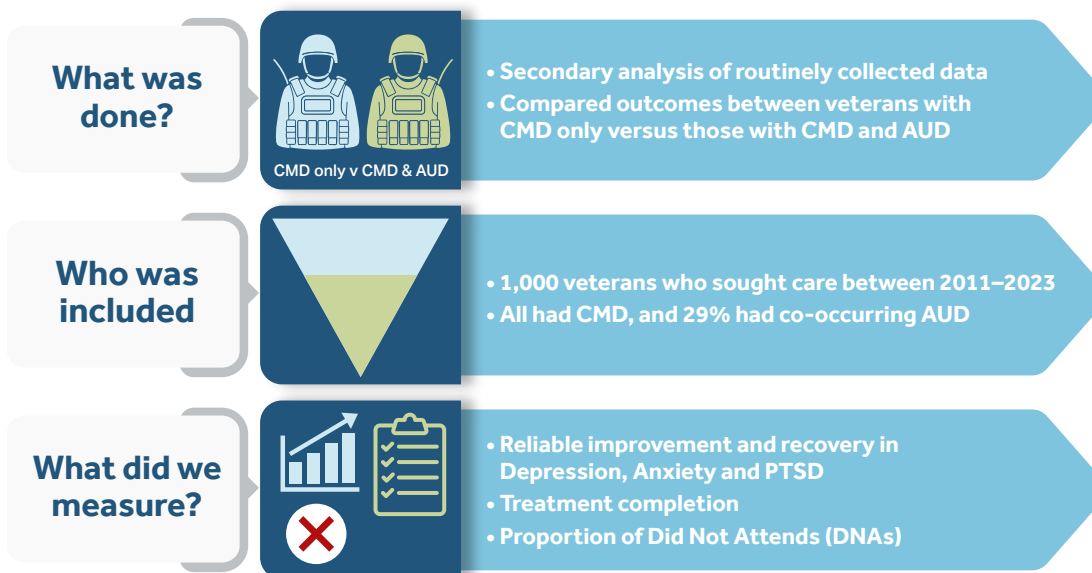
- 1 Military culture shapes norms of stigma, heavy alcohol use and masculinity which leads to delays in problem recognition and help-seeking
- 2 Challenges when seeking support: “wrong doors,” limited awareness of available services, lack of military cultural understanding, rigid policies and requirements
- 3 What works: Veteran-informed services, flexible entry and attendance criteria, and practical support like signposting and advocacy
- 4 There were also good examples of integrated care through veteran-specific services

1.5 | Study 3

Adherence to treatment and treatment outcomes in military veterans with co-occurring CMD and AUD

We conducted an analysis of routine data from Pennine Care NHS Foundation Trust (Sept 2011–Sept 2023). We compared mental health treatment outcomes (i.e., reliable improvement and recovery for depression, anxiety, and PTSD) and engagement with treatment (i.e., proportion of sessions they Did Not Attend (DNA) and treatment completion) between veterans with only a CMD to veterans with co-occurring CMD and AUD (at least hazardous alcohol use). We found that veterans with co-occurring CMD and AUD showed similar levels of reliable improvement (i.e., reduction in symptoms of CMD) and recovery (i.e., no longer meeting criteria for a CMD diagnosis) compared to veterans with CMD only. These findings remained the same when we focused only on those who completed treatment. However, veterans with CMD and AUD were less likely to complete treatment (i.e., 69% compared with 77% of veterans with CMD only) and had a higher proportion of DNAs than veterans with CMD only (i.e., mean proportion DNA 14% vs 9%, respectively). These findings suggest that whilst veterans with co-occurring AUD may have difficulties staying engaged in treatment, they can benefit just as well from psychological therapy.

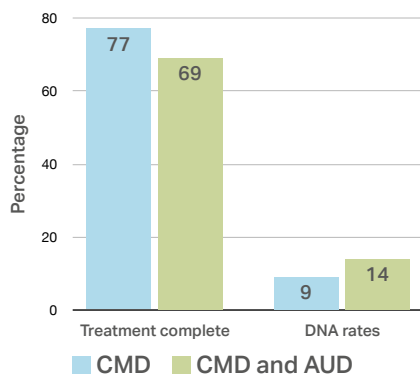
Adherence to treatment and treatment outcomes in military veterans with co-occurring CMD and AUD: Evidence from Pennine Care NHS Foundation Trust Military Veterans Service



What was found?

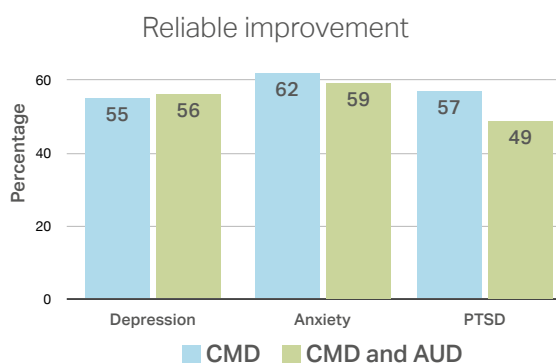
Engagement outcomes

Lower treatment completion and higher DNA rates for CMD and AUD compared to CMD only



Mental health outcomes

Similar improvement and recovery outcomes across CMD only and CMD and AUD groups



Key Message



Although veterans with co-occurring problems often experience difficulties staying engaged in treatment, they show similar benefits from mental health treatment as those without co-occurring problems

1.6 | Study 4

Service providers' perspectives on treatment for co-occurring CMD and AUD in veterans: treatment pathways, challenges, best practices, and recommendations to improve care

We conducted three online focus groups with 17 service providers from NHS and third-sector organisations that support veterans with either or both of CMD and AUD. The focus groups involved group discussions and interactive activities.

We found that co-ordinated treatment for both conditions was seen as the most effective for veterans with co-occurring CMD and AUD. However, service providers outlined issues relating to disjointed services, poor information-sharing, and strict abstinence policies that delay access to mental health treatment. Service providers also described examples of good practice. This included flexible and holistic support, involving substance use workers within veteran mental health teams (e.g., Op COURAGE mentioned specifically), and support from peer mentors. A total of 45 recommendations were suggested by the focus groups which were taken forward to the Delphi study (study 5) to refine into a top 15.

Service providers' perspectives on treatment for co-occurring CMD and AUD in veterans: treatment pathways, challenges and best practice



1.7 | Study 5. Generate consensus on recommendations to improve service provision for veterans with co-occurring CMD and AUD.

We conducted two-rounds of an online Delphi study (a structured method to gather opinions from experts) with an expert panel of service providers from NHS and third-sector services. In Round 1, 41 experts rated the importance of each recommendation on a five-point scale, with those rated 4-5 (highly important) by over 80% progressing to Round 2. In Round 2, 31 experts assessed workability and ranked the recommendations by importance.

We found that, in Round 1, a total of 26 recommendations were rated as highly important by more than 80% of participants. In Round 2, participants assessed the workability of these 26 recommendations and ranked them in order of importance. The 15 highest-ranked recommendations highlighted strong support for accessible and coordinated treatments for veterans, but some of these 15 recommendations were rated as less workable to implement in practice.

1.8 | Key Findings, Conclusions, & Recommendations

Our research shows that veterans with co-occurring CMD and AUD can benefit from psychological therapies and recover, particularly if the treatment targets both conditions. Across these studies, there are three key findings.

Firstly, integrated psychological interventions can be effective for veterans with co-occurring CMD and AUD. While veterans with co-occurring problems may find it more difficult to stay in treatment, they can still benefit in terms of improved symptom outcomes equally to those with only a CMD.

This supports recommendations for:

- “No wrong door” approaches across mental health and alcohol treatment services.
- Abstinence-only policies should be removed in mental health services to reduce barriers for veterans seeking help for both conditions.
- Where possible, CMD and AUD should be treated concurrently and with a coordinated care plan.
- If there is justification to treat one condition first (typically alcohol), veterans should not be left without or experience long delays for mental health support when seeking treatment for alcohol use.

Secondly, these studies identified some unique challenges that veterans may face when seeking support. Veterans report feelings of shame and stigma (linked to military cultural norms of masculinity and self-sufficiency), being unaware of what support is available to them, and a lack of veteran-informed care in some mainstream services.

This shows the need for:

- Increased awareness of services that provide support for veterans with co-occurring CMD and AUD.
- Approaches such as national campaigns and local strategies (e.g., organised by local authorities and veteran-specific services or charities) which aim to reduce stigma.
- Mental health and alcohol treatment services to build their awareness of, and conduct outreach work with, veteran organisations.

Finally, we found examples of good practice, such as:

- Flexible and holistic support that reflects the needs and preferences of veterans.
- Wrap-around care to support veterans to navigate complex services and remain engaged in treatment.
- Personalised care plans which reflect the wider needs (e.g., housing support) and goals of veterans.
- Ensuring that veterans with co-occurring CMD and AUD are fully informed about their options and are actively supported to get the treatment that they need.

The findings from studies 1- 4 informed the development of recommendations, which were then agreed on by stakeholders in the final study. We present 15 recommendations to improve care for veterans with co-occurring CMD and AUD.

Recommendations to improve service provision for veterans with co-occurring CMD and AUD



Awareness

- 1 Increase transitioning veterans' awareness of NHS & third-sector services that support veterans with co-occurring CMD and AUD.
- 3 Mainstream mental health and alcohol services should engage in outreach with veteran organisations and events to improve visibility and share available support.
- 4 Encourage providers to learn about local and national veteran support services for alcohol, mental health, and related needs like housing.
- 5 Develop national campaigns sharing lived experiences and evidence to highlight co-occurring CMD and AUD and encourage help-seeking.



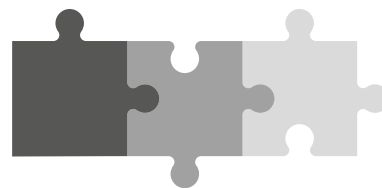
Access and Eligibility

- 2 Adopt low-threshold, no wrong door approach with self-referral options across mental health and alcohol services to reduce barriers.
- 7 Provide brief alcohol interventions and follow-up plans at 1st contact (e.g., GP practices), even if veterans avoid specialist services.
- 8 Consider limitations of abstinence-only policies and adopt flexible, needs-based approaches that assess veterans' ability to engage in treatment.
- 9 All organisations should include strategies to reduce stigma and shame around mental health and alcohol use.



Assessment

- 6 Ensure mental health screening is included in initial drug and alcohol assessments, inform veterans of its purpose, and refer for further evaluation.
- 10 Assess alcohol and mental health issues at multiple points in mental health and alcohol services, as conditions can change over time.



Treatment Approaches

- 11 Ensure veterans seeking alcohol support receive timely mental health support, with quick progression from referral to assessment and treatment in order to maintain engagement and prevent deterioration.
- 12 Support veterans in creating personalised care plans for their needs, goals and preferences, ensuring coordinated mental health and alcohol support.
- 13 After assessment, inform veterans with co-occurring conditions and guide them into coordinated care pathways.
- 14 Treat CMD and AUD together concurrently with a coordinated care plan, unless a sequential approach is clearly justified.
- 15 Provide mental health support promptly after alcohol detox to address emerging issues (e.g., anxiety) and reduce relapse risk.

Note: The numbers indicate ranking positions.



2 | Introduction

2.1 | What is the problem being addressed?

Whilst most military personnel leave service with good mental health, the prevalence of common mental disorders (CMD) and alcohol use disorders (AUD) is higher than in civilians. A previous comparison study across representative veteran and civilian populations found greater odds of AUD (11% vs 6%), CMD (23% vs 16%) and post-traumatic stress disorder (PTSD; 8%, rising to 17% for veterans who were deployed in combat roles, vs 5%) in veterans compared to civilians, after accounting for those factors which could explain any differences, such as socioeconomic status (Rhead et al., 2022). The prevalence of AUD is also higher in military personnel than other emergency services personnel, such as police officers (3% meet criteria for AUD) (Irizar et al., 2021).

This higher prevalence of mental health need can be compounded by challenges that veterans might face in finding the support that they need, including having to navigate a complex structure of mainstream and veteran specific services, and in having to navigate all that is required to transition well from the Armed Forces to civilian life, as this process can be challenging for some (Misca et al., 2023; Morris & Hanna, 2023). Furthermore, research has shown that veterans show low levels of problem recognition for AUD, which can delay people from seeking support (less than half recognise they have an AUD – which is comparable to the general population (McManus et al., 2016; Spanakis et al., 2023)). These factors may explain why research from one of the largest veteran-specific mental health providers wait 15 years before seeking any support for complex mental health difficulties (though veterans who served in Afghanistan or Iraq appear to seek help sooner, approximately 3-6 years after leaving service) (Campbell et al., 2023).

CMDs typically do not occur in isolation in veterans. Comorbid alcohol or substance use disorders are commonly observed (Goodwin et al., 2017; Head et al., 2016), with the high prevalence of AUD driven by the normalisation of heavy alcohol use in military service, which can be a coping response for traumatic experiences that continues into civilian life (Jones & Fear, 2011). Serving personnel and veterans are more likely to continue drinking to harmful levels if they have co-occurring PTSD, whereas serving personnel and veterans who do not have PTSD are more likely to reduce their alcohol consumption over time (Palmer et al., 2022). Additionally, serving personnel and veterans who continue to drink to harmful levels are more likely to report a CMD than those who maintain low-risk levels of drinking (Goodwin et al., 2017). Co-occurring problems often result in poorer outcomes, as people are less likely to get therapies that they need in a timely manner, due to the current siloed systems which have been set up to typically treat these conditions separately.

2.2 | Treatment provision for veterans with co-occurring CMD and AUD

The National Institute for Health and Care Excellence (NICE) has developed guidelines for the provision of care for people with co-occurring substance use and mental health problems (NICE, 2016). These guidelines outline three treatment models, including serial or sequential (i.e., receive treatment for one condition first, followed by treatment for the co-occurring condition), parallel (both problems are addressed at the same time, but by separate services), and integrated (i.e., one service addresses both problems at the same time, in the same service, or separate services provide co-ordinated care to address both issues) (NICE, 2016). Integrated care may not be being implemented routinely in practice: our PPI work with veterans identified that serial models are most common, and veterans are often told that they must stop drinking before they are able to receive support for their mental health. Additionally, some veterans may only seek help for one problem, if that is having a greater impact on their life, or only receive help for one problem due to long gaps between serial treatments meaning that some people never receive treatment for the second condition.

Mental health support is typically provided by NHS services, whereas alcohol treatments are usually provided by third sector organisations. This separation often leads to fragmented care. The treatment landscape also differs for veterans compared to the general population. There are veteran-specific services, such as Op COURAGE (NHS) or Veterans NHS Wales, which provide specialised care for military-related mental health issues, and We Are With You or Tom Harrison House, which provide alcohol treatment programmes specifically for veterans. In addition to the NICE guidelines mentioned, Public Health England (PHE) also produced guidance which states that commissioners and providers of CMD and AUD services have a joint responsibility to work collaboratively, and that there should be an open-door policy for individuals with co-occurring problems (PHE, 2017). Both the NICE and PHE guidance also outline the importance of

asking about alcohol use among those identified with a mental health problem, following up after missed appointments, and ensuring a care co-ordinator is allocated (NICE, 2016; PHE, 2017). However, civilian service users and service providers have highlighted that this is not typically followed in routine practice (Jackson et al., 2024; Priester et al., 2016). Additionally, there is a need for such services to understand the veteran-specific context, given the different provision of those services.

2.3 | Barriers to access and engagement for veterans with co-occurring CMD and AUD

People with co-occurring CMD and AUD report more barriers to accessing treatment than those with only one condition (Kaufmann et al., 2014). For example, people report being turned away from mental health services until they have reduced their alcohol use, and practitioners not recognising the relationship between the conditions which can limit access to co-ordinated care (Jackson et al., 2024). People with co-occurring CMD and AUD face both individual-level and structural barriers (Priester et al., 2016). Individual-level barriers refer to personal vulnerabilities, such as substance use worsening mental health symptoms and lowering motivation, and personal beliefs, such as lack of trust in healthcare services (Priester et al., 2016). Structural barriers refer to the limited availability of integrated services, under-identification of co-occurring conditions, and long waiting lists (Priester et al., 2016). Stigma is also a commonly reported barrier to help-seeking for both AUD (Oleski et al., 2010) and CMD (Clement et al., 2015), particularly for veterans (Coleman et al., 2017; Randles & Finnegan, 2022).

Understanding barriers to access, engagement and retention with treatment is particularly important in veterans, as less than 70% of veterans with a self-reported AUD access treatment (Gribble et al., 2024). Studies show that veterans sometimes normalise excessive alcohol consumption, which can delay engagement with substance use services, and result in complex and complicated presentations to healthcare services, often at the point of crisis (Kiernan et al., 2018). Alcohol use is also reported as a barrier to engaging with mental health services (Hitch et al., 2023b). In the context of PTSD, alcohol is frequently used to dampen hyperarousal and intrusive symptoms—consistent with the self-medication hypothesis—which can maintain problematic use and further impede help-seeking (Hawn et al., 2020). Veterans face specific barriers relating to their military background, as noted above. Research shows that healthcare professionals require training to better understand the military and veteran culture and the nature of modern warfare, and to tackle stigma (Kiernan et al., 2016).

2.4 | Gaps in the literature

Existing systematic reviews mostly examine the efficacy of interventions for co-occurring AUD and PTSD (Roberts et al., 2022; Roberts et al., 2015); and although veterans are included in some, they are not the focus. Less evidence exists on the effectiveness of interventions for co-occurring CMD and AUD, such as depression and anxiety; but these latter conditions do warrant separate study. Interventions to treat CMD differ from interventions to treat PTSD, as the latter are typically trauma-focused and may not include the wide-ranging interventions that are used to treat the former, such as cognitive and behavioural therapies. There is therefore a need to evaluate the effectiveness of interventions for people with co-occurring CMD and AUD as the literature is scarce generally. As the treatment landscape differs for veterans compared to civilians, research on veterans specifically is also required. For example, it is important to understand whether veterans with co-occurring problems can benefit to the same extent from the psychological therapies offered to veterans who solely have a CMD. This needs to be studied in the context of understanding that veterans with co-occurring problems may experience more barriers to engaging with a cycle of psychological therapy.

In summary, there are three existing treatment models (serial, parallel, integrated) for co-occurring CMD and AUD, but a lack of evidence on which approach is more effective, particularly for veteran populations. Guidance exists on the provision of care for people with co-occurring CMD and AUD (NICE, 2016; PHE, 2017) with new guidance having recently been published regarding alcohol treatment in specific populations, which includes a section on veterans (Department of Health and Social Care, 2025). However, there is no specific guidance for the provision of care for veterans with co-occurring CMD and AUD and it is important to understand integration across veteran specific mental health services and alcohol service provision.

2.5 | Aims of the report

The overarching aim of this project was to understand current treatment experiences and provision for veterans with co-occurring CMD and AUD, and to develop recommendations to improve treatment.

Five studies were conducted to address the following sub-aims:

Study 1
To conduct a systematic review and synthesis of international evidence on the efficacy of interventions for co-occurring CMD and AUD for military and veteran populations, comparing different intervention models (e.g., integrated versus treatment for a single condition).
Study 2
To qualitatively explore military veterans' experiences of treatment services for co-occurring CMD and AUD, focusing on (i) access to treatments (e.g., around eligibility or long gaps between serial treatments), (ii) the type and order of treatments they received, and (iii) engagement with services.
Study 3
To quantitatively identify and compare the level of adherence to treatment services and CMD treatment outcomes across military veterans with (i) CMD only and (ii) co-occurring CMD and AUD within a single large NHS military veterans' service.
Study 4
To identify from a service provider perspective, (i) the most common treatment pathways for veterans with co-occurring CMD and AUD, (ii) examples of best practice; (iii) potential barriers and facilitators; and (iv) recommendations for improving treatment.
Study 5
To generate consensus on recommendations to improve service provision for veterans with co-occurring CMD and AUD.



3 | Study 1

The efficacy of psychological interventions for co-occurring common mental disorders (CMD) and alcohol use disorders (AUD) in military and veteran populations: a Systematic Review and Synthesis Without Meta-analysis (SWiM)

3.1 | Background & aims

A range of psychological interventions are used to manage and treat AUD (including hazardous, harmful, or dependent alcohol use, with the latter two usually being defined as AUD), which vary depending on severity. Hazardous alcohol use is often treated through brief interventions, whereas harmful or dependent alcohol use is often treated through motivational interviewing, 12-step treatment programmes, and addiction-specific cognitive behavioural therapy (CBT) (Nadkarni et al., 2023). Specific types of CBT are also commonly used as an effective treatment for depression and anxiety (Twomey et al., 2015). Interventions for PTSD tend to be trauma-focused, such as trauma-focused CBT and eye movement desensitisation and reprocessing (EMDR) (Lewis et al., 2020).

Treatment for individuals with co-occurring CMD and AUD often requires coordinated intervention approaches. This may include treating one condition first, followed by treatment for the second condition (sequential), or treating both conditions at the same time in a coordinated way (integrated). Sometimes individuals with co-occurring problems may only receive treatment for one condition (e.g., alcohol-focused interventions), and it is possible that this could have benefits for both conditions. This systematic review aimed to determine the efficacy of psychological interventions for reducing symptoms of CMD and AUD (including PTSD) in military and veteran populations and to understand whether integrated interventions which target both CMD and AUD are more effective than interventions which target either condition in isolation.

3.2 | Methods

We conducted a systematic review of existing literature to determine how well psychological interventions work for co-occurring CMD and AUD in military personnel and/or veterans.

We searched the following databases from 2000 to September 2024 for published studies: PsycINFO, MEDLINE, Scopus, Embase, Web of Science. The search strategy included keywords relating to alcohol use, common mental disorders, psychological interventions, and military/veteran populations. After conducting our search and removing duplicate records, we first screened titles and abstracts against the eligibility criteria, followed by full texts.

Inclusion criteria	Exclusion criteria
Serving and/or ex-serving military personnel, from any country At least 80% of the study sample met criteria for co-occurring CMD and AUD Studies focusing on polysubstance use (substance use disorder, SUD) were included if the primary substance was alcohol for at least 80% of participants Psychological interventions for either alcohol use or CMD, or integrated interventions for both conditions Studies with any experimental design (e.g., randomised controlled trials [RCTs], single arm before and after studies without a comparator group, pilot studies)	Studies of family members of military personnel or veterans and service providers Interventions that were primarily pharmacological or psychosocial interventions (e.g., yoga, acupuncture) Observational studies, qualitative studies, and mixed methods studies

Table 3.1: Inclusion and exclusion criteria for papers to be included in the review

We extracted data from all eligible articles. This included information on the study design, sample characteristics (e.g., proportion with CMD and AUD), outcome measures, and results for primary outcomes. The primary outcomes included:

- Changes in alcohol use severity or patterns of use (e.g., percent days abstinent and percent heavy drinking days)
- Changes in symptom severity related to depression, anxiety, and PTSD
- Changes in diagnosis (disorder present to absent) for either AUD, CMD, or both
- We also assessed the risk of bias in all eligible articles. Risks of bias assess the likelihood that features of the study design or conduct of the study will give misleading results (scores of 0-59% = high risk of bias, 60-79% = moderate risk of bias, 80-100% = low risk of bias).

To synthesise the findings, we conducted a Synthesis Without Meta-analysis (SWiM). It was not possible to conduct a meta-analysis as the study designs and outcomes differed too much. We first grouped outcomes that were similar into outcome domains (depression, anxiety, PTSD, alcohol use). We then looked at the results of studies for each outcome domain. For randomised controlled trials (RCTs), we categorised each result as the intervention being better, worse, or no different, compared to the comparator after treatment. For pre-post (before and after) single-arm studies, we categorised each result at the end of treatment as being better, worse, or no different, compared to before treatment.

Arrow	Definition
	Positive effect (improvement favouring the intervention in RCTs / outcome better at the end of treatment than before in pre-post studies)
	Negative effect (improvement favouring the comparator in RCTs / outcome better before treatment than at the end in pre-post studies)
	No effect, mixed or conflicting findings (no difference or inconsistent results)

Table 3.2: Overview of how the SWiM criteria were applied to determine directionality of the study effects

3.3 | Results

We identified 14,825 studies in our initial search. In total, 21 studies met our inclusion criteria (see Figure 3.1). Most studies were conducted in the USA (n=18), with two studies from the UK and one from Australia.

Most studies (n=15) employed a randomised controlled trial (RCT) design. Of these, 12 evaluated integrated interventions and three evaluated alcohol-focused interventions. The remaining studies comprised five pre-post single-arm studies, and one non-randomised comparative study, all evaluating integrated interventions.

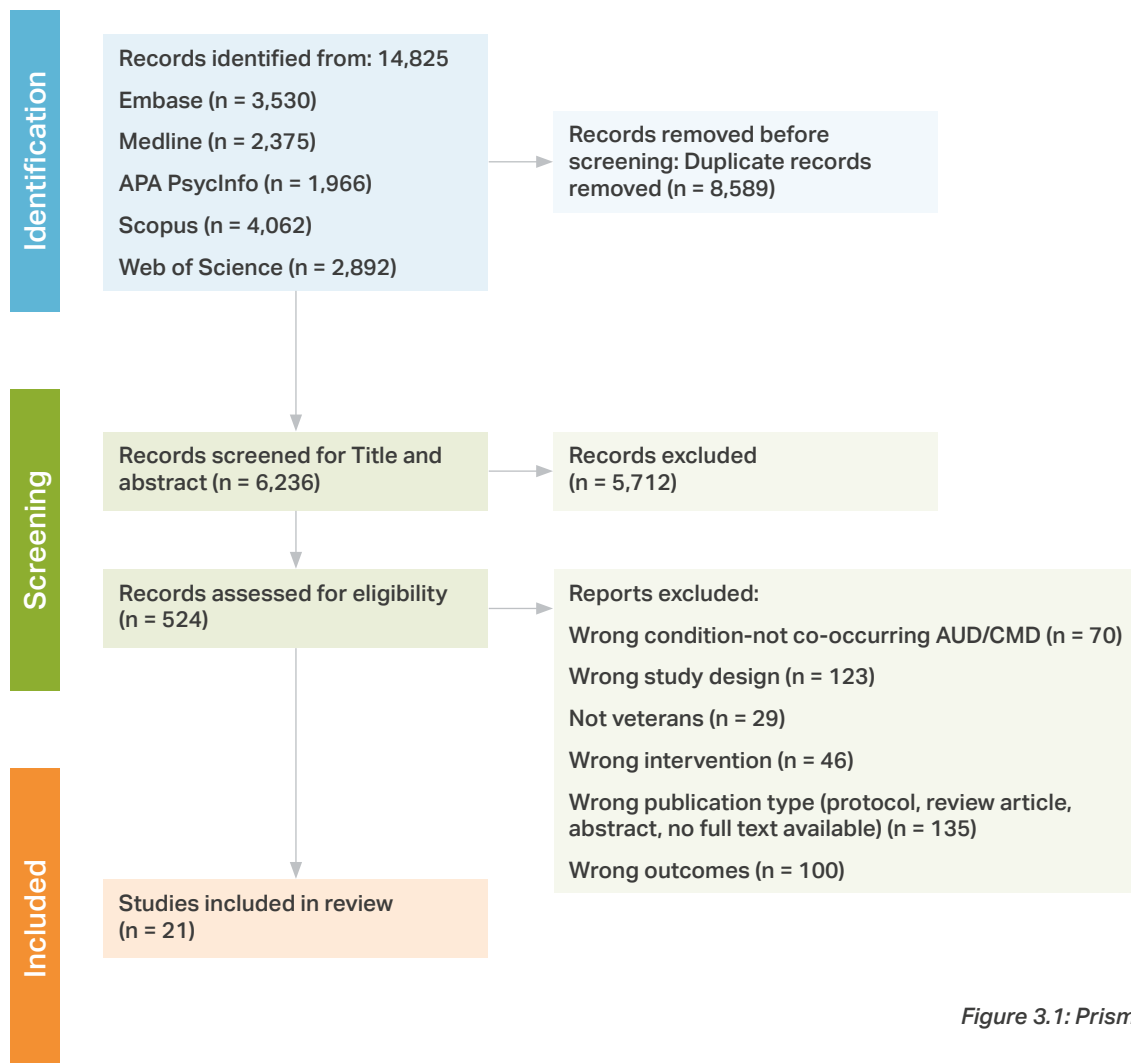


Figure 3.1: Prisma Flow Diagram

3.3.1 | Treatment outcomes in randomised controlled trials (RCTs)

Integrated interventions Vs treatment-as-usual* (TAU)

Five RCTs compared integrated interventions to TAU or delayed interventions. TAU means that the comparator group was not provided with any treatment beyond that which they would usually receive and helps isolate the added benefit of the intervention. Delayed interventions are when the comparator group receives the same intervention as the treatment group but only after the study period has ended, which can be ethically important when the intervention is expected to be beneficial. All five studies measured differences in PTSD and alcohol use between intervention and comparator groups. No studies examined differences in depression and anxiety.

Across the five RCTs, four integrated interventions showed improvements for PTSD and AUD compared to TAU or delayed interventions (Acosta et al., 2017; Brief et al., 2013; Capone et al., 2020; Possemato et al., 2024). These interventions used integrated CBT for PTSD and AUD (Acosta et al., 2017; Capone et al., 2018), with some also incorporating motivational interviewing approaches for AUD (Brief et al., 2013) and prolonged exposure therapy for PTSD (Possemato et al., 2024). However, one study implementing the integrated Seeking Safety model (present-focused CBT) for PTSD and AUD showed no difference between the intervention and comparator group for both outcomes (Boden et al., 2012). This may be because treatment as usual in this study was more comprehensive and included a range of support to treat both PTSD and AUD, meaning participants benefitted equally from the intervention and usual care.

Risk of bias was high for three out of five studies, with two studies rated as moderate risk of bias. This means that there were concerns about the methodological quality of the studies, which reduces our confidence in the findings.

*Treatment-as-usual (TAU) also known as routine or standard care, is the healthcare or support a patient normally receives in a given setting. This varies across studies and contexts.

Study	N	Intervention	Comparator	PTSD	Depression	Anxiety	Alcohol
Integrated Vs TAU/delayed intervention							
Boden et al (2011)	98	Integrated (SS)	TAU	◄►			◄►
Brief et al (2013)	600	Integrated (VetChange)	Delayed intervention	▲			▲
Acosta et al (2016)	162	Integrated (Web based CBT)	TAU	▲			▲
Possemato et al (2024)	63	Integrated (PC-TIME)	TAU	▲			▲
Capone et al (2018)	44	Integrated (ICBT)	TAU	▲			▲
Integrated Vs Alcohol							
Back et al (2019)	81	Integrated (COPE)	Alcohol (RP)	▲	▲		◄►
Lydecker et al (2010)	206	Integrated (ICBT)	Alcohol (TSF)		◄►		◄►
Integrated Vs Integrated							
Norman et al (2019)	119	Integrated (COPE)	Integrated (SS)	▲			◄►
Kehle-Forbes et al (2019)	183	Integrated (MET/PE)	Serial (phased MET/PE)	◄►	◄►	◄►	◄►
Najavits et al (2018)	52	Integrated (past-focused CC)	Integrated (present-focused SS)	◄►			◄►
Haller et al (2016)	123	Integrated (CPT-M)	Integrated (CBT)	▲	◄►		◄►
Possemato et al (2019)	30	Integrated (Web peer support CBT)	Integrated (Web self-managed CBT)	▲			▼
Alcohol Vs TAU							
Leightley et al (2022)	123	Alcohol (DrinksRationApp)	TAU				▲
Battersby et al (2013)	77	Alcohol (Flinders programme)	TAU	◄►	◄►	◄►	▲
Alcohol Vs Alcohol							
Killeen et al (2023)	204	Alcohol (mindfulness)	Alcohol (TSF)				▲

Table 3.3. Effect-direction plots for the RCT studies

Effect direction:

upward arrow: ▲ = positive health impact

downward arrow ▼ = negative health impact

sideways arrow ◄► = no change/mixed effects/conflicting findings

Study quality/Risk of bias (ROB): denoted by row colour:

low ROB
 some concerns
 high ROB

Integrated interventions Vs alcohol-focused treatments

Two RCTs compared integrated interventions to alcohol-focused interventions. Only one study demonstrated better mental health outcomes for the integrated approach. Back et al. (2019) found that the integrated COPE (concurrent treatment of PTSD and substance use disorders using prolonged exposure) intervention led to greater reductions in PTSD and depression severity at post treatment compared to relapse prevention (alcohol-focused treatment), although no differences were observed across these interventions for alcohol use severity. Lydecker et al. (2010) compared integrated CBT with alcohol-focused 12-step facilitation, finding similar improvements across these interventions for both alcohol and depression outcomes. The risk of bias was rated as high for both studies, meaning we cannot be confident in the study findings.

Integrated interventions Vs Integrated interventions

Five RCTs compared two different integrated interventions, such as concurrent treatment of PTSD and substance use disorder using prolonged exposure therapy (COPE-PE) versus integrated Seeking Safety (Norman et al., 2019).

Three studies found that one integrated intervention was more beneficial for improving PTSD outcomes (COPE-PE, CBT with motivational interviewing, peer-support integrated CBT), than the comparator (Seeking Safety, CBT without motivational interviewing, self-managed integrated CBT respectively). For example, Norman et al. (2019) found that the COPE-PE model led to greater PTSD symptom reductions than Seeking Safety, but there were no differences between the two groups for alcohol outcomes. Cognitive processing therapy (for PTSD) with motivational interviewing (for AUD, CPT-M) was more beneficial for PTSD outcomes than integrated CBT, but both groups showed similar changes for depression and alcohol outcomes (Haller et al., 2016). Peer-support integrated CBT was more beneficial than self-managed integrated CBT for PTSD, but self-managed CBT was more beneficial for alcohol outcomes (Possemato et al., 2019). Two studies showed no difference between the two integrated interventions for mental health or alcohol outcomes (Kehle-Forbes et al., 2019; Najavits et al., 2018). Kehle-Forbes et al. (2019) was the only study to compare sequential treatment to an integrated approach, finding no differences between the two treatment approaches for CMD and AUD outcomes.

Four studies had a high risk of bias, with one study having a low risk of bias. The findings across these studies are mixed for PTSD outcomes, with some showing that one type of integrated intervention is more beneficial for improving PTSD symptoms than an alternative integrated intervention (including the low risk of bias study). However, for most studies (including the low risk of bias study), both types of integrated interventions were equally beneficial for improving alcohol and other mental health outcomes.

Alcohol-focused interventions Vs TAU

Two RCTs compared alcohol-focused interventions to TAU. Leightley et al. (2022) (low risk of bias) reported improvements in alcohol use outcomes following the use of the DrinksRation smartphone app compared to TAU (Leightley et al., 2022). Battersby et al. (2013) (high risk of bias) evaluated the Flinders Programme against a waitlist control, finding improvements in alcohol outcomes for the intervention group compared to TAU, but both groups showed similar improvements in CMD outcomes (Battersby et al., 2013).

Alcohol-focused interventions Vs alcohol-focused interventions

One RCT compared two alcohol-focused interventions (mindfulness-based relapse prevention vs 12-step facilitation treatment). Killeen et al (2023) (moderate risk of bias) compared a mindfulness-based relapse prevention intervention with 12-step facilitation therapy, finding that mindfulness-based relapse prevention was more beneficial for improving alcohol outcomes (Killeen et al., 2023).

3.3.2 | Treatment outcomes in pre-post and non-randomised studies

Table 3.4 summarises findings from six non-randomised pre-post (before and after) studies. One non-randomised study included a comparator group, comparing integrated prolonged exposure and CBT for PTSD and AUD, against CBT for AUD only (Norman et al., 2016). One study evaluated an intervention for moral injury, comparing outcomes before and after the intervention (Williamson et al., 2023). All other studies examined an integrated intervention, looking at outcomes before and after (Luciano et al., 2022; Meyer et al., 2018; Schumm et al., 2015; Watkins et al., 2024).

All studies showed positive effects for PTSD, depression, and alcohol use, from pre- to post-treatment. However, all pre-post non-randomised studies were rated as having moderate or high risk of bias, primarily due to methodological limitations such as lack of control groups, small sample sizes, and non-randomised designs. Without a suitable control group, it is not known whether outcomes would have improved over time, without the intervention.

Study	N	Intervention	Comparator	PTSD	Depression	Anxiety	Alcohol
Meyer et al (2018)	43	Integrated (ACT)	None (pre-test)	▲	▲		▲
Williamson et al (2023)	20	Moral Injury	None (pre-test)	▲	▲		▲
Luciano et al (2023)	13	Integrated	None (pre-test)	▲			
Norman et al (2016)	30	Integrated (PE + CBT)	TAU/Single (CBT for SUD)	▲	▲		
Watkins et al (2023)	42	Integrated (IOP)	None (pre-test)	▲	▲		▲
Schumm et al (2015)	9	Integrated (CTAP)	None (pre-test)	▲	▲		▲

Table 3.4: Effect direction plots for the pre-post studies

Effect direction: upward arrow:

- ▲ = positive health impact, upward arrow
- ▼ = negative health impact, downward arrow

◄► = no change/mixed effects/conflicting findings

Study quality/Risk of bias (ROB): denoted by row colour:

- low ROB
- some concerns
- high ROB

3.4 | Key messages & conclusions

There was evidence across the studies that integrated interventions were helpful for improving alcohol use and PTSD, in comparison to TAU. This aligns with previous findings from two reviews which examined the efficacy of interventions for co-occurring substance use disorders and PTSD, which included studies of civilian populations and some studies with veteran populations (Roberts et al., 2022; Roberts et al., 2015). However, when compared to alcohol-focussed treatments, integrated interventions were not more effective for improving alcohol use outcomes, which also aligns with a recent review of studies including both civilian and veteran populations (Hien et al., 2024).

Whilst alcohol-focused treatments were beneficial for reducing alcohol use among veterans with co-occurring problems, these alone may not have the desired effect on mental health outcomes. Mental health outcomes were either not measured or improved equally among the alcohol-focused treatment group and TAU.

Trials which compared two integrated interventions showed varied results and typically did not find that one was more favourable than the other; but this cannot be generalised to mean that all integrated treatments may be equally effective. In one low-risk-of-bias study (Norman et al., 2019) exposure-based therapies (e.g., COPE/I-PE) outperformed present-focused skills-based approaches (e.g., Seeking Safety) for PTSD outcomes, though the results did not extend to alcohol use outcomes. This highlights the importance of selecting evidence-based integrated psychological therapies.

While concerns are often raised about clinical risk when delivering integrated treatment for CMDs and alcohol use, particularly regarding the need for abstinence prior to engagement, some studies have demonstrated that integrated approaches can be effective even when individuals are not abstinent. Overall, the studies seem to show that veterans with co-occurring problems can engage with integrated treatment approaches that address both conditions from the outset.



4 | Study 2

Understanding treatment experiences of veterans with co-occurring mental health and alcohol problems: a qualitative interview study

4.1 | Background & aims

Despite the high prevalence of co-occurring CMD and AUD in veteran populations (Goodwin et al., 2017; Head et al., 2016), help-seeking is low for these conditions. Among UK serving personnel and veterans, 71% of those who meet criteria for an AUD have not sought any form of help (Gribble et al., 2024) and only half of those with a CMD seek formal medical treatment (Stevellink et al., 2019) - which is comparable to the general population (McManus et al., 2016).

Systematic reviews have examined barriers and facilitators to help-seeking among veterans with CMD and/or AUD (Hitch et al., 2023a, 2023b). Quantitative studies showed common barriers including long wait lists, costs, lack of transport, and schedule conflicts (Hitch et al., 2023a). Qualitative evidence highlighted barriers such as stigmatising beliefs about help-seeking, normalisation of excessive alcohol use within military culture, limited awareness of problem severity, and systemic service issues (e.g., lack of information on available services, civilian services misunderstanding veterans and lack of trust in the system) (Hitch et al., 2023b). In contrast, facilitators to help-seeking include reaching a crisis point, military informed health professionals, and peer-led support (Kiernan et al., 2016; Kiernan et al., 2018).

People with co-occurring CMD and AUD, both civilian and veterans, face fragmented services and siloed treatment services, exclusionary thresholds, and long delays meaning many people receive help for only one condition (Harris et al., 2023; Priester et al., 2016). Although national guidance recommends open access for people with co-occurring conditions (PHE, 2017), evidence suggests that this is not consistently implemented in practice (Jackson et al., 2024; Swithenbank et al., Under Review). This study, therefore, aimed to qualitatively explore veterans' experiences of treatment for co-occurring alcohol and mental health problems, with a focus on treatment pathways, and barriers and facilitators to access and engagement.

4.2 | Methods

We used a qualitative approach to explore veterans' experiences of seeking treatment for co-occurring CMD and AUD. Semi-structured interviews were conducted with UK veterans with co-occurring CMD and AUD and who had sought help for at least one of these two conditions within the past two years. Participants were excluded if they were within the first month of treatment or currently serving in the Armed Forces.

Participants were recruited through third sector (primarily veteran-focused) organisations, and social media advertising. Interested individuals received an information sheet, completed a screening interview to determine eligibility and treatment model, and were given 24 hours to decide whether to participate. Participants then provided informed consent before taking part in the interview. Interviews were conducted either on the phone or online (e.g., Teams). A topic guide was developed with input from PPI and stakeholder groups, to support the interview process. All interviews were audio-recorded, and participants were reimbursed £20 for their time. The procedure is summarised in Figure 4.1.

Audio recordings of the interviews were transcribed verbatim and analysed using an inductive thematic approach. Data collection and analysis were done simultaneously, allowing insights of earlier interviews to inform later data collection. Transcripts were repeatedly reviewed, coded iteratively, and grouped into categories and collated into themes. Data analysis was carried out using NVivo v15 analysis software.



Figure 4.1: Flow diagram of procedure for conducting interviews

4.3 | Results

4.3.1 | Participant characteristics

Seventeen veterans participated in the study. Participants were predominantly male ($n = 16$) and White British ($n = 16$), with ages ranging from 35 to 62 years (mean age 54 years). Most had served in the Army ($n = 10$), with others from the RAF ($n = 5$) and Navy ($n = 2$). A majority had been deployed ($n = 12$), with years of service ranging from 3.5 to 25 years. Over half of participants were economically active ($n = 10$), and just over one-third ($n = 7$) were currently married.

4.3.2 | Summary of themes & treatment pathways

Three overarching themes emerged from veterans' accounts: Accessing care for co-occurring CMD and AUD often involved delays (Theme 1), help-seeking typically followed a crisis, and was facilitated by support networks (Theme 2), and veterans stressed the need for flexible, culturally informed and integrated care models (Theme 3).

We explored the treatment pathways experienced by the 17 participants which included both earlier and more recent (past two years) experiences. Current treatment pathways (within the past two years) were categorised as single, sequential, parallel, or integrated, with some notable shifts over time. For many participants, earlier treatment (more than two years earlier) involved single- or sequential-pathway models, where either alcohol or mental health was addressed in isolation or one after another. Some experienced sequential care but had to complete alcohol detox before accessing psychological support. Only a few participants described integrated models, often facilitated by veteran-specific services or charities. Recent pathways (past two years) show a modest shift toward parallel care, where alcohol and mental health are treated concurrently but through separate services (e.g., voluntary-sector alcohol support alongside veterans' mental health services). Integrated models remain limited but are emerging, especially within military-informed NHS pathways.

Theme 1

Military culture and alcohol facilitating delays in help-seeking

Veterans described how the culture of the Armed Forces shaped norms of masculinity, self-reliance and heavy drinking, created stigma around acknowledging difficulties and framed help-seeking for alcohol and/or mental health difficulties as a weakness. The expectation to "just get on with it," alongside the normalisation of alcohol use in and after service, reinforced silence, or increased delays. As veterans described:

"There's a huge stigma... a 'just get on with it' thing... it's harder to say, 'I am struggling'." (P01, 50-54 years, Single-MH)

Veterans often initially used alcohol to manage mental health symptoms, such as anxiety, insomnia, or intrusive memories. What began as a coping mechanism gradually became part of the problem, masking symptoms and making it harder to recognise when help was needed:

“Drinking... makes you chaotic... half the time you are not actually able to identify, I think I might be depressed’... you are self-medicating.” P16, 55-59 years, Single-MH)

These patterns also undermined engagement with care. One veteran described how good intentions in the morning often gave way to drinking by evening, disrupting motivation and follow-through, an experience echoed by others:

“You’ve got to be in the right state to reach out... wake up with the best intentions... or drink a large gin and tonic... Often the large gin can be the winner.” (P13, 60-64 years, Single-MH)

Theme 2

Turning points for accessing support for co-occurring problems

While stigma, military norms, and alcohol use often delayed help seeking (Theme 1), veterans described reaching critical turning points that finally led them to seek support. According to veterans’ narratives, such turning points typically occurred when alcohol use and mental health difficulties caused strain to key areas of their lives—relationships, employment, and physical health - making life feel unmanageable:

“This went on for 6–7 years. Lots of arguments with the wife, lots of lost jobs, getting done for drink driving... and eventually I just woke up one morning and thought, I can’t do it anymore. Went to see the doctor.” (P04, 60-64 years, Single-MH)

For some, these pressures built up, leading to crisis points that prompted care-seeking. As one participant highlighted:

“It was only after my first suicide attempt that I actually stopped drinking” (P11, 45-49 years, Single-MH).

Most veterans revealed that, family - especially partners - played a key role in overcoming barriers to care and accessing and engaging with services. Their support often included understanding, encouragement, practical assistance, and advocacy:

“My wife talked me into it... if I hadn’t done that, I wouldn’t have got the help... I don’t think I would be where I am today.” (P12, 45-49 years, Single-MH)

Across interviews, veterans highlighted challenges in navigating care for mental health and/or alcohol problems. Many veterans reported limited awareness of available services, particularly at the point of discharge from the armed forces. Initial signposting was often passive, leaving individuals to self-navigate complex systems while unwell:

“They told you more about housing and getting a job... They never referred to your mental state of mind... I didn’t know where to look.” (P09, 60-64 years, Integrated)

Effective signposting and advocacy (often from trusted professionals, peers, or family members) reduced these challenges and created momentum for engagement:

“She [physiotherapist] looked me in the eye and went, ‘Are you okay?’... and within about a week or two weeks I got the help I needed.” (P07, 55-59, Single-MH)

Veterans also highlighted the importance of peer networks including veteran specific communities. These environments, whether online or in person, were described as inclusive and flexible, allowing veterans to engage without pressure or judgment and discuss both alcohol and mental health issues. For some, peer connection was transformative, as one participant described how meeting another peer acted as a turning point:

“Meeting another veteran... was a defining moment... he started dragging me to AA meetings” (P10, 55-59, Single-Alcohol).

Participants also mentioned how practical support, such as making appointments, made significant differences in their ability to engage. As one participant who was referred for detox services by a support worker explained: “they do all the leg work... I found that once I had an appointment, I was quite good at motivating myself to go to appointments” (P02, 50-54, Parallel).

Theme 3

Need for flexibility and tailoring of integrated care models for veterans

The final theme describes veterans' experiences of treatment for co-occurring CMD and AUD, including some challenges faced, as well as examples of good integrated care through flexible and tailored approaches. Many participants described how long waits and rigid rules drained momentum and hope, often leaving them in limbo before meaningful help began. For some, accessing care involved bureaucratic hurdles that were hard to navigate while unwell:

“There was a long waiting list... you have to jump through a lot of hoops... if you missed an appointment, you went back to the bottom of the queue.” (P01, 50-54 years, Single-MH)

For some, the environment itself could feel misaligned or even harmful, reinforcing disengagement. One participant recalled being placed in a mental health day assessment centre that felt overwhelming and inappropriate for their needs:

“In that day assessment centre... surrounded by really, really ill people... I decided not to continue because I just felt it was making me worse.” (P11, 45-49 years, Single-MH)

Participants also highlighted that services, such as NHS talking therapies and mental health charities, often required individuals to be abstinent before accessing mental health support. One participant described a past experience where abstinence requirements led them to hide their alcohol use:

“...they said to me, whatever you do, don't tell them you're drinking. Otherwise, they won't treat you... so I basically lied all through my... therapy.” (P10, 55-59 years, Single-Alcohol)

Another participant, currently seeking alcohol treatment and advised to reduce their drinking before accessing mental health support, questioned why alcohol use and mental health are treated separately:

“...for me, I can't see why you don't need help in them both at the same time, or why it's alcohol first” (P03, 35-39, Single-Alcohol).

In contrast, other services, such as veteran-specific NHS and third-sector services, implemented integrated and flexible approaches without automatically excluding individuals who were drinking:

“They said [NHS veterans' mental health services], don't drink... if you're going to drink, don't drink on the days you have the therapy... but... they are not going to stop the therapy.” (P07, 55-59 years, Single-MH)

“It was a holistic approach... mindfulness, 1-to-1, interpersonal group therapy... addiction and mental health, yeah [third sector services].” (P01, 50-54 years, Single-MH)

Another participant described a positive experience of joined-up trauma care with alcohol monitoring within an NHS veterans' mental health service: “I did EMDR... and I met with my alcohol support worker who monitored my alcohol intake... kept that in check... they went together” (P09, 60-64 years, Integrated). However, although this participant highlighted the value of integration, another warned that integrated care may not be suitable for everyone, emphasising the need for flexibility in integrated care models:

“Sometimes... for some people, it might be too much... maybe address the one that's causing the most serious damage at that time” (P08, 55-59 years, Parallel).

Many participants described care as most effective when providers demonstrated both an understanding of military culture and a trauma-informed approach. Feeling that providers “spoke the same language” helped build trust and fostered an instant connection. For example, a participant who received care from NHS veterans’ mental health services described the support as empathetic and tailored: “There’s a lot more empathy there... lots of them were ex-service people... it wasn’t one-fix-fits-all... they understood it more” (P09, 60-64 years, Integrated). In contrast, several participants described negative experiences in NHS primary care, where providers lacked both trauma awareness and understanding of military life:

“I had a young girl [IAPT services] ... fresh out-of-the-box... some of the stuff I was saying was actually frightening her... by the 4th or 5th session I just stopped going.” (P10, 55-59, Single-Alcohol)

Finally, veterans emphasised that effective care should be person centred, and that clinicians should consider military service as only one influencing factor on their mental health or alcohol use among many, rather than attributing all difficulties to their military experience, as one participant stated:

“Anybody you speak to... they all blame it straight away on being ex-military, but it’s not always the case.” (P11, 45-49 years, Single-MH)

4.4 | Key messages & conclusions

Whilst the interviews outlined the challenges that veterans had experienced in navigating mental health and alcohol services together, there were some good examples of integrated care, particularly from veteran-specific services.

Stigma is still a barrier for help-seeking for veterans with co-occurring CMD and AUD. This persists despite recent efforts and investments from the Ministry of Defence to normalise mental health maintenance. One such initiative is HeadFIT, which provides tools and resources to help military personnel see the maintenance of and proactive action to support mental fitness as on a par with physical health fitness. There were clear barriers to accessing psychological therapies which stemmed from someone’s use of alcohol. This reflects what is seen in civilian populations, where people with co-occurring CMD and AUD face “wrong doors” and are turned away from mental health services until they have stopped drinking (Swithenbank et al., 2025). Many of the veterans interviewed outlined that abstinence-only policies for mental health treatments are not useful, given that their alcohol use and mental health are closely related.

These barriers seemed to be overcome by more flexible approaches, where mental health services could continue to support someone, or at least keep them on the books, whilst they sought alcohol treatment. Flexible approaches also involve proactively following up with veterans if they miss an appointment, to support them to engage. These approaches avoid discharging someone completely from a mental health service, as being discharged can disrupt continuity of care, erode trust, and increase the risk of disengagement from services. There were also positive examples of person-centred care, which can ensure veterans are involved in the decision-making around their treatment and are supported for wider issues (e.g., housing, finances, employment) which could be contributing to alcohol and mental health problems.

Whilst many of the barriers experienced by veterans are similar to civilian populations with co-occurring CMD and AUD, veterans also faced unique challenges. For example, military culture shapes norms of stigma, heavy alcohol use and masculinity, potentially delaying problem recognition and help-seeking more so than in civilian populations. Additionally, some treatment settings may not be suitable for veterans, such as services where staff are not appropriately trained to understand military culture and the unique experiences of veterans.

At the same time, there were also good examples of integration which have happened more recently, and which seemed to come through veteran-specific NHS services (e.g. Op COURAGE) or veteran-specific charities. Nevertheless, there is still some way to go to ensure veteran-informed care across services, including NHS services.



5 | Study 3

Adherence to treatment and treatment outcomes in military veterans with co-occurring common mental disorder (CMD) and alcohol use disorder (AUD)

5.1 | Background & aims

There is limited research on whether people with co-occurring CMD and AUD can benefit equally from psychological therapy compared to people without an AUD. Evidence from trials of mental health interventions that have not excluded people with AUDs show similar intervention efficacy to those which do exclude people (Halsall et al., 2025). A further study compared adherence to psychological therapy (IAPT) and mental health treatment outcomes in civilians with a CMD only versus those with co-occurring CMD and AUD (Buckman et al., 2018). Although Buckman et al (2018) found that people with an AUD were more likely to drop out of therapy, they showed similar levels of recovery and improvement in mental health symptoms to those with only a CMD. These findings suggest that co-occurring AUDs may impact on engagement with treatment, but if people remain engaged and complete treatment, they can benefit equally to those without a co-occurring AUD.

The present study used data obtained from Pennine Care NHS Foundation Trust Military Veterans' Service (MVS), between September 2011 and September 2023. This is an example of an integrated service, which provides mental health support whilst also working closely with substance use support workers who are embedded in the service. This study aimed to identify and compare the level of engagement to treatment and CMD treatment outcomes across veterans with (i) CMD only and (ii) co-occurring CMD and AUD (defined as drinking at least hazardously), within Pennine Care NHS Foundation Trust MVS.

5.2 | Methods

We conducted a secondary analysis of service data collected between September 2011 and September 2023 from the Pennine Care NHS Foundation Trust MVS. From 2011 to 2014, the service received referrals from across the Northwest of England; from 2014 onwards, referrals were limited to Greater Manchester and Lancaster.

All veterans who sought help for a CMD through the Pennine Care NHS Foundation Trust MVS who met the following criteria were included in the sample:

- Three or more attended contacts (suggesting participation in at least one treatment session, typically beyond referral and initial assessment)
- Had started a psychological therapy with a mental health professional
- With a valid clinician assessment of alcohol use
- Aged 18 years and older

In addition, individuals who opted out of data sharing or were stepped up or down to other services, deemed unsuitable for treatment, moved away, or died during the study period were excluded from the analysis.

Our main outcomes of interest were changes in mental health (reliable improvement and reliable recovery for depression, anxiety, and PTSD) and engagement with treatment (proportion of missed sessions and treatment completion). We compared two groups of veterans: those with a CMD only versus those with co-occurring CMD and AUD (at least hazardous alcohol use). We also obtained data on a range of sociodemographic and military-related variables, which we used when controlling for differences between the groups. An overview of these variables is provided in Table 5.1.

Category	Variable and description
Clinical outcomes	• Reliable improvement in depression, anxiety, and PTSD: This indicates a meaningful reduction in symptoms between the first and last assessment, showing that a person's mental health improved over the course of treatment • Reliable recovery in depression, anxiety, and PTSD: This means that not only did symptoms improve, but they also moved from a level that indicates a mental health problem to a level that is below the clinical cut-off by the end of treatment (Reliable improvement and recovery were based on PHQ-9, GAD-7, and IES-R scales for depression, anxiety, and PTSD respectively)
Engagement outcomes	• Proportion of missed sessions i.e., Did Not Attends (DNAs) across eligible appointments • Treatment completion (completed vs. discontinued prematurely)
Primary exposure	• CMD only • CMD and AUD Clinician-rated alcohol use was collapsed into a binary variable, with 0 indicating either no or low-risk alcohol consumption and 1 indicating at least hazardous drinking (exceeding recommended limits)
Covariates	• Sociodemographic factors (sex, age, ethnicity, sexual orientation, marital status, employment status, year of assessment) • Military characteristics (service branch, deployment, years served)

Table 5.1: Overview of variables

We analysed the data to examine whether veterans with co-occurring CMD and AUD showed any differences in treatment engagement and clinical outcomes, compared to veterans with a CMD only. We used multivariate regression models to test for significant differences in outcomes between the two groups. We first ran the regression models without controlling for any possible confounders. Then we repeated them, controlling for group differences in sociodemographic and military characteristics.

5.3 | Results

The initial dataset included 1,392 people who had received treatment from the service and had at least 3 contacts. This was reduced to an analytical sample of 1,000 participants after applying inclusion and exclusion. All service users met criteria for a CMD (i.e. depression, generalised anxiety, or PTSD) at baseline (as expected based on the study's eligibility criteria) and 28.6% of these service users met criteria for AUD (Figure 5.1).

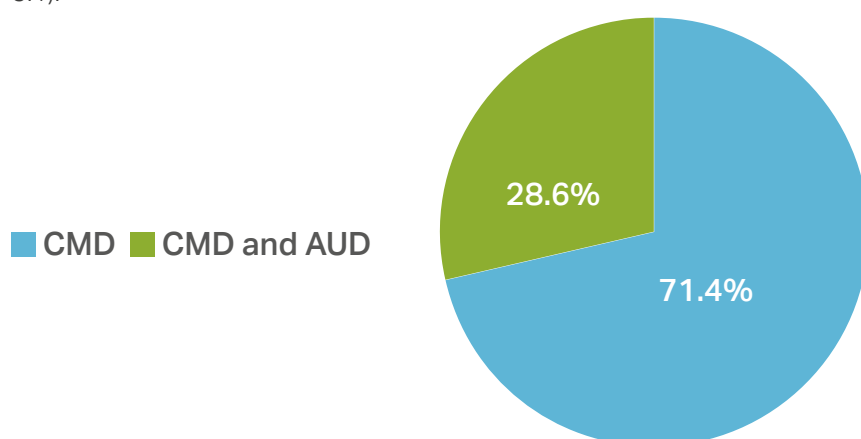


Figure 5.1: Proportion of veterans with CMD only versus those with CMD and AUD

The overall sample was predominantly male (96%), heterosexual (69%) and White British (96%). Around 29% were aged between 36-45 years, with the 26-35 and 46-55 groups each making up roughly 26% of the sample. Overall, 39% were married and 38% were single. There were relatively equal proportions who were employed (37%), unemployed (24%) or economically inactive (35%). The majority had served in the Army (86%), had previously deployed (91%) and the largest proportion had served for 6-10 years (38%).

The CMD only and CMD and AUD groups were comparable across most demographic and military characteristics, but the CMD and AUD group were more likely to be unemployed, and single compared to the CMD only group.

Figure 5.2 shows the symptom severity categories for depression (PHQ9), anxiety (GAD7), and PTSD (IES-R) at baseline. There were no statistically significant differences between the CMD and CMD and AUD groups for symptom severity.

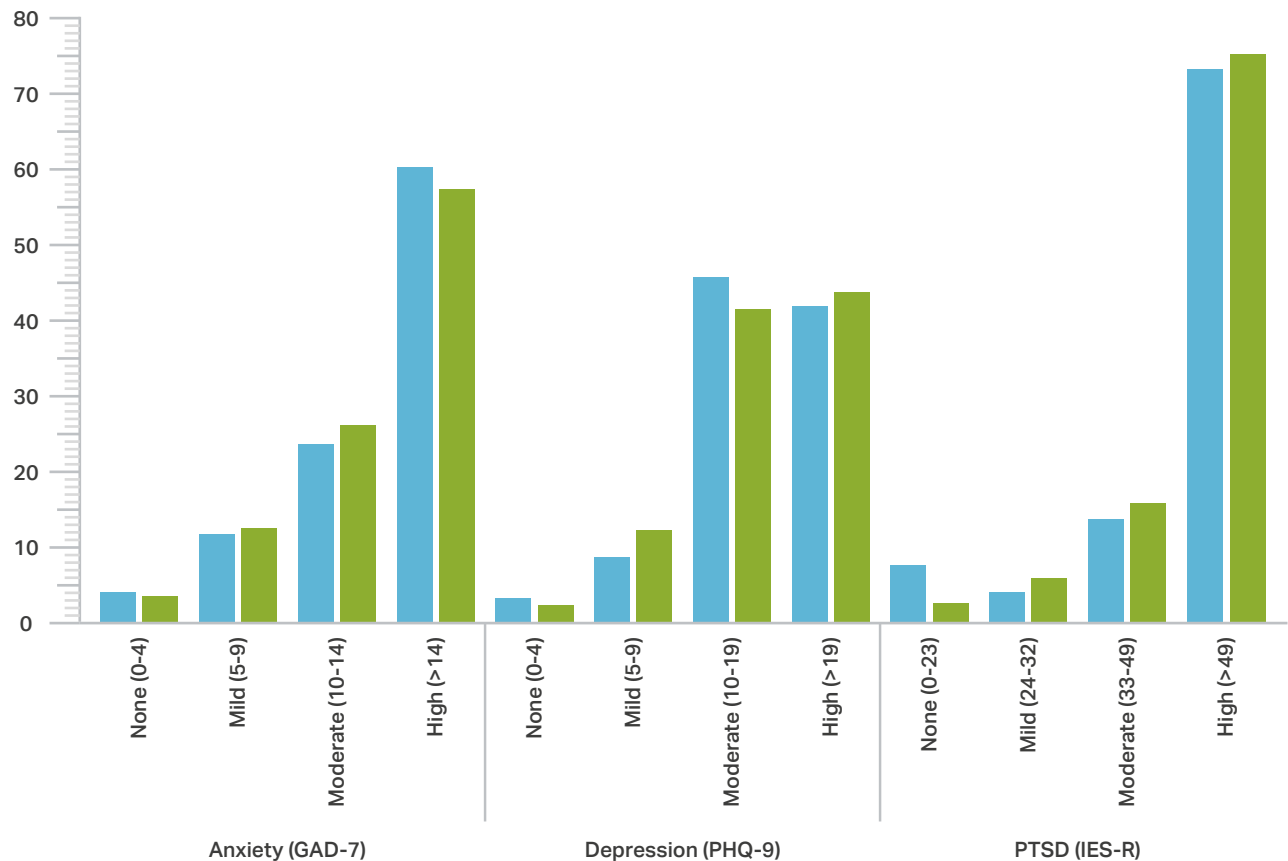


Figure 5.2: Prevalence and severity of mental health problems for veterans with CMD only versus those with CMD and AUD

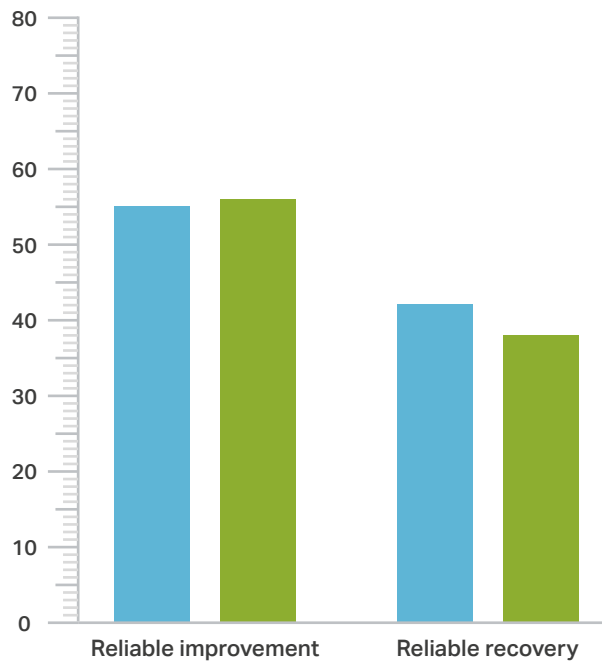
5.3.1 | Reliable improvement and recovery outcomes for CMD

Figure 5.3, Figure 5.4, and Figure 5.5 show unadjusted differences in depression, anxiety, and PTSD outcomes for veterans with CMD and AUD compared with those with CMD only.

Across all three conditions, the proportion of veterans showing reliable improvement in symptoms were similar between CMD and AUD and CMD only groups (no statistically significant differences). At the end of treatment, roughly half of participants showed reliable improvements. For anxiety and PTSD, there were no statistically significant differences between the groups in either the unadjusted or adjusted analyses. For depression, after adjusting for sociodemographic and military characteristics and the proportion of DNAs, veterans with CMD and AUD were significantly more likely to show reliable improvement compared with those with CMD only.

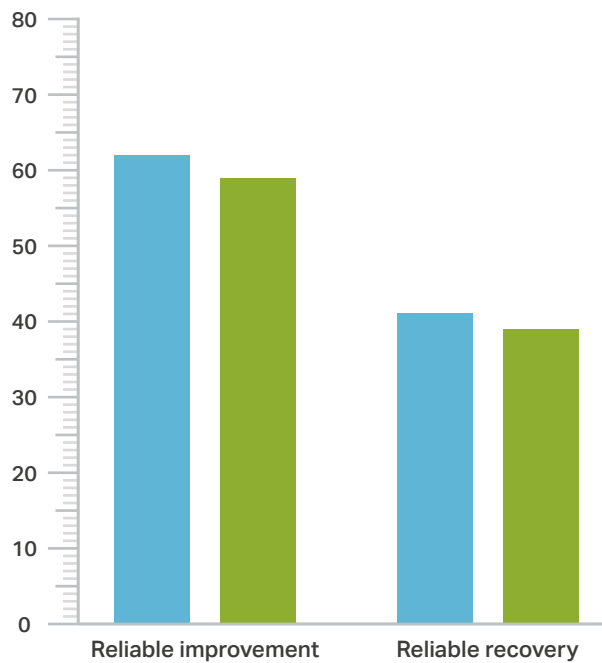
There were no statistically significant differences in reliable recovery for depression, anxiety or PTSD between the groups in either unadjusted or adjusted analyses (see Figures 5.3, 5.4, and 5.5). Whilst there were similar levels of recovery for depression and anxiety, the proportions were lower for PTSD among the CMD and AUD group, compared to the CMD only group.

In a sensitivity analysis which focused only on veterans who had completed treatment (see appendix 11.1-11.3), there were no significant differences in reliable improvement and recovery for each of the conditions between veterans with CMD and AUD and those with only CMD.



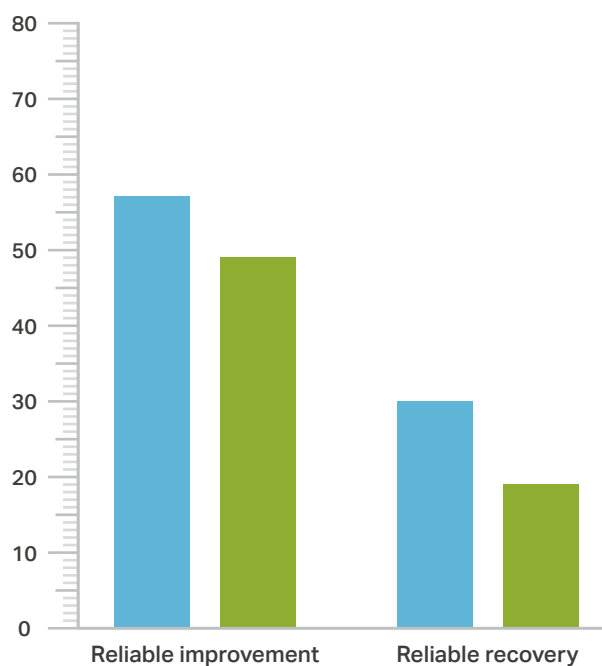
Depression

Figure 5.3: Changes in depression outcomes for veterans with CMD and AUD compared to veterans with CMD only



Anxiety

Figure 5.4: Changes in anxiety outcomes for veterans with CMD and AUD compared to veterans with CMD only



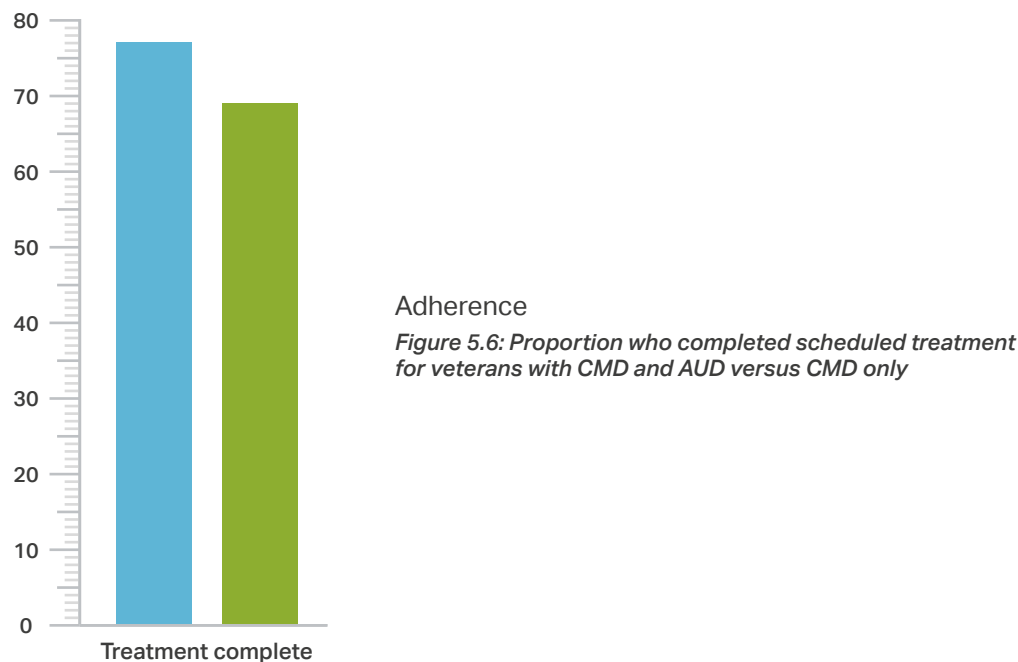
PTSD

Figure 5.5: Changes in PTSD outcomes for veterans with CMD and AUD compared to veterans with CMD only

■ CMD ■ CMD and AUD

5.3.2 | Adherence outcomes for the CMD only and CMD and AUD groups

Veterans with co-occurring CMD and AUD were less likely to complete treatment, and less likely to attend planned therapy sessions compared to those with a CMD only (68.5% vs 77.0%, respectively; Figure 5.6). They also had a higher proportion of DNAs (i.e., missed appointments) during treatment, with a mean of 14% compared with 9% among veterans with CMD only; $\beta=0.04$, 95% CIs 0.01-0.06.



5.4 | Key messages & conclusions

Using routinely collected data from an NHS veteran-specific mental health service, we showed that veterans with CMD only and those with co-occurring CMD and AUD were comparable at baseline in terms of their mental health profiles.

Veterans with co-occurring AUD were less likely to complete treatment, and less likely to attend planned therapy sessions compared to those with a CMD only. However, the mental health improvement and recovery outcomes were just as positive for veterans with co-occurring problems. These findings align with similar research conducted in a civilian population (Buckman et al., 2018). These findings suggest that the mental health treatment offered was suitable and reinforces the message that veterans with co-occurring problems should not be turned away from mental health services. It also provides evidence that abstinence-based eligibility criteria may be unnecessarily declining treatment for service users who can benefit from the therapy being offered.

After controlling for the proportion of DNAs (as well as sociodemographic and military characteristics), veterans with co-occurring CMD and AUD were significantly more likely to show reliable improvements in depression compared to veterans with only a CMD. This suggests that, for veterans with both conditions, differences in adherence to planned therapy sessions may be an important factor in depression outcomes.

The findings should be put into the context that this veterans' service had a specialist alcohol nurse available to work with veterans, which may have helped their outcomes, even though this did not prevent them from being more likely to disengage with treatment. Since September 2023, Pennine Care have now introduced a new co-occurring mental health and alcohol and drugs (COMHAD) pathway, where a substance use specialist nurse first works with veterans with a co-occurring AUD to address potential barriers to engaging with treatment. This new pathway may lead to more equitable experiences, in terms of engagement and treatment completion.



6 | Study 4

Service providers' perspectives on treatment for co-occurring alcohol and mental health problems in veterans: treatment pathways, challenges, best practices, and recommendations to improve care

6.1 | Background & aims

Although some studies have explored the experiences and barriers to care for veterans with co-occurring problems (see Chapter 4), these have largely focused on the perspectives of service users. There is also a need to understand the perspectives of service providers who provide treatment to veterans with co-occurring CMD and AUD, and to identify practical and feasible solutions to overcome challenges to service provision.

Some qualitative studies have been conducted with service providers who treat civilian populations with co-occurring CMD and AUD in countries outside of the UK. A study of Dutch mental health professionals found barriers to identifying and addressing AUD in mental health settings with some clinicians viewing alcohol interventions as “too much extra work” or underestimating the importance of addressing it. In contrast, facilitators included sharing information and creating team support for new alcohol interventions, with service providers calling for better training and knowledge exchange between mental health and addiction services (Kools et al., 2024). Another study with service providers in Norway noted concerns around balancing strict abstinence requirements with acceptance of substance use, emphasising that whilst services should not reject those unwilling to achieve total abstinence, the preference was for substance use to be addressed before addressing mental health problems (Brekke et al., 2018).

This study aimed to identify from a service providers' perspective, common treatment pathways for veterans with co-occurring CMD and AUD, examples of best practice, and potential barriers and facilitators to providing care. Recommendations follow on from these study aims to help improve service provision for veterans with co-occurring CMD and AUD.

6.2 | Methods

We conducted three online focus groups, with four to eight service providers in each group (N=17 in total), representing a range of relevant organisations to ensure diverse viewpoints and experiences. Given that mental health services are typically provided by NHS services and alcohol services through the third sector, we prioritised recruitment of participants from both settings. Eligible participants included service providers from primary care, secondary care, and third sector organisations involved in treating veterans with AUD, CMD, or co-occurring problems. Organisations represented included Pennine Care NHS Foundation Trust Military Veterans Service; Veterans NHS Wales; Combat Stress; Change Grow Live; Spider Project; Adferiad; We Are With You; Tom Harrison House; and others.

Each focus group lasted approximately two hours and was divided into two parts. The first section involved a structured discussion on common treatment pathways, barriers and facilitators to providing services for veterans with co-occurring CMD and AUD. This was followed by two interactive whiteboard tasks (Padlet) designed to identify examples of best practice and generate recommendations for improving care and service delivery. A focus group topic guide was used to ensure consistency across sessions and to structure the discussions. All participants provided informed consent prior to taking part in the focus groups.

Audio recordings of the interviews were transcribed, and an inductive thematic approach was used to analyse data. Initial transcripts were read and re-read to become familiarised with the data, and a coding structure was created. Finally, codes were grouped together to develop categories and collated into potential themes.

6.3 | Results

6.3.1 | Common treatment pathways

We asked service providers in each focus group to describe the most common treatment pathways for veterans with co-occurring alcohol and mental health problems. Sequential care, where alcohol use is treated before mental health problems, was identified by participants as the most common pathway across services. This approach is often driven by abstinence requirements within mental health services, which delay or exclude veterans from accessing mental health support until they have stopped drinking. According to participants:

“My whole experience... is that it’s always been ‘let’s treat the alcohol disorder first and then the mental health problem....” (Participant 2, FG3)

Parallel care, where both mental health and alcohol use issues are treated simultaneously through separate, uncoordinated services, was also described as common. In the UK, mental health support is generally provided through NHS services, while alcohol-related care is often accessed via third-sector organisations. Participants noted that poor communication between these services frequently undermined effectiveness, placing veterans at risk of falling between service gaps:

“They might be seen by mental health and alcohol or drug services at the same time, but... there’s not necessarily that information sharing across services... The services are not actually talking to each other... so you encourage clients to fall in between the gaps.” (Participant 2, FG3)

In contrast, integrated care, coordinated treatment of both disorders, ideally within a single service or through collaboration, was widely regarded as the most effective but not a common practice:

“Integrated stuff is great when it happens... but in our area... it’s not widely accepted that services communicate particularly well.” (Participant 1, FG1)

6.3.2 | Challenges to coordinated care and service provision

Service providers in the focus groups discussed challenges at multiple levels - from **systemic and structural** challenges within the NHS and third sector, to **cultural and individual-level** factors such as stigma, shame, and readiness to engage.

Poor integration, coordination, and communication

Participants from all focus groups described the mental health and alcohol care system as fragmented and disjointed, with veterans often facing multiple overlapping challenges (e.g., alcohol, mental health, housing instability) without a coordinated response:

“It is all very disjointed... there’s not a care that can just pick them up and go from A-Z.” (Participant 4, FG1)

Services were seen as operating in siloes and sometimes in competition, due to resource constraints:

“It’s not just that the services are sort of separate, but they’re also pitted against each other historically... protecting their stretched services and protecting their own groups.” (Participant 1, FG2)

According to service providers, poor communication between services was identified as a major barrier to coordinated care, leaving veterans to repeatedly share their stories, navigate referrals without shared care plans, and undergo multiple assessments:

“Trying to get sharing agreements... is an absolute nightmare... what they said at the GP doesn’t get through to the hospital.” (Participant 4, FG3)

Some participants described innovative or localised efforts toward integrated approaches, often involving peer support, flexibility, and partnerships, as reflected by a service provider from a third sector alcohol services:

“When they engage with us [health and social care charity] for alcohol, we connect them straightaway with [Veteran’s mental health charity]... they get both supports at the same time.” (Participant 5, FG3)

Rigid structures

Providers noted that many veterans use alcohol as a form of self-medication for underlying mental health problems, so requiring abstinence before addressing mental health often delayed intervention, caused disengagement and reinforced feelings of rejection, as mentioned below:

“They say to the clients... go and have the substance misuse issues sorted first and then come back to us... the majority... never come back.” (Participant 2, FG3)

Service providers also mentioned structural barriers such as limited therapy sessions or bureaucratic hurdles for detox and rehabilitation services. They also mentioned that many veterans ***“fall in this void between primary and secondary care”*** (Participant 1, FG2), meaning their symptoms are considered too complex for standard primary care (e.g., GP or low-intensity therapy) but not severe enough to meet the criteria for specialist secondary mental health services.

Access to services was also reported to vary significantly by location, creating a “postcode lottery” for veterans with some areas having well-developed veteran-specific pathways and strong cross-agency links, while others lacked dedicated support or timely access:

“It’s a postcode lottery... because you’ve got the different NHS’s that come under the different areas.” (Participant 4, FG1)

Services not suitable for veterans

A lack of cultural understanding of military life among civilian services was identified as a barrier to engagement, with many providers struggling to relate to veterans’ experiences, language, and values:

“A lot of people in the civilian population don’t get the military experience... we also need to be working hard to understand the military experience... our lack of understanding is probably creating a barrier.” (Participant 6, FG1)

Participants also described local substance use services as unwelcoming, both physically and psychologically, whilst mental health settings were often perceived as overly clinical and chaotic, creating discomfort for veterans with PTSD or sensory sensitivities:

“...these places [local drug and alcohol services]], you know... it might be very chaotic, the clients got difficulties around vigilance and threat...because of their PTSD or other issues and they don’t want to go into that environment...” (Participant 6, FG3)

Stigma and shame

Service providers in the focus groups mentioned that veterans, often perceived as resilient, self-reliant, and proud, frequently felt uncomfortable seeking help and engaging with services:

“It’s incredibly difficult to make that first step... particularly difficult for what are perceived to be the strongest individuals... being veterans.” (Participant 1, FG1)

This reluctance was compounded by stigma around mental health and substance use. They also noted that shame could be even more powerful than stigma, sometimes linked to moral injury, which interacted with substance use to create a cycle of avoidance and disengagement:

“Shame is the biggest barrier to care for anyone in any healthcare.” (Participant 1, FG2)

Motivation and readiness to engage

Social norms around alcohol use within military and veteran environments was suggested to sometimes obscure recognition of problematic alcohol use and delay help-seeking for both alcohol and mental health problems:

“Quite high consumptions of alcohol while functioning... is kind of normalised... might be one or two bottles of wine a night.” (Participant 6, FG3)

Service providers noted that veterans' motivation to engage in treatment was fragile and highly time sensitive so delays in accessing detoxification or psychological support often resulted in missed opportunities:

“You’ve got to capture the motivation... the time is ripe for action and to do something about it rather than it being left... for a few more weeks or months.” (Participant 6, FG3)

6.3.3 | Best practice care for veterans with co-occurring problems

Integrated and collaborative care

According to participants, veterans benefited when alcohol and mental health needs were addressed together, or when services worked closely rather than in isolation. Integration within NHS services was evident in models such as Op COURAGE, where substance use workers were embedded into multidisciplinary teams. This allowed alcohol and mental health support to be delivered side by side, avoiding delays or fragmented care:

“By adding in the addictions work alongside the mental health work, they have suddenly flown and got better from both counts.” (Participant 1, FG2)

Strategic care plan reviews involving substance use, mental health providers, and third sector organisations were provided as an example of effective collaboration:

“We have a strategic care plan review where the veteran is present and we invite everyone... It’s about expectation management and navigating a plan that works, with everybody in the room.” (Participant 1, FG2)

Relational support: peer mentors, advocacy, and soft handovers

A recurring example of best practice highlighted by service providers across all three focus groups was the importance of relational support - having someone such as a peer or advocate alongside the veteran to provide trust, continuity, and navigation across complex systems:

“Peer support is something I think is really key for helping people navigate services... that’s the bit that keeps them well.” (Participant 1, FG2)

“Having someone who will advocate for you... whether it be for their GP, for medication, or diagnosis... and if they don’t have that, it’s really hard to move forward” (Participant 3, FG3).

Flexible and holistic support

Alongside clinical treatment, participants also stressed the importance of wraparound services (housing, employment etc.) that addressed the practical needs of veterans, without which it would be difficult for veterans to fully engage in psychological or addictions support:

“You do have case management, you do have housing, employment support... making sure those basic needs are in place so psychological treatment can be more successful” (Participant 7, FG3)

Flexibility in care delivery was also highlighted as a facilitator, helping veterans to remain engaged even when recovery was inconsistent. Participants recognised that progress was rarely linear, and services that adapted rather than discharged veterans for setbacks (e.g., missed appointments) were more effective:

“They’re trying to come in and failing, trying to come in and failing. And then one day it sticks... and you’ve got them, great.” (Participant 3, FG2)

6.3.4 | Generation of recommendations

A detailed list of recommendations was generated through the focus groups, which were subsequently carried forward to the Delphi study. We reviewed the recommendations and, through several rounds of discussion with the wider team, refined and consolidated them into a final set of 45 items, across eight themes, for inclusion in the Delphi study. The eight themes included Awareness; Accessibility and eligibility to mental health and drug and alcohol services; Assessment; Treatment approaches and models; Integration and coordination across services; Peer support; Workforce training and development; and Research, policy, and funding considerations.

6.4 | Key messages & conclusions

The focus groups with service providers identified important challenges to providing coordinated care to veterans with co-occurring CMD and AUD, from the perspectives of those involved in the delivery of care. Integrated models of care were viewed as the most effective, yet these were often not implemented in practice.

The service providers highlighted the key barriers to delivering integrated care, including disjointed and fragmented mental health and alcohol treatment services who often are in competition with one another for limited resources, a lack of communication across services, and rigid structures (e.g., abstinence policies within mental health services). Whilst there is the expectation that veterans should reduce their drinking before getting mental health support, this is complicated by veteran-specific issues around heavy drinking being normalised and the fact that veterans may not want to attend mainstream substance use services. Veterans often feel mainstream services are not designed for them and struggle to identify with attendees whose life experiences differ (e.g., homelessness, long-term substance misuse). For those with strong military values of self-reliance and strength, this lack of shared identity can reinforce stigma and lead to disengagement. The challenges identified by service providers closely resembles the experiences of veterans who participated in Study 2, such as civilian staff not having a good understanding of military culture, and stigma and shame among veterans being a common barrier to help-seeking.

Nevertheless, the focus groups with service providers also highlighted examples of best practice, such as offering flexible and holistic support, and the use of peer mentors (i.e., veterans with lived experience of CMD/AUD). Peer support can be useful in helping to break down some of the perceived barriers to accessing care. There were also examples of good integrated care, such as veteran mental health services that have alcohol support built in (e.g., in many Op COURAGE services), and those that acknowledged that veteran progress was rarely linear and as such adapted to setbacks (e.g., not discharging for repeated DNAs). Through the focus group discussions and activities, we developed a list of 45 recommendations to be included in the following Delphi study.



7 | Study 5

Delphi survey generating consensus on recommendations to improve care for veterans with co-occurring CMD and AUD

7.1 | Background & aims

People in the general population with co-occurring CMD and AUD face barriers to treatment at individual and structural levels (Kaufmann et al., 2014) (Priester et al., 2016) and veterans with co-occurring CMD and AUD face additional barriers in accessing care compared to non-veterans. The normalisation of heavy drinking within military culture can delay recognition of problems and engagement with substance use services, often leading to complex presentations to healthcare services at crisis point (Kiernan et al., 2018). Civilian services may also lack an understanding of military experiences and culture (Randles & Finnegan, 2022), which can further act as a barrier to engaging with treatment (Hitch et al., 2023b).

Updated alcohol treatment guidance was published in 2025, which includes a chapter on care for military personnel and veterans (Department of Health and Social Care, 2025) outlining approaches to optimise engagement and recovery, such as signposting to peer support and armed forces recovery champions. It also includes a chapter on co-occurring CMD and AUD (not specific to veterans), reiterating the principles of “everyone’s job” where mental health and alcohol treatment services should jointly share responsibility, and “no wrong door” principles where service providers should be flexible. Whilst the guidance offers recommendations for treating people with co-occurring CMD and AUD and for treating veterans with AUD, it does not address the differing needs of veterans with co-occurring CMD and AUD.

We conducted a Delphi Study (see Box 7.1) to share recommendations identified from the focus groups with service providers (i.e., Study 4 above), and to generate consensus to improve service provision for veterans with co-occurring CMD and AUD.

Box 7.1: Delphi method

The Delphi method is a structured, iterative approach used to gather expert opinion and reach consensus on complex issues, such as developing recommendations or guidelines. The method involves recruiting a panel of experts with relevant knowledge and experience.

These experts complete a series of questionnaires (or “rounds”). After each round, responses are summarised and fed back to the panel, allowing experts to reconsider or refine their views considering the group’s feedback. This process continues across multiple rounds until a predefined level of consensus is reached. This method is commonly used in healthcare, policy, and service development to gather anonymous, systematic input from multiple experts.

7.2 | Methods

We conducted an online modified Delphi method to generate consensus on the recommendations generated from the focus groups (Dalkey, 1969; Keeney et al., 2006; Okoli & Pawlowski, 2004; Shariff, 2015). The Delphi process for this study involved two iterative rounds in which an expert panel assessed the importance and feasibility of recommendations and subsequently ranked items to determine a set of priority recommendations.

The expert panel included individuals from the focus groups and a wider group of service providers involved in the provision of care for veterans with AUD, CMD or co-occurring problems. We aimed to recruit a sample of 30–35 experts (Akins et al., 2005; Shariff, 2015). Recruitment took place by inviting all focus group participants via email and by approaching a wider group of service providers. Service providers were also encouraged to share the study invitation with colleagues to broaden recruitment.

In the first round, experts were asked to rate the importance of each recommendation using a 5-point Likert scale, where 1 indicated “Not important” and 5 indicated “Extremely important”. Items rated 4 or 5 by at least 80% of experts were accepted into Round 2. In Round 2, participants ranked the recommendations in order of importance and evaluated the feasibility of each recommendation using a 5-point Likert scale, where 1 indicated “Not feasible” and 5 indicated “Very feasible”. Data collection took place between July–September 2025.

We analysed Round 1 data using descriptive statistics, such as Mean scores of importance for each recommendation and the percentage of participants assigning high (4–5), moderate (3), or low (1–2) ratings. In Round 2, we analysed feasibility ratings using the same descriptive approach. Ranking data was also aggregated to generate an overall list of priority recommendations.



7.3 | Results

7.3.1 | Characteristics of the expert panel

In Round 1, 41 participants completed the survey

- Age: Most were 40–59 years old (78%)
- Experience: Average of 10.2 years in their profession
- Employment:
 - ☐ NHS services (including veterans' mental health): 51.2%
 - ☐ Charities or higher education: 41.5%
 - ☐ Worked across both sectors: 7.3%
- Areas of work:
 - ☐ Mental health: 36.6%
 - ☐ Alcohol or substance use services: 34.2%
 - ☐ Veteran mental health services: 80.5%
 - ☐ Veteran alcohol/substance use services: 51.2%
- Location:
 - ☐ England: 87.8%
 - ☐ Wales: 24.4%
 - ☐ Scotland: 14.6%
 - ☐ Northern Ireland: 14.6%

In Round 2, 78% of participants completed the feasibility questions and 68% of participants completed the ranking activity. Overall, the Delphi panel reflected a diverse and balanced mix of professional roles, sectors, and service types involved in veteran alcohol and mental health care, strengthening the credibility and relevance of the final recommendations.

7.3.2 | Round 1 result

A total of 45 recommendations were generated from the focus groups. The table in Appendix 11.4 provides details of importance ratings including the Mean Score, standard deviation (SD), and percentage of experts rating items as high (4–5), moderate (3), or low (1–2) for all the recommendations. For those recommendations rated as high importance (4–5) by more than 80% of participants, we reviewed the associated comments and collated 26 recommendations to carry forward into round 2. The remaining recommendations from Round 1 that were rated below 4–5 are highlighted in the table and were not carried forward to round 2.

The top two items with the highest importance scores in table 11.4 were “RA1: For veterans transitioning from military to civilian life, increase awareness of national and regional NHS and third sector services that provide integrated support for veterans with co-occurring mental health and alcohol use disorders” and “RD4. Veterans with co-occurring mental and alcohol use problems should not be left without, or experience long delays for, mental health support, when seeking treatment for alcohol use...” Both items were given importance scores of 4 or 5 by 98% of the participants, with a further seven items rated as ‘high’ importance (4 or 5) by 95% of the participants.

The item with the lowest proportion of participants scoring 4 or 5, “RF4. Mental health and drug and alcohol services should engage with regimental charities that provide support to veterans of specific regiments in the Armed Forces, to strengthen trust within members of the same unit and reduce stigma around help-seeking.” was still rated as high (4 or 5) importance by 61% of participants.

7.3.3 | Round 2 results

Table 7.1 outlines the top 15 recommendations from the ranking process in Round 2, with the feasibility scores (mean and SD) reported for each item. The full list of 26 recommendations for round 2, including the rankings and mean and SDs for feasibility are reported in Appendix 11.5, highlighting those items which had been developed based upon this research, but which were not ranked as priority recommendations.

There was some variation in the feasibility scores for the top 15 recommendations, with the most feasible item ranked as sixth important, regarding systematic implementation of mental health screening in drug and alcohol services. The least feasible recommendation to implement (of the top 15) was ranked 11th for importance, which related to provision of mental health support whilst someone is seeking treatment for their alcohol use.

Rank	Recommendation	Feasibility	
		Mean	SD
1	RA1. For veterans transitioning from military to civilian life, increase awareness of national and regional NHS and third sector services that provide integrated support for veterans with co-occurring mental health and alcohol use disorders.	4.09	0.69
2	RB1. Adopt a low threshold entry (e.g., minimal requirements for access), "no wrong door" approach and referral access model (e.g., allowing self-referrals) across mental health and drug and alcohol services to reduce barriers for veterans to access and engage with services.	3.94	1.05
3	RA2. Mental health and drug and alcohol services should conduct outreach work with veteran organisations, charities, and at veteran events (e.g., breakfast clubs) to enhance visibility and provide information on support that is available for veterans with co-occurring mental health and alcohol use disorders.	3.78	0.91
4	RA4. Encourage service providers to actively build their awareness of local and national veteran support services for alcohol use and/or mental health, as well as wider related issues such as housing, employment or offending	4.13	0.75
5	RA5. Develop national campaigns which share lived experience perspectives and empirical evidence relating to co-occurring mental health and alcohol use disorders to raise awareness on the high comorbidity of these conditions and normalise help-seeking	3.81	0.90
6	RC2. Drug and alcohol services should ensure that mental health is part of any initial assessments and veterans should be informed about the purpose and referred on for further assessment for more severe mental health conditions.	4.41	0.61
7	RB4. Initial support around alcohol (e.g., brief alcohol interventions) and plans for follow-up should be provided in the first setting where veterans present, such as GP practices, even if someone is reluctant to visit drug and alcohol treatment services.	3.56	0.88
8	RB2. Services should consider the limitations of abstinence-only policies that prevent access to mental health support for veterans with co-occurring mental health and alcohol use disorders. Instead, adopt a flexible, needs-based approach that assesses veterans' ability to attend structured sessions.	3.84	0.99
9	RB3. All organisations should consider the inclusion of local strategies that aim to reduce the stigma and shame surrounding alcohol and mental health, for example, sharing lived experience stories or applying trauma-informed approaches.	4.06	0.76
10	RC3. In both mental health and drug and alcohol treatment services, alcohol and mental health problems should be assessed at multiple time points, not just at the initial assessment, as problems can develop or change over time.	4.38	0.71
11	RD4. Veterans with co-occurring mental and alcohol use problems should not be left without, or experience long delays for, mental health support, when seeking treatment for alcohol use. Timely progression from referral to assessment and referral to treatment will help maintain engagement and prevent issues from worsening.	3.41	1.21
12	RD1. Veterans should be supported to develop personalised care plans which reflect their wider needs, preferences, and goals, with a focus on ensuring coordination of support for both mental health and alcohol use disorders.	4.19	0.82
13	RD2. Following assessment, veterans identified with co-occurring mental health and alcohol use disorders should be fully informed and actively guided into appropriate care pathways and support networks which address both issues in a coordinated way.	3.94	0.95
14	RD5. Mental health and alcohol use disorders should be treated concurrently and with a co-coordinated care plan, where possible, unless there is a clear justification for a sequential approach, for example, if the service user wants to focus on one of the problems first.	3.50	1.24
15	RD8. Mental health support should be provided soon after detox from alcohol, to address emerging mental health problems (e.g., heightened anxiety, re-experiencing symptoms, increased problems with sleep) and reduce the risk of relapse.	3.97	0.90

Table 7.1: Top 15 of 26 recommendations presented with the mean feasibility scores

7.4 | Key messages & conclusions

The highest ranked recommendation referred to the need to increase awareness of services with an integrated approach for veterans with co-occurring problems, with the second highest item outlining the importance of a 'no wrong door' approach, with more flexible entry criteria to support veterans to access the support that they need. Raising awareness of integrated services received the highest rating in both rounds, indicating that experts consistently viewed this as an important priority.

Furthermore, recommendations which were highly prioritised focused on improving access to treatment for veterans with co-occurring problems, for example, in relation to eligibility criteria around someone's alcohol use or having a more open-door policy.





8 | Discussion

8.1 | Key findings

The key finding from across these research studies is the positive message that veterans with co-occurring CMD and AUD can benefit from psychological therapies and recover, but particularly where the support offered is integrated. This research also identified some positive examples of practice that are specific to veteran services, including where alcohol care may be more likely to be integrated.

There were integrated psychological therapies identified through the systematic review, such as prolonged exposure therapy, which resulted in reductions in both PTSD and depression symptoms when compared to alcohol only treatments, but integrated therapies were no different than alcohol-focussed therapies for reducing alcohol use post-treatment (integrated interventions were more effective than usual care for reducing alcohol use). Whilst the alcohol specific therapies did reduce alcohol use in those with co-occurring problems, these approaches were not sufficient to also improve someone's mental health. This may not be surprising given the different foci of alcohol and mental health treatment; however, it is a useful finding in the context of people often being told that their mental health will improve if they reduce their drinking, and both findings suggest that an integrated approach is required if the aim is to target both outcomes.

The qualitative findings support previous evidence around the barrier that alcohol can present in someone accessing mental health support. Furthermore, service users reported how they used alcohol to mask their symptoms, so this delayed when they sought support. In terms of how things should move forward, there were clear recommendations about removing abstinence-focused eligibility criteria, and the balance between having an open-door approach whilst at the same time supporting someone to reduce their alcohol use to be able to engage and benefit from psychological therapy.

Our quantitative evaluation of an existing NHS veterans' mental health service found that whilst veterans with co-occurring CMD and AUD were more likely to drop out of therapy than veterans with CMD alone, their symptom improvement and recovery outcomes were just as good. This highlights the importance of understanding why veterans drop out of treatment and how wrap-around care or peer support structures may facilitate better engagement, as demonstrated by examples of veteran specific peer support services that appear to be effective in this role.

Across the studies, it was clear that the structure of Op COURAGE seems to work for those veterans who have co-occurring conditions; many of these services have embedded alcohol support workers who can support people and help them to reach a point that they can benefit from the psychological therapies offered. However, depending on the level of need around someone's alcohol or substance use, some veterans may require a referral to a local drug and alcohol service where they can receive specialist alcohol support, but some veterans were put off pursuing these services due to the stigma and concern about who else could be in these settings (e.g., those using illicit drugs). Whilst these views may also be held in a civilian population, there were suggestions that concerns about using a drug and alcohol service may be compounded in veterans, requiring more targeted and tailored campaigns to increase access.

It was clear that navigating the different types of treatment services is complex, and therefore this presents a barrier for veterans knowing where to go, particularly when they are trying to identify support for two problems at once. This can mean that many veterans only seek support for a single problem; hence, why the highest priority recommendation from the Delphi Study was around the importance of making veterans aware of what integrated treatments are available to them; such information should be communicated alongside the message that veterans with co-occurring problems can recover, and that there are mainstream treatments out there that can help.

8.2 | How the results fit with what is already known from research

Taken together, these findings align with earlier research calling for integrated care for veterans with co-occurring CMD and AUD to reduce the number of veterans 'falling through the gaps' or disengaging from services (Osborne et al., 2022). Our systematic review highlighted the benefits of integrated psychological therapies for veterans with co-occurring problems. This builds on previous systematic reviews of interventions for co-occurring substance use disorders and PTSD (in any population), which found a modest effect for integrated trauma-focused and substance use interventions for improving both PTSD and alcohol use (Roberts et al., 2022).

The findings from the interview study identified barriers and facilitators to accessing and engaging with mental health and/or alcohol treatment. Previous research into veterans with either a CMD or AUD has identified similar barriers, including military culture and culturized norms, feeling unwelcome, concern over being seen as weak, lack of awareness of available services, and inadequate military cultural competency among service providers (Hitch et al., 2023a; 2023b). Our findings build on this to highlight unique barriers faced by veterans who have co-occurring CMD and AUD, rather than one condition alone. For example, military cultural norms around heavy alcohol use can result in alcohol use masking mental health symptoms and delaying care.

Qualitative data from both the interviews with veterans and the focus groups with service providers highlighted examples of good practice. Some services provide integrated care which addresses both alcohol and mental health problems in a coordinated way; Pennine Care NHS Foundation Trust's Military Veterans Service is an example of an integrated treatment service. Our analysis of the Trust's data showed that although veterans with co-occurring problems are less likely to complete treatment (68.5% vs 77.0% with CMD only), those who complete treatment can benefit equally from psychological therapy compared to those with CMD only. This fits with previous research showing that trials of mental health interventions that do not exclude people with AUDs show similar intervention efficacy in terms of CMD outcomes to those which do exclude people with AUDs (Halsall et al., 2025). The findings also align with a study of adherence and access to IAPT in the general population, which found similar levels of reliable improvement and recovery for people treated for co-occurring CMD and AUD as those treated for only CMD (Buckman et al., 2018). The evidence suggests that if veterans with co-occurring problems are supported to engage with psychological therapy, they can still benefit from mental health treatment despite the existence of an AUD and therefore should not be excluded due to their alcohol use. Such exclusionary policies also carry numerous risks, including veterans feeling discouraged or rejected, which may increase the likelihood of disengagement from support.

8.3 | How do the results align with current policy and practice?

The recommendations from this work align with increasing trends towards integrated healthcare approaches and with plans to provide more community and neighbourhood provision for mental health in mainstream care, where peer support and social prescribing services may be able to offer the wraparound care required to support those with co-occurring problems to engage with their mental health treatment. There are also recommendations specific to the veteran treatment landscape, for example, through the priorities of VALOUR to better coordinate services in a regional context (Ministry of Defence & Office for Veterans' Affairs, 2025) which should offer a great opportunity to improve networking across mental health and alcohol service provision, as well as more holistic aspects of recovery (e.g., access to housing and employment support), to encourage the integration of treatment support.

The findings of this report complement the latest UK clinical guidelines for alcohol treatment (Department of Health and Social Care, 2025) which outline the importance in mainstream services of coordinating care for people with co-occurring mental health and alcohol problems and of agreeing a collaborative care plan across alcohol and mental health services; however, the findings of this report have shown that there is still a way to go in terms of ensuring this coordination is delivered – for veterans and for civilians alike, and we have outlined some recommendations as to how this could be achieved, including some unique opportunities and existing best practices as seen in specific services tailored for veterans and the triage processes through Op COURAGE which provide more integrated provision. Our recommendations include better identification of co-occurrence through improved communication and increasing awareness of which services might be suitable for the veteran and going beyond solely making a referral. The promoted 'no wrong door approach' is also likely to be met with the removal of abstinence-based eligibility criteria.

The NHS strategy has a core focus on moving from ‘sickness to prevention’ (Department of Health and Social Care, 2025), which means that co-occurring alcohol problems need to be identified earlier and before people develop alcohol-related physical health conditions. This also means that veterans need to be encouraged to seek support earlier for their mental health, in line with the previous Veterans’ Strategy Action Plan (Office for Veterans’ Affairs, 2022), as this may also avoid people using alcohol to mask or cope with symptoms and consequently experience additional mental health burden through their alcohol use.

8.4 | Strengths and limitations of the research studies

The main strength of these research studies is that they were conducted using robust methodological approaches to gather and synthesize evidence on a unique population. For example, the systematic review was conducted in line with SWiM guidance, to ensure comprehensive and transparent reporting. In the second research study, a total of 17 interviews were conducted, generating rich data on treatment experiences among veterans with co-occurring CMD and AUD. By restricting participation to only those who have engaged with treatment in the last two years, these interviews provide an understanding of experiences of the current treatment landscape for this population.

For the third research study, we were able to obtain anonymised data from a thousand veterans within an NHS Military Veterans’ Mental Health Service. This unique data source allowed a comprehensive analysis of treatment engagement and outcomes, and comparisons between veterans with co-occurring CMD and AUD, versus those with only a CMD. Additionally, we were able to control for a range of sociodemographic and military characteristics which could influence differences in treatment engagement and outcomes between these two groups. In the final set of studies, we conducted focus groups and a Delphi study with service providers involved in the delivery of care for veterans with co-occurring CMD and AUD – the first study of its kind. This enabled a deeper understanding of the barriers faced by veterans with co-occurring problems from the perspectives of those who provide care.

Whilst there are several strengths to the research studies, limitations can be noted. The studies included in the systematic review had high heterogeneity (differences across studies), and variations in outcomes and interventions meant that a meta-analysis could not be conducted. Additionally, many studies were assessed as having a high risk of bias, which further limits confidence in the findings. For the interview study, we intended to conduct interviews with equal numbers across the three treatment model types (sequential, parallel, and integrated). However, sequential treatment models were the most common. The interviews also mainly included older veterans; thus, we may not have captured treatment experiences among younger and more recent veterans.

The approach for the analysis of NHS data was restricted to veterans who had completed treatment between September 2011 and September 2023. This was because the service changed their treatment pathways for veterans with co-occurring CMD and AUD after September 2023, to include a specialist COMHAD (co-occurring mental health and alcohol and drugs) pathway. This approach helped to reduce the impact of the post September 2023 change on the observed outcomes, but it is not known whether the new COMHAD pathways resulted in changes in engagement or outcomes for veterans with co-occurring CMD and AUD. This selected time frame also reduces comparability with the interviews and focus groups, which reflect more recent treatment experiences. The limitations of the focus groups and Delphi study relate to scheduling, as the focus groups were conducted online at set times and there was a short period to complete the 2 rounds of Delphi questionnaires, meaning that key stakeholders may not have been able to contribute.

What are the specific challenges for military veterans with co-occurring CMD and AUD who are seeking support?

Veterans share many experiences with civilians but also face unique challenges



Military culture influences norms of masculinity, self-reliance, and heavy drinking, which can delay problem-recognition. Using alcohol as a coping mechanism can mask mental health symptoms

“Drinking... makes you chaotic... half the time you are not actually able to identify, *I think I might be depressed...* you are self-medicating. (Interview, Veteran)



Heightened stigma and shame may be linked to veterans' lasting military identity and perception of mental health or alcohol problems as weakness

“There's a huge stigma... a 'just get on with it' thing... it's harder to say, 'I am struggling' (Interview, Veteran)



Abstinence requirements for mental health treatment may be a bigger barrier for veterans because of military cultural norms around alcohol use. These strict eligibility criteria can lead to delays and disengagement from care

“They say to clients... go and have the substance misuse issues sorted first and then come back...majority never come back. (Focus group, Service provider)



Mainstream civilian services can be chaotic for veterans who have been exposed to trauma. A lack of military cultural awareness in mainstream services can undermine trust

“These places... might be very chaotic... clients got difficulties... because of PTSD and don't want to go into that environment. (Focus group, Service provider)



Integrated, flexible and person-centred care is essential for veterans. Services should address individual needs and wider issues (e.g., housing and finances) and be proactive around the increased likelihood of DNAs and treatment dropout

“It wasn't one-fix-fits-all... they [veteran specific integrated care] understood it more. (Interview, Veteran)

9 | Conclusions

There are several key messages from the collated research studies, which align with the recommendations that were prioritised by stakeholders involved in the provision of care for veterans with co-occurring CMD and AUD. First, integrated psychological interventions can be effective for veterans with co-occurring CMD and AUD. When veterans with co-occurring problems engage with treatment, they benefit equally to those with only a CMD. The evidence supports the following recommendations from the Delphi study:

1. Adopt “no wrong door” approaches across mental health and alcohol treatment services to reduce barriers for veterans
2. Services should consider the limitations of abstinence-only policies and instead, adopt a flexible, needs-based approach that assess veterans’ ability to attend structured sessions (e.g., not to be under the influence of alcohol when attending the service)
3. Veterans with co-occurring mental health and alcohol use problems should not be left without, or experience long delays for, mental health support, when seeking treatment for alcohol use
4. Mental health support should be provided soon after detox from alcohol, to address emerging mental health problems and reduce the risk of relapse
5. Mental health and alcohol use disorders should be treated concurrently and with a coordinated care plan, unless there is a clear justification for a sequential approach.

Second, qualitative data from the perspectives of both veterans and service providers highlighted issues around awareness of available services and feelings of shame and stigma, which act as barriers to accessing support for co-occurring CMD and AUD. Additionally, delays in staff identifying co-occurring problems also prevents timely access to support. A lack of understanding of military culture and the wider veteran support landscape within mainstream services, also emerged as a key qualitative finding, highlighting additional challenges for engagement. These findings show the importance of the following recommendations:

6. Increase awareness of services that provide integrated support for veterans with co-occurring mental health and alcohol use disorders
7. Mainstream mental health and alcohol treatment services should conduct outreach work with veteran organisations to enhance visibility of the services they offer
8. Mainstream mental health and alcohol treatment services should build their awareness of veteran support services for alcohol use and/or mental health, as well as for wider related issues (such as housing instability, financial issues)
9. Develop national campaigns which share lived experience perspectives and empirical evidence relating to co-occurring conditions to raise awareness and normalize help-seeking
10. Organisations should consider the inclusion of local strategies that aim to reduce stigma and shame surrounding alcohol and mental health
11. Drug and alcohol services should ensure that mental health is part of initial assessments (referring veterans on for further assessment for more severe mental health conditions)
12. Alcohol, drug and mental health problems should be assessed at multiple time points, not just at the initial assessment, as problems can develop or change over time

Finally, the evidence from the research studies demonstrates examples of good practice, such as flexible and holistic support, and person-centred care which reflects the needs and preferences of veterans. This flexible and person-centred care recognises that recovery is not linear and that continued support, rather than discharge after early DNAs, can be beneficial. Within this, the studies showed how wrap-around care can also be beneficial, by supporting veterans to navigate complex services and remain engaged. This is reflected in the following recommendations:

13. Veterans should be supported to develop personalised care plans which reflect their wider needs, preferences, and goals, with a focus on ensuring co-ordination of support for both mental health and alcohol use disorders
14. Initial support around alcohol and plans for follow-up should be provided in the first setting where veterans present (e.g., GP practices)
15. Following assessment, veterans identified with co-occurring conditions should be fully informed and actively guided into appropriate care pathways



10 | References

- Acosta, M. C., Possemato, K., Maisto, S. A., Marsch, L. A., Barrie, K., Lantinga, L., . . . Rosenblum, A. (2017). Web-Delivered CBT Reduces Heavy Drinking in OEF-OIF Veterans in Primary Care With Symptomatic Substance Use and PTSD. *Behavior therapy*, 48(2), 262–276. <https://doi.org/10.1016/j.beth.2016.09.001>
- Akins, R. B., Tolson, H., & Cole, B. R. (2005). Stability of response characteristics of a Delphi panel: application of bootstrap data expansion. *BMC medical research methodology*, 5(1), 37.
- Back, S. E., Killeen, T., Badour, C. L., Flanagan, J. C., Allan, N. P., Ana, E. S., . . . Brady, K. T. (2019). Concurrent treatment of substance use disorders and PTSD using prolonged exposure: A randomized clinical trial in military veterans. *Addictive behaviors*, 90, 369–377. <https://doi.org/10.1016/j.addbeh.2018.11.032>
- Baker, A. L., Thornton, L. K., Hiles, S., Hides, L., & Lubman, D. I. (2012). Psychological interventions for alcohol misuse among people with co-occurring depression or anxiety disorders: a systematic review. *Journal of affective disorders*, 139(3), 217–229.
- Battersby, M. W., Beattie, J., Pols, R. G., Smith, D. P., Condon, J., & Blunden, S. (2013). A randomised controlled trial of the Flinders Program™ of chronic condition management in Vietnam veterans with co-morbid alcohol misuse, and psychiatric and medical conditions. *The Australian and New Zealand journal of psychiatry*, 47(5), 451–462. <https://doi.org/10.1177/0004867412471977>
- Boden, M. T., Kimerling, R., Jacobs-Lentz, J., Bowman, D., Weaver, C., Carney, D., . . . Trafton, J. A. (2012). Seeking Safety treatment for male veterans with a substance use disorder and post-traumatic stress disorder symptomatology. *Addiction (Abingdon, England)*, 107(3), 578–586. <https://doi.org/10.1111/j.1360-0443.2011.03658.x>
- Brekke, E., Lien, L., Nysveen, K., & Biong, S. (2018). Dilemmas in recovery-oriented practice to support people with co-occurring mental health and substance use disorders: a qualitative study of staff experiences in Norway. *International journal of mental health systems*, 12(1), 30.
- Brief, D. J., Rubin, A., Keane, T. M., Enggasser, J. L., Roy, M., Helmuth, E., . . . Rosenbloom, D. (2013). Web intervention for OEF/OIF veterans with problem drinking and PTSD symptoms: a randomized clinical trial. *Journal of consulting and clinical psychology*, 81(5), 890–900. <https://doi.org/10.1037/a0033697>
- Buckman, J., Naismith, I., Saunders, R., Morrison, T., Linke, S., Leibowitz, J., & Pilling, S. (2018). The impact of alcohol use on drop-out and psychological treatment outcomes in improving access to psychological therapies services: an audit. *Behavioural and cognitive psychotherapy*, 46(5), 513–527.
- Campbell, G. M., Weijers, B., Barker, R., & Murphy, D. (2023). Exploring help-seeking patterns of UK veterans with mental health difficulties: referrals to combat stress 2012–2022. *European Journal of Trauma & Dissociation*, 7(3), 100337.
- Capone, C., Presseau, C., Saunders, E., Eaton, E., Hamblen, J., & McGovern, M. (2018). Is integrated CBT effective in reducing PTSD symptoms and substance use in Iraq and Afghanistan veterans? Results from a randomized clinical trial. *Cognitive Therapy and Research*, 42(6), 735–746.
- Capone, C., Tripp, J. C., Trim, R. S., Davis, B. C., Haller, M., & Norman, S. B. (2020). Comparing Exposure- and Coping Skills-Based Treatments on Trauma-Related Guilt in Veterans With Co-Occurring Alcohol Use and Posttraumatic Stress Disorders. *Journal of traumatic stress*, 33(4), 603–609. <https://doi.org/10.1002/jts.22538>
- Chew, N. W., Lee, G. K., Tan, B. Y., Jing, M., Goh, Y., Ngiam, N. J., . . . Shanmugam, G. N. (2020). A multinational, multicentre study on the psychological outcomes and associated physical symptoms amongst healthcare workers during COVID-19 outbreak. *Brain, behavior, and immunity*, 88, 559–565.
- Clark, D. M., Canvin, L., Green, J., Layard, R., Pilling, S., & Janecka, M. (2018). Transparency about the outcomes of mental health services (IAPT approach): an analysis of public data. *The lancet*, 391(10121), 679–686.
- Clement, S., Schauman, O., Graham, T., Maggioni, F., Evans-Lacko, S., Bezborodovs, N., . . . Thornicroft, G. (2015). What is the impact of mental health-related stigma on help-seeking? A systematic review of quantitative and qualitative studies. *Psychological medicine*, 45(1), 11–27.
- Coleman, S., Stevelink, S., Hatch, S., Denny, J., & Greenberg, N. (2017). Stigma-related barriers and facilitators to help seeking for mental health issues in the armed forces: a systematic review and thematic synthesis of qualitative literature. *Psychological medicine*, 47(11), 1880–1892.
- Creamer, M., Bell, R., & Failla, S. (2003). Psychometric properties of the impact of event scale—revised. *Behaviour research and therapy*, 41(12), 1489–1496.
- Dalkey, N. C. (1969). The Delphi method: An experimental study of group opinion.
- Department of Health and Social Care. (2025). Clinical guidelines for alcohol treatment. Retrieved from GOV.UK. <https://www.gov.uk/guidance/clinical-guidelines-for-alcohol-treatment>

- Young, E., Randall, E., Hill, S., Morris, S., Drummond, C., Fear, N., Goodwin, L., McBride, O., & McManus, S. Alcohol dependence. (2025). In Morris, S., Hill, S., Brugha, T., McManus, S. (Eds.), *Adult Psychiatric Morbidity Survey: Survey of Mental Health and Wellbeing, England, 2023/4*. NHS England.
- Goodwin, L., Norton, S., Fear, N., Jones, M., Hull, L., Wessely, S., & Rona, R. (2017). Trajectories of alcohol use in the UK military and associations with mental health. *Addictive behaviors*, *75*, 130–137.
- Grant, S., Azhar, G., Han, E., Booth, M., Motala, A., Larkin, J., & Hempel, S. (2021). Clinical interventions for adults with comorbid alcohol use and depressive disorders: A systematic review and network meta-analysis. *PLoS medicine*, *18*(10), e1003822.
- Gribble, R., Stevelink, S. A., Spanakis, P., Goodwin, L., & Fear, N. T. (2024). Help seeking for self-reported alcohol problems among serving and ex-serving personnel: A cross-sectional study. *Journal of Military, Veteran and Family Health*, *10*(5), 63–71.
- Gyani, A., Shafran, R., Layard, R., & Clark, D. M. (2013). Enhancing recovery rates: lessons from year one of IAPT. *Behaviour research and therapy*, *51*(9), 597–606.
- Haller, M., Norman, S. B., Cummins, K., Trim, R. S., Xu, X., Cui, R., . . . Tate, S. R. (2016). Integrated Cognitive Behavioral Therapy Versus Cognitive Processing Therapy for Adults With Depression, Substance Use Disorder, and Trauma. *Journal of substance abuse treatment*, *62*, 38–48. <https://doi.org/10.1016/j.jsat.2015.11.005>
- Halsall, L., Jones, S., Swithenbank, Z., Ushakova, A., & Goodwin, L. (2025). Alcohol use across trials of psychological interventions for bipolar: A systematic review and meta-analysis. *Journal of affective disorders*, 119745.
- Harris, J., Dalkin, S., Jones, L., Ainscough, T., Maden, M., Bate, A., . . . Mitcheson, L. (2023). Achieving integrated treatment: a realist synthesis of service models and systems for co-existing serious mental health and substance use conditions. *The Lancet Psychiatry*, *10*(8), 632–643.
- Head, M., Goodwin, L., Debell, F., Greenberg, N., Wessely, S., & Fear, N. (2016). Post-traumatic stress disorder and alcohol misuse: comorbidity in UK military personnel. *Social psychiatry and psychiatric epidemiology*, *51*(8), 1171–1180.
- Hien, D. A., Papini, S., Saavedra, L. M., Bauer, A. G., Ruglass, L. M., Ebrahimi, C. T., . . . Killeen, T. K. (2024). Project harmony: A systematic review and network meta-analysis of psychotherapy and pharmacologic trials for comorbid posttraumatic stress, alcohol, and other drug use disorders. *Psychological bulletin*, *150*(3), 319.
- Hitch, C., Toner, P., & Armour, C. (2023a). Enablers and barriers to military veterans seeking help for mental health and alcohol difficulties: A systematic review of the quantitative evidence. *Journal of health services research & policy*, *28*(3), 197–211. <https://doi.org/10.1177/13558196221149930>
- Hitch, C., Toner, P., & Armour, C. (2023b). A qualitative systematic review of enablers and barriers to helpseeking for veterans that have completely left the military within the context of mental health and alcohol. *Journal of Veterans Studies*, *9*(1), 15–30.
- Irizar, P., Stevelink, S. A., Pernet, D., Gage, S. H., Greenberg, N., Wessely, S., . . . Fear, N. T. (2021). Probable post-traumatic stress disorder and harmful alcohol use among male members of the British Police Forces and the British Armed Forces: a comparative study. *European journal of psychotraumatology*, *12*(1), 1891734.
- Jackson, K., Kaner, E., Hanratty, B., Gilvarry, E., Yardley, L., & O'Donnell, A. (2024). Understanding people's experiences of the formal health and social care system for co-occurring heavy alcohol use and depression through the lens of relational autonomy: A qualitative study. *Addiction*, *119*(2), 268–280.
- Jones, E., & Fear, N. T. (2011). Alcohol use and misuse within the military: a review. *International review of psychiatry*, *23*(2), 166–172.
- Kaufmann, C. N., Chen, L.-Y., Crum, R. M., & Mojtabai, R. (2014). Treatment seeking and barriers to treatment for alcohol use in persons with alcohol use disorders and comorbid mood or anxiety disorders. *Social psychiatry and psychiatric epidemiology*, *49*(9), 1489–1499.
- Keeney, S., Hasson, F., & McKenna, H. (2006). Consulting the oracle: ten lessons from using the Delphi technique in nursing research. *Journal of Advanced Nursing*, *53*(2), 205–212.
- Kehle-Forbes, S. M., Chen, S., Polusny, M. A., Lynch, K. G., Koffel, E., Ingram, E., . . . Oslin, D. W. (2019). A randomized controlled trial evaluating integrated versus phased application of evidence-based psychotherapies for military veterans with comorbid PTSD and substance use disorders. *Drug and Alcohol Dependence*, *205*, 107647. <https://doi.org/10.1016/j.drugalcdep.2019.107647>
- Kiernan, M. D., Moran, S., & Hill, M. (2016). Understanding why veterans are reluctant to access help for alcohol problems: considerations for nurse education. *Nurse education today*, *47*, 92–98.
- Kiernan, M. D., Osbourne, A., McGill, G., Jane Greaves, P., Wilson, G., & Hill, M. (2018). Are veterans different? Understanding veterans' help-seeking behaviour for alcohol problems. *Health & social care in the community*, *26*(5), 725–733.

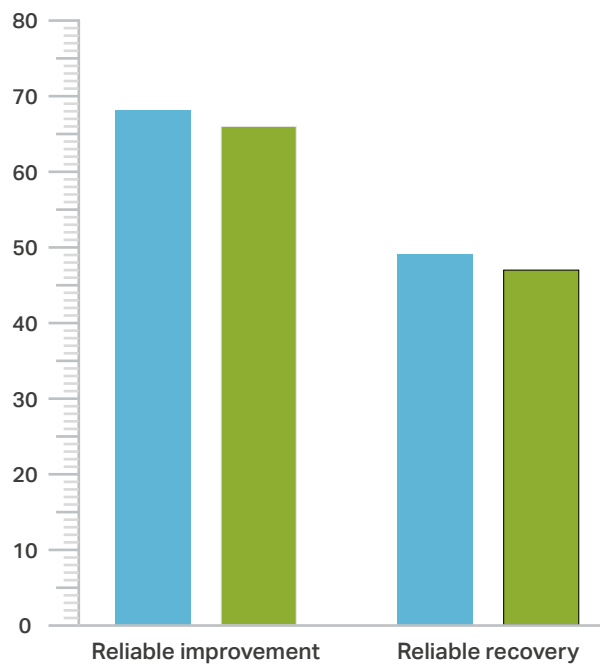
- Killeen, T. K., Baker, N. L., Davis, L. L., Bowen, S., & Brady, K. T. (2023). Efficacy of mindfulness-based relapse prevention in a sample of veterans in a substance use disorder aftercare program: A randomized controlled trial. *Journal of substance use and addiction treatment*, 152, 209116. <https://doi.org/10.1016/j.josat.2023.209116>
- Kools, N., Rozema, A. D., van den Bulck, F. A., Bovens, R. H., Mathijssen, J. J., & van de Mheen, D. (2024). Exploring barriers and facilitators to addressing hazardous alcohol use and AUD in mental health services: a qualitative study among Dutch professionals. *Addiction science & clinical practice*, 19(1), 65.
- Kroenke, K., Spitzer, R. L., & Williams, J. B. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of general internal medicine*, 16(9), 606–613.
- Leightley, D., Williamson, C., Rona, R. J., Carr, E., Shearer, J., Davis, J. P., . . . Murphy, D. (2022). Evaluating the efficacy of the drinks: ration mobile app to reduce alcohol consumption in a help-seeking military veteran population: randomized controlled trial. *JMIR mHealth and uHealth*, 10(6), e38991.
- Lewis, C., Roberts, N. P., Andrew, M., Starling, E., & Bisson, J. I. (2020). Psychological therapies for post-traumatic stress disorder in adults: Systematic review and meta-analysis. *European journal of psychotraumatology*, 11(1), 1729633.
- Luciano, M. T., McDevitt-Murphy, M. E., Murphy, J. G., Zakarian, R. J., & Olin, C. C. (2022). Open trial of a personalized feedback intervention and substance-free activity supplement for veterans with PTSD and hazardous drinking. *Journal of behavioral and cognitive therapy*, 32(2), 136–144. <https://doi.org/10.1016/j.jbct.2022.02.004>
- Lydecker, K. P., Tate, S. R., Cummins, K. M., McQuaid, J., Granholm, E., & Brown, S. A. (2010). Clinical outcomes of an integrated treatment for depression and substance use disorders. *Psychology of addictive behaviors : journal of the Society of Psychologists in Addictive Behaviors*, 24(3), 453–465. <https://doi.org/10.1037/a0019943>
- McManus, S., Bebbington, P., Jenkins, R., & Brugha, T. (2016). *Mental health and wellbeing in England: Adult Psychiatric Morbidity Survey 2014. A survey carried out for NHS Digital by NatCen Social Research and the Department of Health Sciences, University of Leicester*. NHS Digital.
- Meyer, E. C., Walser, R., Hermann, B., La Bash, H., DeBeer, B. B., Morissette, S. B., . . . Schnurr, P. P. (2018). Acceptance and Commitment Therapy for Co-Occurring Posttraumatic Stress Disorder and Alcohol Use Disorders in Veterans: Pilot Treatment Outcomes. *Journal of traumatic stress*, 31(5), 781–789. <https://doi.org/10.1002/jts.22322>
- Misca, G., Augustus, J., Russell, J., & Walker, J. (2023). Meaning (s) of transition (s) from military to civilian life at the intersection with mental health: implications for clinical settings. *Frontiers in Psychology*, 14, 1142528.
- Morris, J., & Hanna, P. (2023). The military to civilian transition: Exploring experiences of transitions to 'civvy street' and implications for the self. *Journal of Veterans Studies*, 9(3).
- Nadkarni, A., Massazza, A., Guda, R., Fernandes, L. T., Garg, A., Jolly, M., . . . Roberts, B. (2023). Common strategies in empirically supported psychological interventions for alcohol use disorders: A meta-review. *Drug and Alcohol Review*, 42(1), 94–104.
- Najavits, L. M., Krinsley, K., Waring, M. E., Gallagher, M. W., & Skidmore, C. (2018). A Randomized Controlled Trial for Veterans with PTSD and Substance Use Disorder: Creating Change versus Seeking Safety. *Substance use & misuse*, 53(11), 1788–1800. <https://doi.org/10.1080/10826084.2018.1432653>
- NICE. (2016). *NICE guideline: Severe mental illness and substance misuse (dual diagnosis): community health and social care services*. <https://www.nice.org.uk/guidance/ng58/documents/severe-mental-illness-and-substance-misuse-dual-diagnosis-community-health-and-social-care-services-final-scope2>
- Norman, S. B., Davis, B. C., Colvonen, P. J., Haller, M., Myers, U. S., Trim, R. S., . . . Robinson, S. K. (2016). Prolonged exposure with veterans in a residential substance use treatment program. *Cognitive and behavioral practice*, 23(2), 162–172.
- Norman, S. B., Trim, R., Haller, M., Davis, B. C., Myers, U. S., Colvonen, P. J., . . . Mayes, T. (2019). Efficacy of Integrated Exposure Therapy vs Integrated Coping Skills Therapy for Comorbid Posttraumatic Stress Disorder and Alcohol Use Disorder: A Randomized Clinical Trial. *JAMA Psychiatry*, 76(8), 791–799. <https://doi.org/10.1001/jamapsychiatry.2019.0638>
- Okoli, C., & Pawlowski, S. D. (2004). The Delphi method as a research tool: an example, design considerations and applications. *Information & management*, 42(1), 15–29.
- Oleski, J., Mota, N., Cox, B. J., & Sareen, J. (2010). Perceived need for care, help seeking, and perceived barriers to care for alcohol use disorders in a national sample. *Psychiatric services*, 61(12), 1223–1231.
- Palmer, L., Norton, S., Jones, M., Rona, R. J., Goodwin, L., & Fear, N. T. (2022). Trajectories of alcohol misuse among the UK Armed Forces over a 12-year period. *Addiction*, 117(1), 57–67.
- PHE. (2017). *Better care for people with co-occurring mental health, and alcohol and drug use conditions*. GOV.UK: Public Health England Retrieved from <https://www.gov.uk/government/publications/people-with-co-occurring-conditions-commission-and-provide-services>

- Porter, A., Franklin, M., De Vocht, F., d'Apice, K., Curtin, E., Albers, P., & Kidger, J. (2024). Estimating the effectiveness of an enhanced 'Improving Access to Psychological Therapies'(IAPT) service addressing the wider determinants of mental health: a real-world evaluation. *BMJ open*, *14*(1), e077220.
- Possemato, K., Johnson, E. M., Emery, J. B., Wade, M., Acosta, M. C., Marsch, L. A., . . . Maisto, S. A. (2019). A pilot study comparing peer supported web-based CBT to self-managed web CBT for primary care veterans with PTSD and hazardous alcohol use. *Psychiatric rehabilitation journal*, *42*(3), 305–313. <https://doi.org/10.1037/prj0000334>
- Possemato, K., Mastroleo, N. R., Balderrama-Durbin, C., King, P., Davis, A., Borsari, B., & Rauch, S. A. M. (2024). A Randomized Controlled Pilot Trial of Primary Care Treatment Integrating Motivation and Exposure Treatment (PC-TIME) in Veterans With PTSD and Harmful Alcohol Use. *Behavior therapy*, *55*(3), 570–584. <https://doi.org/10.1016/j.beth.2023.08.011>
- Priester, M. A., Browne, T., Iachini, A., Clone, S., DeHart, D., & Seay, K. D. (2016). Treatment access barriers and disparities among individuals with co-occurring mental health and substance use disorders: an integrative literature review. *Journal of substance abuse treatment*, *61*, 47–59.
- Randles, R., & Finnegan, A. (2022). Veteran help-seeking behaviour for mental health issues: a systematic review. *BMJ mil Health*, *168*(1), 99–104.
- Rhead, R., MacManus, D., Jones, M., Greenberg, N., Fear, N. T., & Goodwin, L. (2022). Mental health disorders and alcohol misuse among UK military veterans and the general population: a comparison study. *Psychological Medicine*, *52*(2), 292–302.
- Roberts, N. P., Lotzin, A., & Schäfer, I. (2022). A systematic review and meta-analysis of psychological interventions for comorbid post-traumatic stress disorder and substance use disorder. *European journal of psychotraumatology*, *13*(1), 2041831.
- Roberts, N. P., Roberts, P. A., Jones, N., & Bisson, J. I. (2015). Psychological interventions for post-traumatic stress disorder and comorbid substance use disorder: A systematic review and meta-analysis. *Clinical psychology review*, *38*, 25–38.
- Schumm, J. A., Monson, C. M., O'Farrell, T. J., Gustin, N. G., & Chard, K. M. (2015). Couple Treatment for Alcohol Use Disorder and Posttraumatic Stress Disorder: Pilot Results From U.S. Military Veterans and Their Partners. *Journal of traumatic stress*, *28*(3), 247–252. <https://doi.org/10.1002/jts.22007>
- Shariff, N. (2015). Utilizing the Delphi survey approach: A review. *J Nurs Care*, *4*(3), 246.
- Spanakis, P., Gribble, R., Stevelink, S. A., Rona, R. J., Fear, N. T., & Goodwin, L. (2023). Problem drinking recognition among UK military personnel: prevalence and associations. *Social psychiatry and psychiatric epidemiology*, *58*(2), 193–203.
- Spitzer, R. L., Kroenke, K., Williams, J. B., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of internal medicine*, *166*(10), 1092–1097.
- Stevelink, S. A., Jones, N., Jones, M., Dyball, D., Khera, C., Pernet, D., . . . Fear, N. (2019). Do serving and ex-serving personnel of the UK Armed Forces seek help for perceived stress, emotional or mental health problems? *European journal of psychotraumatology*, *10*(1).
- Swithenbank, Z., Irizar, P., Halsall, L., Puddephatt, J.-A., Parkes, P., O'Donnell, A., . . . Goodwin, L. (Under Review). The implementation of current UK guidance for the treatment of co-occurring mental health and substance use conditions: a mixed methods systematic review and thematic synthesis.
- Twomey, C., O'Reilly, G., & Byrne, M. (2015). Effectiveness of cognitive behavioural therapy for anxiety and depression in primary care: a meta-analysis. *Family practice*, *32*(1), 3–15.
- Watkins, L. E., Patton, S. C., Wilcox, T., Drexler, K., Rauch, S. A. M., & Rothbaum, B. O. (2024). Substance Use after Completion of an Intensive Treatment Program with Concurrent Treatment for Posttraumatic Stress Disorder and Substance Use among Veterans: Examining the Role of PTSD Symptoms. *Journal of dual diagnosis*, *20*(1), 16–28. <https://doi.org/10.1080/15504263.2023.2290167>
- Wilkins, K. C., Lang, A. J., & Norman, S. B. (2011). Synthesis of the psychometric properties of the PTSD checklist (PCL) military, civilian, and specific versions. *Depression and anxiety*, *28*(7), 596–606.
- Williamson, V., Murphy, D., Bonson, A., Aldridge, V., Serfioti, D., & Greenberg, N. (2023). Restore and Rebuild (R&R) - a feasibility pilot study of a co-designed intervention for moral injury-related mental health difficulties. *European journal of psychotraumatology*, *14*(2), 2256204. <https://doi.org/10.1080/20008066.2023.2256204>

11 | Appendices

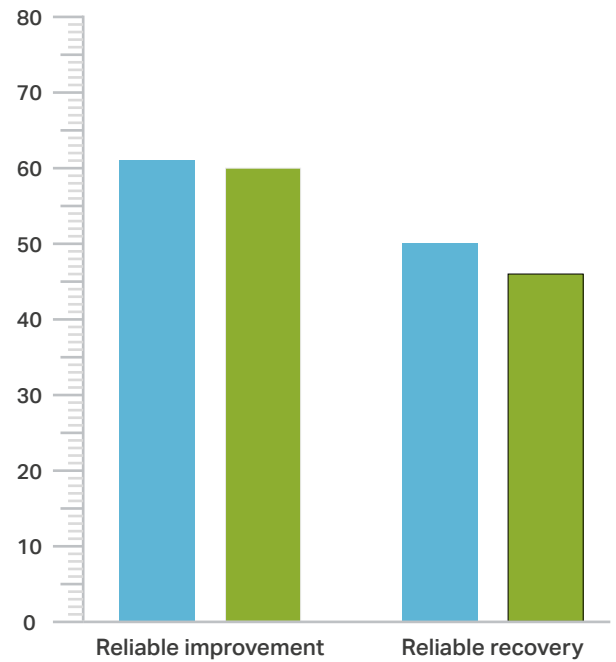
Appendix 11.1

Figure showing changes in depression outcomes for veterans with CMD and AUD compared to veterans with CMD only (reference group) among those who completed treatment



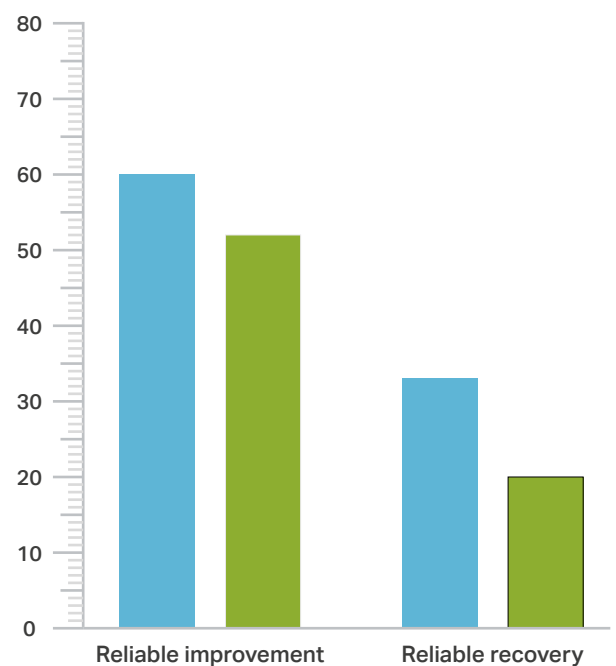
Appendix 11.3

Figure showing changes in PTSD outcomes for veterans with CMD and AUD compared to veterans with CMD only (reference group) among those who completed treatment



Appendix 11.2

Figure showing changes in anxiety outcomes for veterans with CMD and AUD compared to veterans with CMD only (reference group) among those who completed treatment



Appendix 11.4:

Round 1 Delphi Results (Study 5): Importance ratings (Mean Score, SD), and percentage of experts rating items as high (4–5), moderate (3), or low (1–2).

	Recommendations	N	Mean	SD	Score (%)		
					High (4-5)	Mid (3)	Low (1-2)
1	RA1: For veterans transitioning from military to civilian life, increase awareness of national and regional NHS and third sector services that provide integrated support for veterans with co-occurring mental health and alcohol use disorders.	41	4.68	0.52	98%	2%	0%
2	RD4. Veterans with co-occurring mental and alcohol use problems should not be left without, or experience long delays for, mental health support, when seeking treatment for alcohol use. Timely progression from referral to assessment and referral to treatment will help maintain engagement and prevent issues from worsening.	41	4.59	0.74	98%	0%	2%
3	RD1. A personalised care plan should be co-developed with the veteran, reflecting their needs, preferences, and goals. It should guide the timing and choice of interventions for sequential and parallel treatment models, be regularly reviewed, and adapt to their progress—ensuring coordinated support for both mental health and alcohol use disorders.	41	4.63	0.77	95%	2%	2%
4	RD2. Following assessment, veterans identified with co-occurring mental health and alcohol use disorders should be fully informed and actively guided into appropriate care pathways and support networks which address both issues in a coordinated way.	41	4.68	0.57	95%	5%	0%
5	RD7. For veterans with co-occurring mental health and alcohol use disorders, mental health services should utilise evidence-based interventions which address the underlying drivers and maintenance cycles of both conditions (e.g., trauma-specific interventions when unresolved trauma is a driver of alcohol use).	41	4.66	0.76	95%	2%	2%
6	RE3. Encourage NHS services to proactively build and maintain links with veteran-specific and third sector organisations who provide alcohol and/or mental health support, to provide appropriate care pathways (e.g., establish an Armed Forces forum/network within each health board).	41	4.51	0.68	95%	2%	2%
7	RE5. Increase collaboration between veteran-specific services and third sector drug and alcohol services to develop strategies to tailor drug and alcohol support to the needs of veterans (e.g., Change Grow Live's Veteran Support Working Group).	41	4.51	0.68	95%	2%	2%
8	RG3. All staff working within mental health services should be provided with training on the relationship between mental health and alcohol use, and where possible, staff should be trained in psychological interventions that are effective for treating veterans with co-occurring mental health and alcohol use disorders.	41	4.49	0.78	95%	2%	2%
9	RG4. To enable service providers to deliver effective care to veterans, organisations must ensure that staff have access to ongoing support, supervision, and guidance, to prevent burnout and maintain resilience.	41	4.49	0.84	95%	0%	5%
10	RA4. Encourage service providers to actively build their awareness of local and national veteran support services for alcohol use and/or mental health, as well as wider related issues such as housing, employment or offending.	41	4.49	0.71	93%	5%	2%

	Recommendations	N	Mean	SD	Score (%)		
					High (4-5)	Mid (3)	Low (1-2)
11	RD8. Services should provide timely psychological and/or pharmacological support following detox from alcohol, to address emerging mental health problems (e.g., heightened anxiety, re-experiencing symptoms, increased problems with sleep) and reduce the risk of relapse.	41	4.51	0.81	93%	5%	2%
12	RA5. Develop national campaigns which share lived experience perspectives and empirical evidence relating to co-occurring mental health and alcohol use disorders to raise awareness on the high comorbidity of these conditions and normalise help-seeking.	41	4.34	0.88	90%	5%	5%
13	RB3. All organisations must commit to strategies to reduce stigma and shame surrounding alcohol and mental health to promote earlier access to treatment for veterans with co-occurring mental health and alcohol use disorders.	41	4.39	0.89	90%	5%	5%
14	RB4. Initial support around alcohol (e.g., brief alcohol interventions) and plans for follow-up should be provided in the first setting where veterans present, such as GP practices, even if someone is reluctant to visit drug and alcohol treatment services.	41	4.29	0.81	90%	7%	2%
15	RC3: In both mental health and drug and alcohol treatment services, screening for alcohol and mental health problems should be assessed at multiple time points, not just at the initial assessment, as problems can develop or change over time.	41	4.41	0.89	90%	5%	5%
16	RE2. Develop streamlined information sharing systems across organisations that provide alcohol and/or mental health support to veterans, while ensuring security, privacy, and compliance through data-sharing agreements, to allow service providers to access relevant information without requiring veterans to repeatedly share their trauma histories.	41	4.51	0.90	90%	5%	5%
17	RA2. Mental health and drug and alcohol services should conduct outreach work with veteran organisations, charities, and at veteran events (e.g., breakfast clubs) to enhance visibility and provide information on support that is available for veterans with co-occurring mental health and alcohol use disorders.	41	4.39	0.77	88%	10%	2%
18	RC2. Drug and alcohol services should adopt an open assessment approach with routine screening for mental health problems that can easily be delivered by the practitioners (e.g. to assess for symptoms of psychological distress). Veterans should be informed about the purpose of screening and referred on for further assessment for more severe mental health conditions.	41	4.22	0.96	88%	7%	5%
19	RD6. Where parallel or integrated care is not possible (e.g., alcohol use is impacting on engagement with mental health services), offer sequential interventions shown to be effective for veterans with co-occurring mental health and alcohol use disorders, maintaining contact with the veteran whilst they receive the first intervention.	41	4.32	1.04	88%	5%	7%
20	RD9. Offer diverse treatment options and modalities (e.g., individual therapy, family therapy, group therapy) to help veterans with co-occurring mental health and alcohol use disorders to make informed choices.	41	4.34	0.91	88%	7%	5%
21	RE1: Organisations must foster continuous collaboration across mental health and drug and alcohol services involved in veteran care by maintaining ongoing dialogue and sharing best practices. If appropriate, establish formal agreements, such as Memorandum of Understandings to ensure coordinated support.	41	4.34	0.76	88%	10%	2%

	Recommendations	N	Mean	SD	Score (%)		
					High (4-5)	Mid (3)	Low (1-2)
22	RE4. Integrate substance use nurses and COMHAD pathways (Co-occurring Mental Health, Alcohol and Drugs) within all NHS military veterans' services.	41	4.46	0.78	88%	10%	2%
23	RB2. Eliminate abstinence-only policies that prevent access to mental health support. Instead, adopt a flexible, needs-based approach that assesses their level of dependency, emotional engagement capacity, and ability to attend structured sessions.	41	4.51	0.81	85%	12%	2%
24	RD5. Mental health and alcohol use disorders should be treated concurrently, either by separate services in a co-ordinated care plan or within one integrated service (such as integrating substance use recovery workers within mental health services), where possible.	41	4.39	1.02	85%	10%	5%
25	RG1. Provide access to accredited training on veteran-specific needs (e.g., the Military Human Course), to ensure that all professionals working with veterans with mental health and alcohol use disorders have a comprehensive understanding of military culture and veterans' needs.	41	4.34	0.99	85%	7%	7%
26	RG6. Increase training relating to trauma-informed care and military culture for frontline staff (e.g., healthcare professionals working in A&E) to be able to better recognise and respond to veterans in crisis, so they can guide them to appropriate support pathways once they are ready to be discharged from hospital.	41	4.41	0.89	85%	12%	2%
27	RH3. Invest funding in drug and alcohol treatment services and ensure that veterans with co-occurring conditions are provided with clear pathways to access funding for detox and rehabilitation services, including veteran-specific rehabilitation services.	41	4.32	0.93	85%	10%	5%
28	RB1. Adopt a low threshold entry (e.g., minimal requirements for access) and referral access model (e.g., allowing self-referrals) in mental health and drug and alcohol services to reduce barriers for veterans to access and engage with services.	41	4.27	1.00	83%	10%	7%
29	RA3: Facilitate regional networks of veteran champions to share learning and examples of best practice to services who provide support for veterans with co-occurring mental health and alcohol use disorders.	41	4.17	0.92	80%	12%	7%
30	RH2. Develop and implement veteran-specific strategies across all integrated care boards and regions to ensure consistent, co-ordinated support for co-occurring mental health and alcohol use disorders.	41	4.17	0.95	80%	15%	5%
31	RC1. Mental health services should implement an open assessment process that includes routine screening for alcohol and substance use, given the high levels of co-occurrence. Veterans should be informed about the purpose of screening.	41	4.22	0.99	78%	17%	5%
32	RG2. Promote and expand the Veteran-Friendly GP Practice accreditation scheme for GPs, to build knowledge, trust and engagement.	41	4.22	1.15	78%	12%	10%
33	RH5. Develop systems for collecting and sharing anonymised data (e.g., held by a central body such as the Office for Veterans' Affairs) relating to veterans' needs across mental health, substance use, and wider health and social care services, to develop a better understanding of veterans' needs.	41	4.00	1.20	78%	5%	17%
34	RB5. GP practices should implement strategies to reduce stigma surrounding mental health and alcohol use disorders (e.g., staff training, patient education, public awareness campaigns).	41	4.22	0.96	76%	22%	2%

	Recommendations	N	Mean	SD	Score (%)		
					High (4-5)	Mid (3)	Low (1-2)
35	RC4. Clinical formulations which identify maintenance cycles and underlying drivers relating to co-occurring alcohol use should be prioritised within mental health assessments for veterans.	41	4.20	0.95	76%	22%	2%
36	RD3. Veterans identified with co-occurring conditions who are initially referred to drug and alcohol treatment services by a mental health service (due to their level of need) should continue to receive some support and contact from mental health teams whilst they are seen by the drug and alcohol service, to ensure continuity of care.	41	4.29	1.08	76%	17%	7%
37	RH1. Continue and expand research initiatives to examine the efficacy of novel and emerging interventions to address co-occurring mental health and alcohol use disorders in veterans (e.g., multi-modular motion-assisted memory desensitisation and reconsolidation, digital interventions, psychedelic-assisted therapies).	41	4.05	1.05	76%	15%	10%
38	RB6. Learn from region-specific examples of best practice, such as Adferiad in Wales, to implement veteran-to-veteran peer mentoring support and drop-in community hubs, as peer support can be helpful for providing advocacy when someone is navigating the complex treatment landscape.	40	4.18	1.01	75%	20%	5%
39	RF1. Embed Veteran Champions (volunteers who support veterans and their families, raising awareness of issues faced by veterans and ensuring they access to appropriate support) in mental health and drug and alcohol services to advise service providers with limited experience of working with veterans.	41	3.98	1.15	73%	15%	12%
40	RD10. Veterans not ready to address alcohol use should not be discharged from mental health services. Instead, mental health practitioners should use motivational interviewing to build readiness and reduce harm.	41	4.02	1.04	71%	22%	7%
41	RF3. Strengthen peer support networks and embed trained veteran-to-veteran peer mentors with lived experience of mental health and/or alcohol use disorders within mental health and drug and alcohol services, to improve navigation of care.	41	3.98	1.13	71%	20%	10%
42	RH4. Encourage all organisations involved in the provision of care for co-occurring mental health and alcohol use disorders to sign the Armed Forces Covenant and commit to identifying and supporting UK veterans.	41	3.98	1.15	68%	22%	10%
43	RF2. When veterans are identified as having co-occurring mental health and alcohol use disorders, assign an advocate or peer mentor who can help the veteran navigate different treatment services and options, ensure coordinated care and continuity across services.	41	3.78	1.31	63%	17%	20%
44	RG5. Establish regional dedicated leads for veterans' health training to co-ordinate and advance workforce development across mental health, drug and alcohol use, and wider health and social care services.	41	3.95	1.07	63%	29%	7%
45	RF4. Mental health and drug and alcohol services should engage with regimental charities that provide support to veterans of specific regiments in the Armed Forces, to strengthen trust within members of the same unit and reduce stigma around help-seeking.	41	3.83	1.22	61%	24%	15%

Appendix 11.5

Round 2 Delphi results: Recommendations ranked and presented with the mean feasibility scores

Rank	Recommendation	Feasibility	
		Mean	SD
1	RA1: For veterans transitioning from military to civilian life, increase awareness of national and regional NHS and third sector services that provide integrated support for veterans with co-occurring mental health and alcohol use disorders.	4.09	0.69
2	RB1. Adopt a low threshold entry (e.g., minimal requirements for access), "no wrong door" approach and referral access model (e.g., allowing self-referrals) across mental health and drug and alcohol services to reduce barriers for veterans to access and engage with services.	3.94	1.05
3	RA2. Mental health and drug and alcohol services should conduct outreach work with veteran organisations, charities, and at veteran events (e.g., breakfast clubs) to enhance visibility and provide information on support that is available for veterans with co-occurring mental health and alcohol use disorders.	3.78	0.91
4	RA4. Encourage service providers to actively build their awareness of local and national veteran support services for alcohol use and/or mental health, as well as wider related issues such as housing, employment or offending	4.13	0.75
5	RA5. Develop national campaigns which share lived experience perspectives and empirical evidence relating to co-occurring mental health and alcohol use disorders to raise awareness on the high comorbidity of these conditions and normalise help-seeking	3.81	0.90
6	RC2. Drug and alcohol services should ensure that mental health is part of any initial assessments and veterans should be informed about the purpose and referred on for further assessment for more severe mental health conditions.	4.41	0.61
7	RB4. Initial support around alcohol (e.g., brief alcohol interventions) and plans for follow-up should be provided in the first setting where veterans present, such as GP practices, even if someone is reluctant to visit drug and alcohol treatment services.	3.56	0.88
8	RB2. Services should consider the limitations of abstinence-only policies that prevent access to mental health support for veterans with co-occurring mental health and alcohol use disorders. Instead, adopt a flexible, needs-based approach that assesses veterans' ability to attend structured sessions.	3.84	0.99
9	RB3. All organisations should consider the inclusion of local strategies that aim to reduce the stigma and shame surrounding alcohol and mental health, for example, sharing lived experience stories or applying trauma-informed approaches.	4.06	0.76
10	RC3. In both mental health and drug and alcohol treatment services, alcohol and mental health problems should be assessed at multiple time points, not just at the initial assessment, as problems can develop or change over time.	4.38	0.71
11	RD4. Veterans with co-occurring mental and alcohol use problems should not be left without, or experience long delays for, mental health support, when seeking treatment for alcohol use. Timely progression from referral to assessment and referral to treatment will help maintain engagement and prevent issues from worsening.	3.41	1.21
12	RD1. Veterans should be supported to develop personalised care plans which reflect their wider needs, preferences, and goals, with a focus on ensuring coordination of support for both mental health and alcohol use disorders.	4.19	0.82
13	RD2. Following assessment, veterans identified with co-occurring mental health and alcohol use disorders should be fully informed and actively guided into appropriate care pathways and support networks which address both issues in a coordinated way.	3.94	0.95
14	RD5. Mental health and alcohol use disorders should be treated concurrently and with a co-coordinated care plan, where possible, unless there is a clear justification for a sequential approach, for example, if the service user wants to focus on one of the problems first.	3.50	1.24
15	RD8. Mental health support should be provided soon after detox from alcohol, to address emerging mental health problems (e.g., heightened anxiety, re-experiencing symptoms, increased problems with sleep) and reduce the risk of relapse.	3.97	0.90
16	RD6. Where parallel or integrated care is not possible (e.g., when alcohol use is affecting engagement with mental health services), offer sequential interventions and ensure ongoing contact with the veteran throughout the process.	3.84	0.95
17	RD7. When treating veterans with co-occurring mental health and alcohol use disorders, mental health services should consider intervention approaches which also address the underlying drivers and maintenance cycles of alcohol use.	4.09	0.93
18	RH3. Ensure that veterans with co-occurring conditions are provided with clear pathways to access alcohol detox and rehabilitation services, including veteran-specific rehabilitation services.	3.81	0.97
19	RE1: Increase collaboration across mental health and drug and alcohol services and veteran-specific services to tailor support to the needs of veterans, by maintaining ongoing dialogue and sharing best practices.	3.88	0.98

Rank	Recommendation	Feasibility	
		Mean	SD
20	RD9. Offer diverse treatment options and modalities (e.g., individual therapy, family therapy, group therapy) to help veterans with co-occurring mental health and alcohol use disorders to make informed choices.	3.50	1.34
21	RE2. Develop streamlined information and data-sharing compliant processes across veteran specific mental health and drug and alcohols services, to allow service providers to access relevant information (in advance of the development of shared IT infrastructure) and to prevent veterans from having to repeatedly share their trauma histories.	3.31	1.42
22	RE4. Integrate substance use nurses and COMHAD pathways (Co-occurring Mental Health, Alcohol and Drugs) within all NHS military veterans' services.	3.97	1.00
23	RG3. Relevant staff working within mental health services should be provided with training on the relationship between mental health and alcohol use, including on which psychological interventions are effective for treating co-occurring mental health and alcohol use disorders.	4.13	0.83
24	RG6. Increase training relating to trauma-informed care and military culture for frontline staff (e.g., healthcare professionals working in A&E) to be able to better recognise and respond to veterans in crisis, so they can guide them to appropriate support pathways once they are ready to be discharged from hospital.	3.91	0.89
25	RG1. Provide access to accredited training on veteran-specific needs (e.g., the Military Human Course), to ensure that all professionals working with veterans with mental health and alcohol use disorders have a comprehensive understanding of military culture and veteran's needs.	4.06	0.84
26	RG4. To enable service providers to deliver effective care to veterans, organisations must ensure that staff have access to ongoing support, supervision, and guidance, to prevent burnout and maintain resilience.	3.94	0.80

