McMaster University | HEALTH FORUM

Rapid Evidence Profile

Supporting equitable access to mental health care for rural and remote Veterans and their families

17 December 2024

[MHF product code: REP 86]

Appendices

Appendix 1: Methodological details

We use a standard protocol for preparing rapid evidence profiles (REP) to ensure that our approach to identifying research evidence is as systematic and transparent as possible in the time we were given to prepare the profile.

Identifying research evidence

For this REP, we searched Health Systems Evidence and PubMed for:
1) evidence syntheses
2) protocols for evidence syntheses that are underway
3) single studies.

We searched Health Systems Evidence for evidence syntheses using a filter under diseases for "mental health and addictions" and under population for "military personnel, Veterans and their families" combined with a key term search for rural OR remote OR northern. Links provide access to the full search strategy. We searched PubMed for evidence syntheses and single studies using medical subject headings for "military family" "military personnel" "Veterans" as well as for "mental health services" "behavioural medicine" combined with a key term search for (rural OR remote OR northern).

Each source for these documents is assigned to one team member who conducts hand searches (when a source contains a smaller number of documents) or keyword searches to identify potentially relevant documents. A final inclusion assessment is performed both by the person who did the initial screening and the lead author of the rapid evidence profile, with disagreements resolved by consensus or with the input of a third reviewer on the team. The team uses a dedicated virtual channel to discuss and iteratively refine inclusion/exclusion criteria throughout the process, which provides a running list of considerations that all members can consult during the first stages of assessment. Following this process, we included 42 evidence documents.

During this process we include published, pre-print, and grey literature. We do not exclude documents based on the language of a document. However, we are not able to extract key findings from documents that are written in languages other than Chinese, English, French, or Spanish. We provide any documents that do not have content available in these languages in an appendix containing documents excluded at the final stages of reviewing. We excluded documents that did not directly address the research questions and the relevant organizing framework.

Assessing relevance and quality of evidence

We assess the relevance of each included evidence document as being of high, moderate, or low relevance to the question.

Two reviewers independently appraised the quality of the guidelines we identified as being highly relevant using AGREE II. We used three domains in the tool (stakeholder involvement, rigour of development, and editorial independence) and classified guidelines as high quality if they were scored as 60% or higher across each of these domains.

Two reviewers independently appraise the methodological quality of evidence syntheses that are deemed to be highly relevant using the first version of the AMSTAR tool. Two reviewers independently appraise each synthesis, and disagreements are resolved by consensus with a third reviewer if needed. AMSTAR rates overall methodological quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. High-quality evidence syntheses are those with scores of eight or higher out of a possible 11, medium-quality evidence syntheses are those with scores between four and seven, and low-quality evidence syntheses are those with scores less than four. It is important to note that the AMSTAR tool was developed to assess evidence syntheses focused on clinical interventions, so not all criteria apply to those pertaining to health-system arrangements or implementation strategies. Furthermore, we apply the AMSTAR criteria to evidence syntheses addressing all types of questions, not just those addressing questions about effectiveness, and some of these evidence syntheses addressing other types of questions are syntheses of qualitative studies. While AMSTAR does not account for some of the key attributes of syntheses of qualitative studies, such as whether and how citizens and subject-matter experts were involved, researchers' competency, and how reflexivity was approached, it remains the best general quality-assessment tool of which we're aware. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, an evidence synthesis that scores 8/8 is generally of comparable quality to another scoring 11/11; both ratings are considered 'high scores.' A high score signals that readers of the evidence synthesis can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the evidence synthesis should be discarded, merely that less confidence can be placed in its findings and that it needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1): S8).

Preparing the profile

Each included document is cited in the reference list at the end of the REP. For all included guidelines, evidence syntheses, and single studies (when included), we prepare a small number of bullet points that provide a summary of the key findings, which are used to summarize key messages in the text. Protocols and titles/questions have their titles hyperlinked, given that findings are not yet available.

We then draft a summary that highlights the key findings from all highly relevant documents (alongside their date of last search and methodological quality).

Appendix 2: Details about each identified evidence synthesis

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations

• Types of mental health services
  ○ Complementary and alternative therapies
  ▪ Animal-assisted therapies
• Mental health or substance-use service setting
  ○ Community-based care
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ○ Family members of Veterans or retired RCMP officers
  ▪ Spouses/partners
	Animal-assisted interventions may improve well-being in Veterans and their families by improving communication, resilience, and engagement with meaningful activities (1)
	• This review explored the effects of animal-assisted interventions on the well-being of Veterans and their family members
	• The current literature on the effects of animal-assisted interventions is limited but positive effects have been shown throughout
	  ○ Equine-assisted interventions have shown improved relationships and communication
	  ○ Service dogs can increase engagement with activities, promote resilience, and improve relationship functioning
	  ○ Service dogs may be helpful for some spouses, and may increase burden on others
		High	No	7/9	2023	Not available	• Occupation

• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Psychoeducation for individuals and their families
  ○ Complementary and alternative therapies
  ▪ Animal-assisted therapies
• Approaches to improve access in rural and remote areas
  ○ Providing peer support to complement mental health and substance-use services
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
	Equine-assisted services have shown positive effects for treating post-traumatic stress disorder (PTSD) for Veterans and their families (2)
	• This review examined the effectiveness of equine-assisted services for treating PTSD in Veterans
	• Types of equine-assisted treatments included grooming, teamwork, and riding
	• Psychotherapy for reflection, observing, and learning was included into some interventions
	• Equine-assisted treatments consistently showed short term improvements in PTSD symptoms; however, studies were of low quality
	• Equine-assisted treatments showed benefits for the entire family including greater enjoyment and well-being
	• Equine-assisted treatments also include a social component, allowing Veteran families to
		High	No	6/11	2023	Not available	• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
○ Veterans ○ Family members of Veterans or retired RCMP officers ▪ Spouses/partners	share experiences and form meaningful connections						
• Dimensions of access ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) • Types of mental health services ○ Mental health and substance-use services ▪ Psychoeducation for individuals and families ▪ Medication-assisted treatment ▪ Self-help approaches ▪ Case management/care coordination ▪ Multi-component interventions using one or more of the above • Mental health or substance-use service setting ○ Specialty care ▪ Inpatient ▪ Outpatient • Approaches to improve access in rural and remote areas ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) • Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Care experience for Veterans, retired RCMP officers, and/or their families • Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	Mobile health (mHealth) interventions were found to be acceptable and feasible interventions that improved medication adherence and cognitive functioning in patients with psychosis (3) • A total of three out of four studies found improvements in medication adherence using mHealth • A total of two out of three studies found improvements in cognitive functioning using mHealth • mHealth interventions were found to be acceptable and feasible, with preference for smartphone applications over mobile phones	High	No	6/9	2016	No	• None reported
• Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility)	Video therapy for Veterans faces substantial barriers (e.g., clinician concerns, logistical and technological challenges, and resource limitations); however, successful implementation is possible	High	No	4/9	2018	No	• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
○ Acceptability (e.g., professional values, norms, culture) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) ● Types of mental health services ○ Mental health and substance-use services ▪ Psychotherapy and other forms of talk therapy ● Approaches to improve access in rural and remote areas ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ○ Providing culturally appropriate care ● Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Care experience for Veterans, retired RCMP officers, and/or their families ● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	with trained staff, on-site champions, and tailored support strategies (4)						
● Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Acceptability (e.g., professional values, norms, culture) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) ● Types of mental health services	Out of 70 resources on community-based suicide prevention programs identified, only 20 focused on Veterans, one on rural communities, and none of rural Veterans (5) • The paper did not provide the list of 70 resources; however, it compiled the menu of options around the European Alliance Against Depression (EAAD) program's four levels: ○ Level 1: Crisis intervention includes the creation of Veterans Health Administration services and resources for crisis and sharing information about it	High	No	4/9	Not mentioned	No	• Place of residence, urban versus rural • Cultural sensitivity

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
○ Mental health and substance-use services ▪ Harm reduction services ▪ Crisis intervention ▪ Peer support ● Mental health or substance-use service setting ○ Community-based care ● Approaches to improve access in rural and remote areas ○ Approaches to reduce stigma in seeking care ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ○ Providing peer support to complement mental health and substance-use services ● Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Care experience for Veterans, retired RCMP officers, and/or their families ○ Provider experience ● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	○ Level 2: Enhanced education and training in primary care includes training primary care providers on suicide risk assessment, mental health screening, and care for at-risk rural Veterans ○ Level 3: Training community gatekeepers includes training rural community members helping Veterans accessing professional help and noticing warning signs of suicide ○ Level 4: Raising public awareness through a public relations campaign includes raising awareness on mental health and reducing associated stigma • The paper identified The Suicide Prevention Resource Library (SPRC Resources and Programs) as a comprehensive and well-maintained resource compiling the different evidence-based programs, expert/consensus statements, and interventions that adhere to standards						
• Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Acceptability (e.g., professional values, norms, culture) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Affordability (e.g., direct and indirect costs, opportunity costs) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity)	Virtual delivery of trauma therapies was as affective as in-person delivery in reducing PTSD symptoms in Veterans, while also reducing stigma and cost; however, there are possible detractors to accessibility, including technology issues and lack of a quiet, private space (6) • Systematic scoping review of 38 studies identified facilitators to, barriers to, and recommendations for accessing trauma-specific teletherapies • Facilitators identified included: ○ convenience of accessing teletherapy for Veterans in rural areas	High	No	2/9	2020	Not available	• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations

• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Psychotherapy and other forms of talk therapy
  ▪ Peer support
• Approaches to improve access in rural and remote areas
  ○ Approaches to reduce stigma in seeking care
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
  ○ Providing peer support to complement mental health and substance-use services
  ○ Providing transportation and housing supports to access needed care
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
  ○ Provider experience
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	○ reduced stigma due to participating from home
	○ increased feeling of safety at home, especially in clients who experienced military sexual trauma
	○ reduced transportation and missed work costs
	○ similar opportunities for relationship-building with therapist relative to in-person treatment
	○ clinical efficacy
	▪ majority of studies found that digitally delivered trauma-specific therapies (prolonged exposure therapy, cognitive processing therapy (CBT), behavioural activation, and therapeutic exposure therapy) were just as effective as in-person therapy, although evidence for CBT was conflicting
	• Barriers identified included:
	○ technology issues, such as lack of consistent access to secure internet or inability to access compatible hardware
	○ lack of a quiet and private space at home, contributing to:
	▪ fear of being overheard
	▪ difficulty in fully engaging in therapy as a result of poor boundaries between therapy time and home time,
	▪ privacy worries
	○ clients worry over managing strong emotions in isolated home environment
	○ clients with hypervigilance being less willing to participate in exposure therapy activities
	○ possible enabling of social avoidance behaviours
	○ therapists worry over managing safety of client						

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	○ impersonal feeling of videoconferencing possibly limiting strength of therapeutic alliance • Recommendations included: ○ managing technological issues ○ finding ways to increase patient comfort through initial in-person meetings and safety planning for at-home delivery ○ supplementing teletherapy with peer assistance • Limitations of the review included: ○ possible selection bias, given that those who participated may have already accepted the effectiveness of remote delivery ○ heterogeneity in the quality and outcome measures of the studies, making data comparison challenging • Narrative synthesis included mostly good quality studies; however, there was significant variation in outcome measures used						
• Dimensions of access ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Affordability (e.g., direct and indirect costs, opportunity costs) • Types of mental health services ○ Mental health and substance-use services ▪ Complementary and alternative therapies • Breathing • Meditation • Yoga	Significant reductions in PTSD symptom severity after administration of portable mind-body therapy to Veterans was found across the majority of included studies (7) • Narrative synthesis of 15 studies addressed the effectiveness of mind-body therapy in reducing PTSD severity in military Veterans • Mind-body therapy interventions were effective at reducing PTSD symptom severity: ○ Significant reductions found in six of the nine included RCTs, and over time in all six single group studies • Reviewers argued that high participant retention and satisfaction rates suggest that mind-body therapy interventions might be maintainable without too much effort, given: ○ portability of the intervention (might eliminate stigma of going to clinic)	High	No	5/9	2016	Not available	• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations

• Approaches to improve access in rural and remote areas
  ○ Approaches to reduce stigma in seeking care
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	○ reduced delivery cost relative to conventional PTSD treatment, as mind-body interventions can be delivered to many Veterans at once
	• Limitations of the review included:
	  ○ inclusion of uncontrolled single-group studies, since improvements could be attributed to placebo effect
	  ○ small sample size
	  ○ heterogeneity in measure of PTSD outcome
	  ○ lack of long-term follow up in studies						

• Dimensions of access
  ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Complementary and alternative therapies
  • Breathing
  • Meditation
  • Yoga
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	Meta-analysis found significant overall effect, in the small-to-medium range, of mindfulness meditation compared to control conditions in reducing military-related PTSD symptoms (8)
	• Meta-analysis (n = 19) calculated the efficacy of mindfulness meditation, defined as attending to the present moment with non-judgemental awareness, in reducing military-related PTSD
	• A statistically significant overall effect size, in the small-to-medium range, was found across randomized controlled trials (RCTs) comparing mindfulness meditation to treatment as usual, present-centred group therapy, and PTSD health education
	• Active versus nonactive control conditions, group versus individual delivery format, and short versus long intervention duration were found to be equally effective
	• A limitation of the review was that some included studies were rated high or unclear risk of bias
		High	No	9/11	2019	No	• Occupation

• Dimensions of access ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity)	Partnership with a psychiatric assistance dog was associated with a clinically meaningful and statistically significant reduction in PTSD severity in Veterans (11)	High	No	8/11	2021	Not available	• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
○ Acceptability (e.g., professional values, norms, culture) ○ Affordability (e.g., direct and indirect costs, opportunity costs) • Types of mental health services ○ Mental health and substance-use services ○ Complementary and alternative therapies • Animal-assisted therapies • Mental health or substance-use service setting ○ Community-based care • Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Care experience for Veterans, retired RCMP officers, and/or their families • Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	• Quantitative and qualitative synthesis of mainly moderate-quality articles (n = 41) • Meta-analysis found that partnership with a psychiatric assistance dog resulted in clinically meaningful and statistically significant reductions in PTSD severity scores • Due to the high heterogeneity amongst the 41 total articles, only a small subset were included in the meta-analysis • These articles had high methodological scores • Narrative synthesis revealed increased mental health outcome in all studies, including self-reported: ○ decreased PTSD symptoms (specifically, hypervigilance, intrusive memories, and startle reactions) facilitated by dog's trained tasks in all studies ○ greater sense of safety, peace of mind, and self-worth, leading to transformative change in many studies ○ prevention from dying by suicide in multiple participants • Narrative synthesis found contradictory results for physical health outcome, namely: ○ self-report data indicated improvements in sleep quality and decreases in prescription medication and substance abuse, but objective measures yielded null findings • Narrative synthesis found evidence in most studies of the outcome of relationship facilitation: ○ multiple articles observed the partnership acting like a social bridge, helping Veterans repair existing relationships and promoting community engagement through facilitating entry to previously inaccessible (due to PTSD symptoms) public spaces ○ multiple articles also highlighted the significance of the application for the dog						

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations

	and subsequent training in being a seminal occasion where the Veteran forms new connections, and highlighted the importance of the organization's conduct at this crucial point
	• Barriers to access identified included:
	  ○ acquisition barrier
	  ▪ process of training with organization was stressful and demanding
	  ○ partnership barrier
	  ▪ burden of dog's ongoing care
	  ▪ anticipated grief at dog's passing
	  ○ stigma barrier
	  ▪ unwanted attention in public
	• Limitations of the review included:
	  ○ lack of standardization in psychiatric assistance dog industry and lack of reported demographic details and dog placement details interfered with author's ability to compare interventions
	  ○ the lack of RCTs barred causal inferences						

• Dimensions of access
  ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity)
• Types of mental health services
  ○ Mental health and substance-use services
  ○ Complementary and alternative therapies
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
• Populations
  ○ Veterans
	Meditation, acupuncture, and imagery relaxation techniques were found to be among the most studied mind-body interventions to improve the mental health of Veterans and military personnel (9)
	• Systematic scoping review of 89 studies was conducted with the purpose of identifying the state of the published literature on the use of complementary and alternative medicine (CAM) mind and body practices to treat Veterans
	• Some key findings were that:
	  ○ Meditation, imagery relaxation techniques, and acupuncture were among the most studied mind-body practices, while research on yoga was lacking
	  ○ Pain, PTSD, anxiety, and depression were among the most commonly measured primary outcomes
		High	No	4/9	2014	No	• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Living status	Quality (AMSTAR)	Last year literature searched	Availability of GRADE profile	Equity considerations
	○ Most of the RCTs conducted in the field were of poor methodological quality ○ Treatment as usual was the most frequent control						

Appendix 3: Details about each identified single study

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Dimensions of access
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
• Mental health or substance-use service setting
  ○ Community-based care
  ○ Specialty care
  ▪ Inpatient
  ▪ Outpatient
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ○ People who are homeless or facing precarious housing
	In comparison to urban communities, Veterans migrating to or within rural communities demonstrate decreased access to homeless, outpatient, and emergency supports offered through the Veterans Health Administration (VHA) (10)
	• This study explored Veteran experiences with homelessness after migrating from rural to urban residences, or vice versa
	• A reduction in accessing homelessness, outpatient, and emergency services were seen when Veterans migrated to or within rural communities
	  ○ The type of homelessness services accessed was not specified
	  ○ This reduction was consistent even when controlling for sociodemographic and health-related factors
	• This may occur because of the limited availability of resources in rural areas
	• Individuals who already have connections in rural communities may have supports from established connections; however, if relocating to another rural community they may lose these supports
	• This study only looked at services offered by VHA and did not look at community supports
		High	Publication date: September 2023
			
			Jurisdiction studied: United States
			
			Methods used: Longitudinal study
				• Place of residence

• Dimensions of access
  ○ Acceptability (e.g., professional values, norms, culture)
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
  ○ Affordability (e.g., direct and indirect costs, opportunity costs)
• Mental health or substance-use service setting
  ○ Community-based care
  ○ Specialty care
• Approaches to improve access in rural and remote areas
  ○ Approaches to reduce stigma in seeking care
  ○ Providing peer support to complement mental health and substance-use services
	Barriers to Veterans in rural communities accessing mental health services include difficulty asking for help, travelling to treatment, financial challenges, and limited resources (11)
	• This study explored pre-implementation strategies to implement a peer motivational coaching program for rural Veterans
	• Veterans described barriers to engaging in mental health care in rural communities including stigma of mental health conditions, not recognizing a mental health issue, admitting the need for help, inadequate transportation, insufficient finances to cover travel, and navigating Veterans Affairs (VA) bureaucracy
	• Primary care and mental health providers felt overwhelmed by Veteran health needs and did not believe that there were sufficient services to address said needs
	• VA providers described the need for additional mental health services for Veterans living in rural communities
		High	Publication date: September 2016
			
			Jurisdiction studied: United States
			
			Methods used: Qualitative
				• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
• Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	• Leveraging supports from both VA and community services may support the mental health needs of Veteran living in rural communities • Although not tested in this paper, peer motivating coaching may support Veterans by decreasing stigma and providing a sense of inclusion			

• Dimensions of access
  ○ Acceptability (e.g., professional values, norms, culture)
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Psychotherapy and other forms of talk therapy
• Mental health or substance-use service setting
  ○ Community-based care
• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	Additional research is needed to understand the acceptability and effectiveness at telepsychotherapy to improve mental health outcomes in Veterans living in rural communities (12)
	• This study looked at barriers and facilitators to the implementation of telepsychotherapy in rural community clinics, for Veterans
	• Barriers included limited resources and intake from participants
	• The virtual nature of telepsychotherapy was a facilitator as it could increase access or Veterans living far from clinics
		High	Publication date: January 2014
			
			Jurisdiction studied: United States
			
			Methods used: Cross-sectional
				• Place of residence

• Dimensions of access
  ○ Approachability (e.g., transparency, outreach, information, eligibility)
  ○ Acceptability (e.g., professional values, norms, culture)
• Mental health or substance-use service setting
  ○ Community-based care
• Approaches to improve access in rural and remote areas
  ○ Approaches to reduce stigma in seeking care
  ○ Issuing rural and remote exceptions to provider scopes of practice
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	The lack of awareness of Veteran suicide, limited discourse on the issue, and overall stigma can obstruct Veterans from seeking community-based mental health supports; this may be addressed using public education campaigns (13)
	• This study explored the impacts of stigma to the implementation of a community-based suicide prevention program for Veterans
	• Veterans had a general lack of awareness of Veteran suicide rates
	  ○ Many Veterans were unaware of any suicide prevention efforts in their community
	  ○ Some Veterans thought that others would not be supportive of community prevention efforts, unless they were personally impacted by suicide
	• There was limited discourse around Veteran suicide, both amongst Veterans and in the local media
		High	Publication date: May 2020
			
			Jurisdiction studied: United States
			
			Methods used: Qualitative
				• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

	• There is a stigma related to suicide
	  ○ Many Veterans felt uncomfortable talking about suicide
	  ○ Suicide was seen as more stigmatizing than other mental health conditions
	  ○ Many individuals felt more comfortable seeking mental health supports from trusted loved ones, than mental health professionals
	  ○ Veterans' struggle with trust and privacy may act as a barrier to them seeking supports from mental health professionals
	  ○ Privacy may be a bigger concern in rural and tight-knit communities
	• Some suggestions to address the stigma associated with suicide in Veterans include public education and awareness for civilians and resources for the entire Veteran family			

• Dimensions of access
  ○ Approachability (e.g., transparency, outreach, information, eligibility)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Case management/care coordination
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ○ 2SLGBTQIA+ Veterans or RCMP officers
  ○ Racialized Veterans or RCMP officers
	There is a need to improve Veteran Service Officers' competencies and awareness of the unique reintegration needs for Veterans from equity deserving populations (14)
	• This study examined Veteran Service Officers' perception of access to services by equity deserving Veteran sub-populations including racial monitories, females, individuals living in rural populations, and LGBTQ+ persons
	• Most Veteran Service Officers described using a "one size fits all approach" and did not describe differing needs for equity deserving groups
	• Many Veteran Service Officers were unfamiliar with different sub-populations and did not feel comfortable discussing this topic
	• Most Veteran Service Officers distinguished sub-populations by military experiences
	• Veteran Service Officers believed that Veterans should take a larger role in being accountable for their own care
	• Most Veteran Service Officers felt that persons from racialized identities did not receive the same quality of care as white Veterans
	• Less than 20% of Veteran Service organizations offered services for military sexual trauma and less than 50% of organizations had resources specifically for women Veterans
		High	Publication date: August 2018
			
			Jurisdiction studied: United States
			
			Methods used: Qualitative
				• Place of residence
				• Race/ethnicity/ culture/languag e
				• Gender/sex

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
	• Most Veteran Service Officers felt that all Veterans had access to the same information; however, few were aware of gender-specific reintegration needs • Many Veteran Service Officers advocated for improved services for female Veterans, including increasing the number of Veteran Service Officers • No Veteran Service Officers described interactions with Veterans from the LGBTQ+ community and were the least familiar with the needs of this sub-population • Veteran Service Officers were familiar with barriers to accessing services in rural communities (e.g., translation) • This study demonstrates a need to address gaps in accessing mental health services for Veterans from equity deserving populations • The authors state that the competencies of Veteran Service Officers should be expanded, and they should be trained on the unique needs of Veterans from different sub-populations • The "one size fits all" approach may limit the development of culturally competent mental health resources			

• Dimensions of access
  ○ Approachability (e.g., transparency, outreach, information, eligibility)
  ○ Acceptability (e.g., professional values, norms, culture)
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
  ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Medication-assisted treatments
• Mental health or substance-use service setting
  ○ Specialty care
  ▪ Outpatient
• Approaches to improve access in rural and remote areas
  ○ Providing specialist outreach services to areas of need
• Outcomes
	Aspects facilitating the implementation of a buprenorphine program to treat opioid use disorder (OUD) in primary care settings within rural VA health systems included targeted hiring, program champions, new clinical team formats, redesigning primary care settings, and leadership support (15)
	• Qualitative interviews were conducted with leaders, pharmacists, nurses, physicians, and social workers in rural VA healthcare systems focused on learnings from integrating access to buprenorphine for OUD within primary care settings
	  ○ 63% of patients in these healthcare systems reside in rural areas
	• Key aspects facilitating access to buprenorphine within primary care included:
	  ○ targeted hiring
	  ▪ this included a funding effort that prioritized hiring pharmacists with the primary role of prescribing substance-use disorder pharmacotherapy
	  ○ champions of the program
	  ▪ champions of the program, who were mostly pharmacists, engaged with clinicians and local leaders to establish support for the buprenorphine program by
		High	Publication date: July 2024
			
			Jurisdiction studied: Rural Northwest, West, Midwest, South, and Northeast United States
			
			Methods used: Qualitative interviews
				• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ Care experience for Veterans, retired RCMP officers, and/or their families ○ Provider experience • Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	demonstrating the program's alignment with health goals and describing how they can assist physicians with the additional burdens associated with the new treatment ○ developing new clinical teams ▪ sites prescribing buprenorphine worked in clinical care teams with physicians, pharmacists, and other providers ○ redesigning clinical settings ▪ this included standalone clinics associated with primary care that were dedicated to prescribing buprenorphine and supporting those receiving buprenorphine treatment ▪ in other settings a clinical pharmacist served as a bridge between clinicians who did not prescribe buprenorphine and prescribers • disadvantages of this model included a lack of a formal mechanism for identifying patients and that responsibility was concentrated with a single provider ○ leadership support ▪ leadership support was crucial to engaging new primary care prescribers			
• Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) • Types of mental health services ○ Mental health and substance-use services ▪ Peer support ▪ Self-help approaches ▪ Information, referral, and transitional services (including system navigation) • Mental health or substance-use service setting ○ Community-based care • Approaches to improve access in rural and remote areas ○ Approaches to reduce stigma in seeking care	There was no significant difference in substance-use disorder (SUD) treatment outcomes for Veterans in rural areas who received a rural-adapted intensive referral to a mutual-help group compared to those who received a standard referral (16) • Veterans in rural areas beginning SUD treatment received either a rural-adapted intensive referral (RAIR) or standard referral (SR) to a mutual-help group (MHG) • Participants who received SUD treatment improved in measures of MHG involvement, substance use, and post-traumatic stress disorder (PTSD) at six-month follow-up • There were no observed differences in outcomes between participants in the RAIR group or the SR group at six-month follow-up	High	Publication date: January 2018 Jurisdiction studied: Nebraska, United States Methods used: Pretest-posttest quasi-experimental design	• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ Providing peer support to complement mental health and substance-use services • Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families • Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans ○ People with co-occurring substance use				
• Dimensions of access ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Affordability (e.g., direct and indirect costs, opportunity costs) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) • Types of mental health services ○ Mental health and substance-use services ▪ Psychotherapy and other forms of talk therapy • Mental health or substance-use service setting ○ Specialty care ▪ Outpatient • Approaches to improve access in rural and remote areas ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) • Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Cost • Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans ○ Indigenous Veterans ○ Racialized Veterans or RCMP officers	Cognitive behavioural treatment for PTSD and anger problems in Veterans via clinical video teleconferencing offers a less expensive alternative to in-person treatment in remote areas, with similar treatment outcomes (17) • Male Veterans with PTSD and anger problems living on remote islands received cognitive behavioural treatment in-person or by clinical video teleconferencing (CVT) ○ Treatment outcomes did not differ between groups ○ A significant cost reduction was associated with CVT compared to in-person treatment across three clinical outcomes examined	High	Publication date: October 2013 Jurisdiction studied: Maui and the Big Island, Hawai'i, United States Methods used: Retrospective cost analysis of a randomized controlled trial	• Place of residence • Race/ethnicity/culture/language
• Dimensions of access ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)	The United States VA policy changes expanded rural Veterans' mental health access, especially through local VA clinics, yet older Veterans over 75 continued to have limited access despite these efforts (18)	High	Publication date: 2022 Jurisdiction studied: United States	• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Approaches to improve access in rural and remote areas
  ○ Providing specialist outreach services to areas of need
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
			Methods used: Longitudinal cohort analysis	

• Dimensions of access
  ○ Approachability (e.g., transparency, outreach, information, eligibility)
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Medication-assisted treatments
  ▪ Peer support
  ▪ Trauma-informed services
  ▪ Culturally relevant services
• Mental health or substance-use service setting
  ○ Community-based care
  ○ Specialty care
  ▪ Inpatient
  ▪ Outpatient
• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
  ○ Providing peer support to complement mental health and substance-use services
  ○ Providing culturally appropriate care
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
	Rural Veterans face considerable barriers in accessing treatment with 70% lower odds of receiving any mental health treatment compared to urban Veterans, with 52% lower odds for outpatient care and 64% lower odds for prescription medication use (19)	High	Publication date: 2017
			
			Jurisdiction studied: United States
			
			Methods used: Multivariable logistic regression analysis
				• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans				
● Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) ● Types of mental health services ○ Mental health and substance-use services ▪ Information, referral, and transitional services (including system navigation) ▪ Trauma-informed services ● Mental health or substance-use service setting ○ Specialty care ▪ Outpatient ● Approaches to improve access in rural and remote areas ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ● Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Care experience for Veterans, retired RCMP officers, and/or their families ● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	Veterans encounter significant barriers to VA mental health care, including stigma and judgment from others, financial and personal challenges, limited confidence in VA services due to long wait times and understaffing, complex navigation of benefits, and concerns about privacy, security, and potential misuse of services (20)	High	Publication date: 2018 Jurisdiction studied: United States Methods used: Mixed-methods approach	• Place of residence • Occupation • Socioeconomic status
● Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Acceptability (e.g., professional values, norms, culture) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity)	Rural Veterans who received video-enabled tablets used mental health services more frequently, with increased psychotherapy visits and medication management through video, and had fewer emergency department visits, suicide-related ER visits, and reported suicide behaviours (21)	High	Publication date: 2022 Jurisdiction studied: United States Methods used: Retrospective cohort design	• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Psychotherapy and other forms of talk therapy
  ▪ Medication-assisted treatments
  ▪ Case management/care coordination
• Mental health or substance-use service setting
  ○ Specialty care
• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
  ○ Providing peer support to complement mental health and substance-use services
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans				

• Types of mental health services
  ○ Mental health and substance-use services
• Mental health or substance-use service setting
  ○ Community-based care
  ○ Specialty care
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ○ People with co-occurring substance use
	Among treatment-seeking Veterans, those residing in rural areas exhibit trauma histories and current PTSD symptoms that closely mirror those of their urban counterparts (22)
	• Study to determine whether rural residence is associated with trauma exposure or PTSD symptoms among military Veterans seeking treatment for SUD
	• Veterans (n = 196) entered SUD treatment centres at one of three VA sites in Nebraska: Grand Island, Lincoln, or Omaha
	• Veterans completed the Life Events Checklist, the Posttraumatic Stress Disorder Checklist, and the Addiction Severity Index's psychiatric status subscale
	• The range of traumatic experiences was comparable between rural and urban Veterans, with rural-urban residence showing no significant association with the overall types of traumas experienced or the overall scores and sub scores of symptom measures
	• Among 17 potential traumatic lifetime experiences, rural Veterans differed from their urban counterparts in only two
		High	Publication date: August 2016
			
			Jurisdiction studied: United States
			
			Methods used: Cross-sectional
				• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
	areas, reporting significantly lower rates of transportation accidents and unwanted sexual experiences			

• Dimensions of access
  ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity)
• Types of mental health services
  ○ Mental health and substance-use services
• Mental health or substance-use service setting
  ○ Community-based care
  ○ Specialty care
  ▪ Outpatient
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ○ People with co-occurring substance use
	The implementation of group motivational learning (GMI) at the start of a SUD treatment program significantly improved attendance at treatment sessions and 12-step group meetings; it contributed to a notable reduction in alcohol consumption among outpatient Veterans, highlighting its effectiveness in supporting recovery efforts (23)
	• Study evaluated the efficacy of group motivational learning relative to a treatment-control for enhancing treatment and self-help engagement and decreasing alcohol and drug use among Veterans with SUD and co-existing psychiatric disorders
	• Veterans (n = 118) with alcohol use disorder were recruited within an outpatient SUD treatment program and randomized to group motivational learning or TCC upon program entry
	• Alcohol use, SUD treatment, and 12-step session attendance were primary outcomes
	• Drug use days was the secondary outcome
	• Participants were assessed at baseline and at one- and three-month follow-up
	• At three-month follow-up, group motivational learning was more effective than treatment control in reducing number of alcohol use days, binge drinking days, and standards drinks consumed
	• In addition, by three-month follow-up, group motivational learning was more effective than treatment control in promoting greater outpatient SUD treatment and 12-step session attendance
	• Group motivational learning was not more effective than treatment control in reducing number of days of illicit drug use
		High	Publication date: June 2022
			
			Jurisdiction studied: USA
			
			Methods used: Randomized controlled trial
				• Place of residence

• Dimensions of access
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
• Types of mental health services
  ○ Mental health and substance-use services
• Mental health or substance-use service setting
  ○ Community-based care
• Populations (in addition to those covered in the PROGRESS+ framework)
	The VHA has shown substantial growth in the use of medications for opioid use disorder (MOUD) over a recent six-year period, mostly attributable to expanded use of buprenorphine (24)
	• This study examines trends in MOUD provision among VHA patients (2015–2020), compares urban and rural VA health systems, and assesses the role of community providers in MOUD delivery across these settings
	• Included MOUD (buprenorphine, methadone, extended-release naltrexone) received from VHA or paid for by VHA but received at non-VHA facilities through Community Care
		High	Publication date: January 2023
			
			Jurisdiction studied: United States
			
			Methods used: Observational
				• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ Veterans ○ People with co-occurring substance use	• The average proportion of patients receiving MOUD increased from 34.6% to 48.9%, with a similar proportion of patients treated with MOUD in rural and urban systems in all years • Much of this increase was attributable to greatly expanded use of buprenorphine			
• Dimensions of access ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) • Types of mental health services ○ Mental health and substance-use services • Mental health or substance-use service setting ○ Community-based care • Approaches to improve access in rural and remote areas ○ Approaches to reduce stigma in seeking care ○ Establishing specialist services in regional centres • Outcomes ○ Care experience for Veterans, retired RCMP officers, and/or their families • Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans ○ People with co-occurring substance use	Urban providers regarded resources for treating alcohol use disorders (AUD) as robust, comprehensive, effective, and accessible, while rural providers viewed them as insufficient and largely unavailable to address their patients' alcohol-related issues (25) • A focused sub-analysis of qualitative interview data from primary care providers at five VA clinics explored differences in perceptions and practices regarding AUD treatment between urban and rural settings • 24 providers were recruited from three urban clinics at medical centres and two rural community-based outpatient clinics • Urban and rural providers differed in referral practices and perceptions of specialty addiction treatment: ○ urban providers routinely referred patients to accessible, comprehensive specialty care, viewing addiction specialists as experts and collaborators ○ rural providers faced significant barriers to specialty care access, rarely made referrals, and felt unsupported in managing AUD ○ urban providers sought better integration with specialty care, while rural providers prioritized local treatment resources	High	Publication date: January 2018 Jurisdiction studied: United States Methods used: Qualitative	• Place of residence
• Dimensions of access ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity) • Types of mental health services ○ Mental health and substance-use services • Approaches to improve access in rural and remote areas ○ Approaches to reduce stigma in seeking care • Outcomes ○ Care experience for Veterans, retired RCMP officers, and/or their families	Vulnerable Veterans at the VHA are underserved in receiving medications for OUD; given the higher prevalence of OUD among homeless and justice-involved Veterans, quality improvement efforts are needed (26) • This study investigated the receipt of medications for OUD among vulnerable populations within VHA facilities, aiming to identify patient and facility factors contributing to disparities in care • Used national VHA clinical/administrative data from Fiscal Year 2017 • In Fiscal Year 2017, among 53,568 Veterans diagnosed with OUD at VHA facilities, vulnerable groups such as women, older adults, Black Veterans, rural residents, homeless individuals,	High	Publication date: April 2022 Jurisdiction studied: United States Methods used: Cross-sectional	• Place of residence • Socio-economic status • Race/ethnicity • Gender/sex

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans ○ Racialized Veterans or RCMP officers ○ People with co-occurring substance use ○ People who are homeless or facing precarious housing	and justice-involved Veterans had lower odds of receiving medications for OUD than their peers • Veterans were more likely to receive these medications at facilities with a higher proportion of patients with OUD but less likely at facilities in the Southern region compared to the Northeast			
● Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Acceptability (e.g., professional values, norms, culture) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity ● Types of mental health services ○ Mental health and substance-use services ▪ Peer support ▪ Case management/care coordination ▪ Information, referral, and transitional services (including system navigation) ▪ Trauma-informed services ▪ Culturally relevant services ▪ Multi-component interventions using one or more of the above ● Mental health or substance-use service setting ○ Community-based care ○ Specialty care ▪ Outpatient ● Approaches to improve access in rural and remote areas ○ Co-locating mental health or substance-use services with other community supports ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ○ Providing peer support to complement mental health and substance-use services ○ Providing culturally appropriate care ● Outcomes	Fourteen years of experience in providing health services to American Indians and Alaska Native Veterans living in rural areas highlighted a care model linking western medicine with traditional native healing has four components: mental health care, technology, care coordination, and cultural facilitation (27) • Mental health care: ○ Train the providers of American Indians and Alaska Natives Veterans on cultural sensitivity, acknowledging the difficult history, building trust, and establishing long-term relationship with the Veterans ○ Providers are chosen with prior experience in working with native Veterans ○ Providers train families on how to approach PTSD symptoms of Veterans • Technology: ○ Videoconferencing counteracted the need to travel for hours to reach rural Veteran clinics, especially in the winter ○ Videoconferencing were housed in safe and private rooms at the Tribal Health Care Facilities, Indian Health Service facilities, or VA community-based outreach clinics ○ Teleconferencing services were subjected to quality management programs • Care coordination: ○ Tribal/Telehealth Outreach Workers (TOWs) facilitated coordination of different services available locally and federally ○ Most of those workers are Veterans themselves who receive training in Veterans services ○ Those workers were trained in emergency management protocols to support the needs of Veterans • Cultural Facilitation: ○ TOWs coordinate outreach to local Veterans in their communities and connect with the local and community services	High	Publication date: Aug 2017 Jurisdiction studied: United States Methods used: Mixed Methods	• Place of residence • Race/ethnicity / culture/ language

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Care experience for Veterans, retired RCMP officers, and/or their families ○ Provider experience ● Populations ○ Indigenous Veterans	○ In turn, the clinicians rely on them to understand cultural peculiarities ○ Clinicians learn about traditional health systems and facilitate referral networks			
● Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity ● Types of mental health services ○ Mental health and substance-use services ▪ Psychotherapy and other forms of talk therapy ● Mental health or substance-use service setting ○ Specialty care ▪ Outpatient ● Approaches to improve access in rural and remote areas ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ● Outcomes ○ Care experience for Veterans, retired RCMP officers, and/or their families ● Populations ○ Older Veterans	The factors associated with older Veterans less likely to receive telemental health services include those who are seen by resident physicians (AOR 0.04, 95% CI 0.00–0.59) and those who have suicidal or homicidal ideation and agitation (AOR 0.47, 95% CI 0) (28) • Older Veterans are more likely to receive telemental health services if they are seen by nurse practitioners or physician assistants (AOR 4.81, 95% CI 2.04–11.36) • Factors related to patient characteristics including gender, timing of the visit, the presence of multiple medical complaints and comorbidities, or the number of medications did not affect their use of elemental health services	High	Publication date: April 2024 Jurisdiction studied: United States Methods used: Retrospective cohort	• Age
● Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ● Types of mental health services ○ Mental health and substance-use services ▪ Psychotherapy and other forms of talk therapy ● Mental health or substance-use service setting ○ Specialty care ▪ Outpatient	Both rural and urban Veterans increasingly used psychotherapy services in 2010 in comparison with 2007 (22% vs. 17% and 28% vs. 24%) and the rural urban gap was reduced (29) • Rural Veterans use of increased number of psychotherapy sessions grew more rapidly than urban Veterans use between 2007 and 2010 • The proportion of rural Veterans using telepsychotherapy was higher than urban Veterans, albeit both being very low (less than 1%) • Those increases coincided with the VHA increasing access and quality of services to rural Veterans	High	Publication date: 2015 Jurisdiction studied: United States Methods used: Retrospective cohort	• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans				

• Dimensions of access
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Psychotherapy and other forms of talk therapy
  ▪ Case management/care coordination
• Mental health or substance-use service setting
  ○ Community-based care
  ○ Specialty care
  ▪ Outpatient
• Approaches to improve access in rural and remote areas
  ○ Co-locating mental health or substance-use services with other community supports
  ○ Providing specialist outreach services to areas of need
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Outcomes
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	The regional adoption of Primary Care–Mental Health Integration (PC-MHI) in the U.S. was 95% providing integrated, collocated or telemental health services (30)
	• The VHA in the U.S. mandated PC-MHI in large PC clinics to promote collaborative care models
	• Telemedicine can facilitate the implementation of PC-MHI programs in smaller and rural primary care clinics with staffing insufficiency
	• Veterans who have multiple comorbidities, tend to receive care at hospitals or in independent clinics rather than in primary care settings
	• Coordination of care and return of stabilized patients back to primary care can improve the utilization of PC-MHI programs
		High	Publication date: 2019
			
			Jurisdiction studied: United States
			
			Methods used: Cross-sectional study
				• Place of residence

• Dimensions of access ○ Approachability (e.g., transparency, outreach, information, eligibility)	Leadership and clinical stakeholders at centres related to VHA perceived telemental health as particularly beneficial and promising for women Veterans, especially those living in rural areas or who have a caregiver role (31)	High	Publication date: November 2017	• Place of residence • Gender

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ Acceptability (e.g., professional values, norms, culture) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity ● Types of mental health services ○ Mental health and substance-use services ▪ Psychoeducation for individuals and their families ▪ Psychotherapy and other forms of talk therapy ▪ Peer support ▪ Case management/care coordination ● Mental health or substance-use service setting ○ Community-based care ○ Specialty care ▪ Outpatient • Approaches to improve access in rural and remote areas ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ● Outcomes ○ Care experience for Veterans, retired RCMP officers, and/or their families ○ Provider experience ● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	• Women Veterans carry exceptional mental health burdens including PTSD, military sexual trauma, and partner violence; their needs for specialized services are high • Gender-sensitive mental health care and same-gender support groups are facilitated by telemental health services targeting women Veterans • Reported barriers to telehealth include internet connectivity, access to technical support, private rooms, and trained staff		Jurisdiction studied: United States Methods used: Qualitative description	
● Dimensions of access ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment ○ Acceptability (e.g., professional values, norms, culture) ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity ● Types of mental health services ○ Mental health and substance-use services ▪ Psychotherapy and other forms of talk therapy ▪ Case management/care coordination • Mental health or substance-use service setting ○ Community-based care	The Personalized Implementation of Virtual Treatments for Rural Native Veterans (PIVOT-RNV) adoption in four sites for VHA showed improvements in the number of providers using video telehealth (VTH), RNVs using VTH and encounters with RNVs (32) • Important considerations when implementing VTH for RNVs include prioritizing and building relationships, using a collaborative team approach for culturally congruent services, addressing technology needs, and including in-person interactions • PIVOT-RNV acknowledged the historical trauma of the Native communities and addressed the mistrust toward federal entities. • It focused on mutual learning, relationship building, and fostering trust	High	Publication date: 2023 Jurisdiction studied: United States Methods used: Mixed methods	• Place of residence • Race/ethnicity / culture/ language

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Outcomes
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
  ○ Provider experience
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans				

• Dimensions of access
  ○ Approachability (e.g., transparency, outreach, information, eligibility)
  ○ Acceptability (e.g., professional values, norms, culture)
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
  ○ Appropriateness (e.g., technical and interpersonal quality, adequacy, coordination and continuity
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Psychotherapy and other forms of talk therapy
• Mental health or substance-use service setting
  ○ Community-based care
• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Outcomes
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ○ Racialized Veterans or RCMP officers
	There exists a wide racial disparity in the adoption of VTH for mental health that is persistent before and during the pandemic especially among Hispanic-black and non-Hispanic black Veterans (33)
	• Black Veterans use of VTH surpassed other racial groups six months post-pandemic attributed to the disproportionate burden of COVID-19 on Black communities and other political incidents highlighting racial trauma
	• Black Veterans who were more likely to use VTH were black-Hispanic, female, urban, and younger
	• Future efforts for VTH should take into account mental health services use as a social and structural determinant and address the racial, ethnic, age, gender, and rurality considerations as these affect its adoption and use
		High	Publication date: 2024
			
			Jurisdiction studied: United States
			
			Methods used: Cohort
				• Place of residence
				• Race/ethnicity/culture
				• Gender/sex

• Dimensions of access ○ Acceptability (e.g., professional values, norms, culture)	Bridging social risk factors, leveraging technology to facilitate connectedness with Veterans 'at-a-distance,' identifying alternate modes of self-care, and maintaining flexibility within coaching roles	High	Publication date: 2022 Jurisdiction studied: United States	• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ● Types of mental health services ○ Mental health and substance-use services ▪ Peer support ▪ Self-help approaches ▪ Case management/care coordination ▪ Multi-component interventions using one or more of the above ○ Complementary and alternative therapies ▪ Meditation ▪ Yoga ● Mental health or substance-use service setting ○ Community-based care ● Approaches to improve access in rural and remote areas ○ Co-locating mental health or substance-use services with other community supports ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ○ Providing peer support to complement mental health and substance-use services ○ Providing transportation and housing supports to access needed care ● Outcomes ○ Care experience for Veterans, retired RCMP officers, and/or their families ○ Provider experience ● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans ▪ Veterans who become public safety personnel	were primary themes identified to help support meeting the needs of rural Veterans during the COVID-19 pandemic (34) • Social risk factors identified include: 1) a lack of access to healthcare resources; 2) a lack of access to basic needs, such as food and transportation; 3) housing displacement; and 4) social isolation • Leveraging technology can include telephone and face-to-face telehealth platforms, while alternate modes of self-care include online mindfulness, wellness, exercise, and cooking classes		Methods used: Qualitative	
● Dimensions of access ○ Acceptability (e.g., professional values, norms, culture) ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ○ Affordability (e.g., direct and indirect costs, opportunity costs)	Significant disparity exists with respect to the use of VTH services for mental health care among rural and urban populations, and particularly, between American Indian/Alaska Native Veterans and their non-American Indian/Alaska Native counterparts (35) • Addressing geographic, socio-economic, and infrastructural barriers (e.g., increased cost and access to broadband services) to healthcare using a multidimensional lens is critical in supporting these mental health care disparities	High	Publication date: 2023 Jurisdiction studied: United States Methods used: Cohort study	• Occupation • Race/ethnicity/ culture/languag e

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Culturally relevant services
  ▪ Multi-component interventions using one or more of the above
• Mental health or substance-use service setting
  ○ Community-based care
• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
  ○ Providing culturally appropriate care
• Outcomes
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ▪ Veterans who become public safety personnel				

• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Peer support
• Approaches to improve access in rural and remote areas
  ○ Approaches to reduce stigma in seeking care
  ○ Providing peer support to complement mental health and substance-use services
  ○ Providing culturally appropriate care
• Outcomes
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
  ○ Provider experience
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ▪ Veterans who become public safety personnel
	Independence and self-reliance were reported as primary attitudinal barriers that prevent Veterans from seeking mental health care; however, a perceived need for care, caring medical staff, and peer support from Veteran counterparts were found to be facilitators in overcoming these challenges (36)
	• Self-reliance associations included rural culture, military, religious, and gender-based belief systems, stoicism, stigma surrounding mental illness, and institutional mistrust
	• Continuity of care and a 'warm handoff' from medical to mental health care providers can positively impact Veterans' ability to overcome attitudinal barriers
		High	Publication date: 2016
			
			Jurisdiction studied: United States
			
			Methods used: Qualitative
				• Occupation

• Types of mental health services
  ○ Mental health and substance-use services
• Mental health or substance-use service setting
  ○ Specialty care
	Urban and rural Veterans had similar rates of treatment for substance-use disorders; however, rural Veterans were found to have an increased rate of injectable and opiate drug use disorder admissions (37)	High	Publication date: 2019
			
			Jurisdiction studied: United States
				• Occupation

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ▪ Veterans who become public safety personnel
			Methods used: Cross-sectional	

• Dimensions of access
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Medication-assisted treatments
• Mental health or substance-use service setting
  ○ Community-based care
• Approaches to improve access in rural and remote areas
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Outcomes
  ○ Health outcomes for Veterans, retired RCMP officers, and/or their families
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
  ▪ Veterans who become public safety personnel
	Barriers to adopting the use of buprenorphine via telemedicine include attitudinal concerns regarding the legality of tele-prescribing controlled substances, conflicts of interests among stakeholders, and program requirement differences; facilitators to tele-prescribing featured a sense of responsibility to combat the opioid epidemic, and prior use and comfortability with telehealth services (38)	High	Publication date: 2022
			
			Jurisdiction studied: United States
			
			Methods used: Mixed methods
				• Occupation

• Dimensions of access
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
• Types of mental health services
  ○ Mental health and substance-use services
• Mental health or substance-use service setting
  ○ Community-based care
  ○ Specialty care
  ▪ Inpatient
  ▪ Outpatient
	Rural Department of VA enrollees with mental health–related diagnoses demonstrated significantly higher odds of utilizing healthcare services, including 1.7 times higher odds of inpatient and outpatient visits, twice the odds of office-based visits, and nearly threefold higher odds of outpatient mental health visits compared to urban non-VA enrollees (39)
	• Rural VA enrollees were more likely to use emergency rooms and inpatient settings for general care than other sub-populations, suggesting potential gaps in access to preventive or primary care services
	• Mental health-related visits for rural VA enrolees remained consistent over the study period, with a significant increase
		High	Publication date: January 2015
			
			Jurisdiction studied: United States
			
			Methods used: Observational
				• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations

• Approaches to improve access in rural and remote areas
  ○ Providing specialist outreach services to areas of need
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	from 2005 to 2008, potentially tied to VA initiatives such as the expansion of telemental health and the Veterans Crisis Line
	• Emergency room visits for mental health-related issues did not differ significantly between rural VA enrollees and other groups, remaining low at approximately 2.5% across populations			

• Dimensions of access
  ○ Approachability (e.g., transparency, outreach, information, eligibility)
  ○ Acceptability (e.g., professional values, norms, culture)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Crisis intervention
  ▪ Case management/care coordination
• Mental health or substance-use service setting
  ○ Community-based care
• Approaches to improve access in rural and remote areas
  ○ Approaches to reduce stigma in seeking care
  ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.)
• Outcomes
  ○ Care experience for Veterans, retired RCMP officers, and/or their families
• Populations (in addition to those covered in the PROGRESS+ framework)
  ○ Veterans
	While willingness to use e-mental health services among Hawaiian rural Veterans ranged from 32.2% to 56.7% depending on the type of service, Veterans with PTSD were notably less likely to consider these options than their non-PTSD counterparts, even though they exhibited a greater demand for mental health care (40)
	• The study focused on the e-mental health preferences of Veterans and National Guard members in Hawai'i, particularly those who served after September 11, 2001, with a sample size of 600 participants
	• Participants were stratified by rural or urban residence, with a response rate of 58% for Veterans and 49% for National Guard members
	• Veterans with PTSD expressed lower willingness to use e-mental health services (20.4%–37.6%) compared to those without PTSD (45.6%–67.9%), despite having a greater desire for mental health services
	• The study identified barriers to e-mental health utilization, including stigma, avoidance of treatment, and logistical challenges such as transportation and scheduling
		High	Publication date: 2015
			
			Jurisdiction studied: United States
			
			Methods used: Cross-sectional
				• Place of residence

• Dimensions of access
  ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms)
• Types of mental health services
  ○ Mental health and substance-use services
  ▪ Crisis intervention
  ▪ Case management/care coordination
• Mental health or substance-use service setting
	Veterans with alcohol use disorder in rural areas are less likely to receive evidence-based treatments, with lower rates of Healthcare Effectiveness Data and Information Set (HEDIS) initiation (14.2% vs. 18.2%), engagement (23.9% vs. 27.7%), and medication prescriptions (4.4% vs. 5.3%) compared to their urban counterparts (41)
	• Data from the VA to analyze treatment patterns among Veterans diagnosed with AUD in Fiscal Year 2012, focusing on the likelihood of meeting national HEDIS quality measures for specialty addictions care
		High	Publication date: October 2021
			
			Jurisdiction studied: United States
			
			Methods used: Cross-sectional
				• Place of residence

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ Specialty care ▪ Inpatient ▪ Outpatient ● Approaches to improve access in rural and remote areas ○ Approaches to reduce stigma in seeking care ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ○ Providing peer support to complement mental health and substance-use services ○ Providing transportation and housing supports to access needed care ● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans	• The study focuses on evidence-based treatments for AUD, including medication-assisted treatments (e.g., naltrexone, acamprosate) and case management/care coordination through specialty care • Veterans with AUD in rural areas were consistently less likely to receive evidence-based care, including HEDIS initiation, engagement, and AUD medication prescriptions, compared to their urban counterparts • Only 17.4% of all Veterans with AUD met HEDIS initiation criteria, with lower rates in rural areas (14.2%) than urban areas (18.2%) • Secondary measures, such as six-month initiation and three-month engagement, also showed lower treatment receipt in rural areas, highlighting broader systemic disparities			
● Dimensions of access ○ Availability and accommodation (e.g., location, accommodation, hours of opening, appointment mechanisms) ● Types of mental health services ○ Mental health and substance-use services ▪ Psychotherapy and other forms of talk therapy ● Mental health or substance-use service setting ○ Specialty care ▪ Outpatient ○ Medication-assisted treatments ● Approaches to improve access in rural and remote areas ○ Supporting the use of information communication technologies (e.g., telehealth, virtual care, etc.) ○ Providing culturally appropriate care ● Outcomes ○ Health outcomes for Veterans, retired RCMP officers, and/or their families ○ Care experience for Veterans, retired RCMP officers, and/or their families ● Populations (in addition to those covered in the PROGRESS+ framework) ○ Veterans ○ Racialized Veterans or RCMP officers	Telemedicine-delivered buprenorphine treatment for U.S. Veterans with OUD increased 3.5-fold from 2012 to 2019, with patients receiving telemedicine having a median of 722 treatment days compared to 295 for in-person care (42) • VHA to examine trends in the use of telemedicine-delivered buprenorphine (tele-buprenorphine) for the treatment of OUD among U.S. Veterans • Patients receiving tele-buprenorphine treatment were more likely to be treated at community-based outpatient clinics instead of large medical centers • Black Veterans were significantly less likely to receive tele-buprenorphine compared to White Veterans. The adjusted odds ratio (AOR) for being treated with tele-buprenorphine for Black Veterans was 0.54 • Patients receiving tele-buprenorphine had an average of 18 psychotherapy visits for OUD, while those receiving in-person treatment had an average of 15 psychotherapy visits	High	Publication date: February 2022 Jurisdiction studied: United States Methods used: Observational study	• Place of residence • Race/ethnicity Gender/sex

Dimension of organizing framework	Declarative title and key findings	Relevance rating	Study characteristics	Equity considerations
○ People who are homeless or facing precarious housing				

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