

Evidence brief: Virtual and remote mental health care for older adults



What you need to know

- Virtual and remote mental health care, such as internet-delivered cognitive-behavioural therapy (iCBT) or video-based psychotherapies, can be effective at improving mild to moderate symptoms of anxiety, depression and post-traumatic stress disorder (PTSD) in older adults.
- No studies looked at virtual or remote care for substance use disorder or bipolar disorder.
- Common adaptations to providing virtual care to older adults include setting up automatic notification/reminders, providing additional technical support, using memory, visual or hearing aids, and including an option for a friend/family member to facilitate conversation.

What's the problem?

In Ontario, 17 to 30 percent of older adults are estimated to have mental health problems.¹ When including those who experience symptoms of depression and anxiety, the percentage rises to 40 percent of older adults in the province.¹ Older adults in Canada also report problematic use of substances, including prescription medications, alcohol and nicotine, and increased use of cannabis.²

However, research shows that older adults with mental illness often don't access mental health and addiction care due to barriers, such as stigma, cost, low health literacy and limited mobility.^{3,4} Lack of access to resources and trained service providers, particularly in rural settings, can also lead to older adults not getting the care they need.^{4,5}

With the onset of COVID-19, the need for mental health care and the barriers to accessing care have grown:

- Older adults are more likely to experience severe illness related to COVID-19. The increased risk of hospitalization and death among their peers may impact their mental health.⁷
- Social isolation affects physical, psychological, and cognitive health and is associated with higher instances of depression and suicide.^{8,9}
- Lack of formal and informal supports adds to these challenges and may lead to more older adults going into long-term care or the hospital.⁹

Virtual and remote mental health and addiction services offer a potential solution as they are more affordable and accessible for older adults.^{5,10} Research shows telehealth and teletherapy can reduce hospital visits and improve physical and mental health outcomes.¹¹ However, there is minimal research that focuses on older adults.

What did we do?

This evidence brief provides a review of recent research related to virtual and remote mental health and addiction care for older adults. We



conducted a rapid review of the literature with support from the Centre for Addiction and Mental Health (CAMH) Library Services to explore the effects of different virtual and remote technologies for the mental illness and addiction care of older adults.

The search strategy combined terms related to virtual and remote care (e.g., telemedicine, telepsychiatry, internet- or video-based psychotherapy), older adults (e.g., aging, elderly, geriatrics) and mental illness and addiction (e.g., mental disorders, depression, anxiety disorders, substance-related disorders, alcoholism).

We searched PsycINFO, Medline, and Cochrane databases, limiting results from January 1, 2015 to May 28, 2020. The initial search resulted in 743 articles, 680 after removing duplicates. A knowledge broker then scanned titles and abstracts and selected 49 articles for full text review. After a full review, 31 relevant articles (25 individual studies, 1 literature review and 5 systematic reviews) were found for this evidence brief.

Articles were included if:

- the study targeted older adults (mean age of 60+)
- the intervention primarily took place virtually/remotely
- the participants met criteria for one or more mental illnesses/addictions or showed symptoms for a mental illness/addiction or the study's primary outcome measure was symptoms of a mental illness/addiction.

Articles were excluded if they were study protocols, focused on broader mental health issues (e.g., dementia, cognitive impairment, insomnia), provided virtual assessments rather than care, or provided interventions focused on caregivers.

What did we find?

Overview of interventions

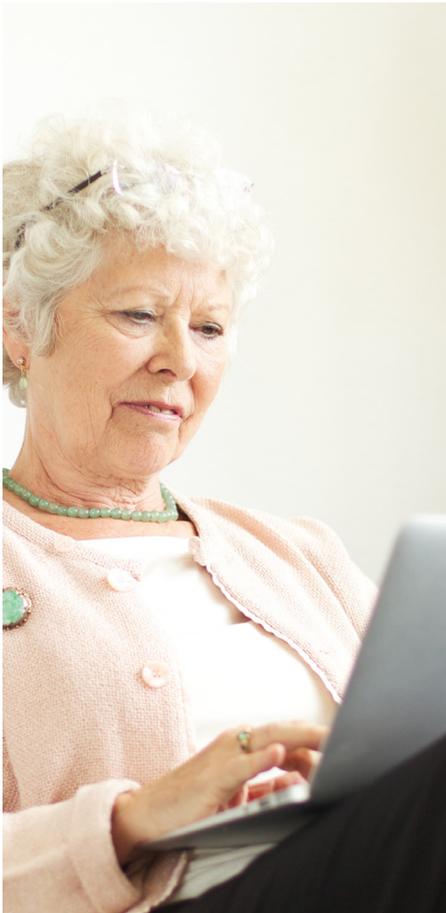
According to the individual studies reviewed, the most common mode of delivery was online programs,^{3,5,10,12-21} followed by videoconferencing.²²⁻²⁷ Individual study interventions were also delivered via the telephone,²⁸⁻³¹ smartphone/app,³² and video game technology.³³ The literature review and systematic reviews looked at the use of technology for mental health care in general,¹¹ as well as online programs,^{34,35} videoconferencing,^{4,36} and smartphone/app³⁷ interventions. All interventions ranged from 5–10 weeks, taking approximately 1–1.5 hours each week. Follow up ranged from 1 month to 1 year. Three individual studies did not include follow up.^{21,22,33}

Online programs or courses often included core and optional modules, as well as regular homework/writing assignments, and access to supplementary resources. For most of the online interventions, the service providers (e.g., therapist, social worker, clinician, psychologist) had brief contact with the participants each week over the phone or email.

The most common intervention among individual studies involved variations of cognitive-behavioural therapy (CBT), which provided older adults with tools to challenge problematic thoughts, assumptions and beliefs.^{3,5,10,12,13,15-17,19-21,30,31} Many studies used behavioural activation (BA), a therapeutic intervention that aims to increase older adults' engagement with activities that bring them joy or a sense of accomplishment and decrease negative behaviours.²³⁻²⁷ One systematic review focused on CBT interventions³⁴ and one focused on CBT, BA and problem solving therapy.³⁶

Symptoms of depression^{4,10,12,16,17,25,28,33} and anxiety^{3,5,16,20,28,30,31} were the most common primary outcome measures in individual studies. Three systematic reviews also looked at depression.^{4,11,35} PTSD, quality of life, disability, pain or worry were measured in some individual studies. There were no studies related to addiction or substance use.

Effects of different virtual and remote technologies



When compared to participants' regular care (e.g., visit the doctor for prescription refill or a physical) or those on a waitlist for services, virtual and remote interventions reduced mild to moderate symptoms of depression,^{3,5,10,12,13,17} anxiety,^{3,5} and PTSD¹³ and improved quality of life.^{3,5,12,13} Only one iCBT program for older adults with anxiety and depression found no clinical significance.¹⁶

For individual studies that compared virtual interventions to face-to-face interventions, there were no significant difference in outcomes.^{18,23,25,26} Additionally, one study found the Wellbeing Plus Course, a CBT intervention, had a higher course completion rate when completed online.¹⁸

Another study compared outcomes for clinician-guided iCBT program and self-guided iCBT for older adults with depression or anxiety.²⁰ It found no significant differences in clinical outcomes, satisfaction or completion rates.

Other considerations

Enablers and barriers to use

There were a number of enablers for older adults to use virtual and remote mental health services identified in the literature:

- The convenience and privacy of virtual care enabled older adults to access mental health care.^{4,15,36}
- Virtual care reduced the barrier of stigma since an individual could access services from home without anyone recognizing them as someone with a mental illness.⁴

Although virtual and remote health services help improve access to care for older adults, there are also barriers that must be addressed:

- Barriers to use included limited knowledge or perceived knowledge of these technologies, lack of trust and financial constraints.^{4,14,29,37}
- One systematic review found that older adults had mixed opinions on the privacy of video conferencing due to a lack of trust in the technology and being unaware if other people are in the room.⁴

To help address barriers to using online, smartphone or video game technologies, service providers can develop interventions that use a simple design, provide programs for free and seek encouragement from older adults' peers, family or healthcare providers.^{15,32}

Intervention adaptations for older adults

There were a number of considerations identified in the literature regarding mental health virtual care. These are categorized below based on intervention category.

For online, smartphone/app or video game technologies:

- provide automatic notifications or reminders to assist with memory loss/cognitive deficits^{3,32,12}
- provide examples or case studies that are tailored to older adults^{3,5,12,18,33}
- provide additional supervision and live technical support (e.g., weekly phone calls or phone number to call for technical difficulties)^{4,11,32,37}
- use plain language and short videos/paragraphs of text³²
- use a simple layout, with clear navigation, contrasting colours and 14-point text³²
- design for larger screens and to be read by screenreaders.³⁷

For video or teleconferencing:

- meet patients in-person before starting virtual care to develop a therapeutic relationship when possible⁴
- discuss with patients how you will manage any interruptions due to technical difficulties and provide alternative options to quickly reconnect⁷
- provide an option to have a family member or friend present to help with any technical difficulties or difficulties in hearing²²
- use memory, hearing and visual aids, such as cue cards.²²

Regardless of the type of intervention, it is helpful to discuss the benefits and risks of virtual care, and the older adults' access and confidence in using these technologies.⁷

What are the limitations of this review?

Due to time and resource limitations and the rapid speed of changes in technology, we limited the articles to a five-year cut off and did not include books or articles that were not available electronically. Relevant information may therefore be missing, particularly regarding telehealth interventions.

There were a number of limitations to the studies themselves and therefore findings may not be reflective of older adults in Ontario:

- Participants were most often white, younger (<75), female and of higher socioeconomic status.
- Studies often excluded participants with severe depression, bipolar disorder, cognitive impairment or substance use disorder.
- No studies looked at virtual or remote care for substance use disorder or bipolar disorder.

What are the conclusions?

Virtual and remote mental health care, such as internet-delivered CBT (iCBT) or video-based psychotherapies, can be effective at improving mild to moderate symptoms of anxiety, depression and post-traumatic stress disorder (PTSD) in older adults.

Service providers and program planners should take the enablers, barriers and intervention adaptations into consideration as they transition services into a pandemic and post-pandemic landscape. Future research is needed on virtual and remote care (a) within the Ontario context, (b) that is better reflective of the diversity of older adults and (c) for older adults with problematic substance use.

Acknowledgments

The author of this evidence brief is Beth White, Knowledge Broker. The author would like to acknowledge Reena Besa, CAMH Librarian, for assistance with the database search.

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