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Virtual Mental Health Counselling

Key Messages

What Is the Issue?

- The rate of mental illnesses, such as major depressive disorder and generalized anxiety disorder, has significantly increased among people aged 15 and older living in Canada.
- In Canada, more than 1 in 3 of those with mental illnesses do not receive adequate mental health (MH) services, with notable geographic disparities in the availability and quality of services. Specialized MH services remain particularly scarce in remote and rural areas.
- Providing MH counselling through virtual platforms has the potential to enhance the accessibility of MH services and reduce the stigma associated with in-person services.
- A review of the clinical effectiveness and evidence-based guidelines is required to help understand the potential role of virtual MH counselling in clinical practice.

What Did We Do?

- To inform decisions regarding the use of virtual MH counselling for people with depression, anxiety, obsessive-compulsive disorder (OCD) or posttraumatic stress disorder (PTSD), we conducted a rapid review and summarized evidence that compared the clinical effectiveness of MH counselling provided in a virtual setting versus in person. We also sought to identify evidence-based guidelines regarding the use of virtual MH counselling for these populations.
- We searched key resources, including journal citation databases, and conducted a focused internet search for relevant evidence published since 2019. One reviewer screened articles for inclusion based on predefined criteria, critically appraised the included studies, and narratively summarized the findings.

What Did We Find?

- We found 6 systematic reviews (SRs) relevant to the present review that evaluated the clinical effectiveness of MH counselling provided through virtual versus in-person settings. Most SRs and their included randomized controlled trials (RCTs) reported results on the reduction of depression and anxiety, followed by PTSD and OCD.
- For depression, PTSD and specific anxiety outcomes (generalized anxiety disorder, social anxiety disorder, and panic disorder), the effectiveness of virtual MH counselling in improving these outcomes was comparable to in-person settings. For OCD, results were inconsistent,

Key Messages

suggesting virtual MH counselling can be an alternative treatment where in-person MH counselling is not readily available.

- We found 5 evidence-based guidelines that provide recommendations on the use of virtual MH counselling for adults with depression, anxiety, and PTSD, based mostly on low-quality evidence or expert opinion. We did not find any evidence-based guidelines or relevant recommendations regarding the use of virtual MH counselling for people of any age with OCD nor children and youth with depression, anxiety, and PTSD.
- Virtual MH counselling is recommended as a first-line intervention for adults with mild depression and for reducing symptoms of anxiety in older adults.
- Virtual MH counselling is recommended as second-line adjunctive or alternative intervention for adults with moderate-severe depression, certain anxiety disorders, and PTSD.

What Does This Mean?

- Virtual MH counselling may improve clinical outcomes for people with depression, anxiety, OCD, or PTSD and can be used as a comparable or alternative treatment to in-person MH counselling.
- Virtual MH counselling may address equity issues regarding access to evidence-based MH services where in-person MH counselling is not readily available.
- Clinicians and health care decision-makers can use the evidence summarized in this review to inform decisions regarding the implementation of virtual MH counselling for adults with depression, anxiety, OCD, or PTSD.

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Abbreviations

BA	behavioural activation
CBT	cognitive behavioural therapy
HTA	health technology assessment
MH	mental health
iBA	internet-based behavioural activation
iCBT	internet-based cognitive behavioural therapy
MA	meta-analysis
MDD	major depressive disorder
OCD	obsessive-compulsive disorder
PRISMA	Preferred Reporting Items for Systematic Reviews and Meta-Analyses
PTSD	posttraumatic stress disorder
RCT	randomized controlled trial
SR	systematic review

Research Questions

1. What is the comparative clinical effectiveness of MH counselling (i.e., psychotherapy or clinical counselling) provided in a virtual setting versus in person for people with depression, anxiety, OCD, or PTSD?
2. What are the evidence-based guidelines regarding the use of MH counselling (i.e., psychotherapy or clinical counselling) in a virtual setting for people with depression, anxiety, OCD, or PTSD?

Context and Policy Issues

What Is MH?

MH is a state of well-being in which individuals can cope with the normal stresses of life, work productively, and contribute to their community.[1] In contrast, mental illness can be defined as a range of conditions that significantly affect a person's thinking, mood, behaviour, and ability to function in daily life.[2] Four of the most prevalent mental illnesses include depressive disorders, anxiety disorders, OCD, and PTSD.[2]

The rate of mental illnesses, such as major depressive disorder (MDD) and generalized anxiety disorder, has significantly increased among people aged 15 and older living in Canada.[3] More than 1 in 3 (36.6%) of people living in Canada with mental illnesses do not receive adequate MH services, with notable geographic disparities in the availability and quality of services.[3] Specialized MH services remain particularly scarce in remote and rural areas.[4] The COVID-19 pandemic further affected access to MH services in Canada as well as other countries.[3]

What Is the Current Practice?

In-person MH counselling is widely recognized as the standard of care, offering a structured, face-to-face environment that fosters trust, rapport, and effective communication between clients and therapists.[5,6] In-person setting allows for real-time observation of nonverbal cues, immediate feedback, and personalized interventions tailored to the client's unique needs.[6] In-person MH counselling ensures access to a controlled and confidential space which is critical for addressing sensitive issues.[5] Services offered may include individual therapy, group therapy and support groups, family and couples counselling, crisis intervention and suicide prevention, and psychoeducation.[7]

Cognitive behavioural therapy (CBT) has been the most studied approach of psychotherapy.[7] However, the effectiveness of other psychotherapy approaches such as behavioural activation (BA), prolonged exposure (PE) therapy, psychodynamic approaches, interpersonal psychotherapy, and acceptance and commitment therapy has also been explored.[7]

What Is Virtual MH Counselling?

In an effort to increase access, many health care systems and organizations developed platforms to deliver MH services virtually.[8] Virtual MH counselling refers to providing psychological support and therapy services through digital platforms, allowing individuals to access MH services remotely.[8] These services can be

delivered synchronously or asynchronously and differ based on the timing of communication between the client and the therapist.[8] Synchronous counselling refers to real-time communication between a client and a therapist whereby both parties are actively engaging in the session at the same time (e.g., video calls, phone calls, or live chat).[9] In contrast, asynchronous counselling does not require real-time interaction; clients and therapists communicate at their convenience through written messages, audio recordings, or video clips.[10] For this review, virtual MH counselling delivered synchronously is of particular interest as it mirrors the dynamic of traditional in-person therapy; the therapist and client can engage in immediate dialogue, allowing the therapist to respond to the client's concerns as they are expressed, enabling instant clarification and emotional support.[9] Moreover, the use of verbal and nonverbal cues, especially in video sessions, helps build rapport and fosters a sense of connection.

What Are Its Potential Benefits and Challenges?

Virtual MH counselling offers several benefits. It increases accessibility, especially for people in rural areas, individuals with disabilities, or those with demanding schedules.[11] It is also more affordable than in-person therapy.[12] Virtual MH counselling can also reduce stigma by providing a private space for seeking help and reducing concerns about being seen visiting a therapist's office.[13] Finally, it can help individuals with mental illnesses to maintain therapy even when travelling or during public health emergencies like the COVID-19 pandemic.[14] Despite these benefits, MH counselling delivered via virtual settings has challenges such as technical barriers, the need for reliable internet access and familiarity with digital tools, which might exclude some populations.[15,16] In addition, ensuring the confidentiality of sensitive information is critical and may depend on the platform's security measures.[16] Therapists may find it harder to observe body language or subtle emotional cues, particularly in telephone-based formats.[17] Finally, the effectiveness of virtual MH counselling in some conditions, such as severe psychiatric disorders, may be limited.[18]

Why Is It Important to Do This Review?

Virtual MH counselling is a rapidly evolving field. Conducting a review of clinical studies and guidelines on virtual MH is crucial for several reasons, as it helps establish a robust foundation for understanding its effectiveness, limitations, and best practices. A review helps evaluate the effectiveness of virtual MH interventions. By analyzing existing studies, practitioners and policy-makers can determine whether these services are as effective as in-person MH counselling for different populations and conditions. Understanding these findings is critical to building trust in virtual MH services and guiding clinicians and clients in their decision-making. Reviewing guidelines ensures adherence to ethical standards and best practices. A review of the available evidence is essential for adapting to changing client needs and emerging technologies. Evaluating these treatment modalities through rigorous studies ensures that their adoption is based on evidence. Moreover, as client expectations evolve, it may help ensure that services remain relevant and client-centred.

Objectives

The purpose of this rapid review is to identify, summarize, and critically appraise evidence on clinical effectiveness of MH counselling (i.e., psychotherapy or clinical counselling) provided in a virtual setting

versus in-person for people with depression, anxiety, OCD, or PTSD. The second objective of this rapid review is to identify, summarize, and critically appraise the evidence-based guidelines regarding the use of MH counselling in a virtual setting for people with depression, anxiety, OCD, or PTSD.

Methods

An information specialist conducted a customized literature search, balancing comprehensiveness with relevancy, of multiple sources and grey literature on November 15, 2024. One reviewer screened citations and selected studies and guidelines based on the inclusion criteria presented in Table 1, and critically appraised included publications and guidelines using established critical appraisal tools. Appendix 1 presents a detailed description of methods and selection criteria for included studies.

Table 1: Selection Criteria

Criteria	Description
Population	People of any age requiring MH counselling services for depression, anxiety, OCD, or PTSD.
Intervention	Psychotherapy or clinical counselling services provided through virtual settings (e.g., over a video call, telephone) by a registered psychologist, psychotherapist, psychiatric nurse, licensed counselling therapist, or social worker.
Comparator	Q1: Psychotherapy or clinical counselling services provided in-person by a registered psychologist, psychotherapist, psychiatric nurse, licensed counselling therapist, or social worker. Q2: No comparator necessary
Outcomes	Q1: Clinical effectiveness (e.g., psychological or psychosocial function or symptoms [e.g., mood, depression, anxiety], health-related quality of life) Q2: Recommendations regarding the use of psychotherapy or clinical counselling provided through virtual settings (e.g., appropriate populations)
Study designs	HTAs, SRs, MAs, evidence-based guidelines
Publication date	Q1: Since November 15, 2021 Q2: Since January 1, 2019

HTA = health technology assessment; MA = meta-analysis; MH = mental health; OCD = obsessive-compulsive disorder; PTSD = posttraumatic stress disorder; SR = systematic review.

Summary of Evidence

Quantity of Research Available

This report includes 6 SRs[19-24] and 5 evidence-based guidelines.[18,25-28] Appendix 1 presents the PRISMA[29] flow chart of the study selection. Additional references of potential interest are provided in Appendix.

Summary of Study Characteristics

Summaries of study characteristics are organized by research question. Additional details regarding the characteristics of included publications are provided in Appendix 2.

Included Studies for Question 1: Clinical Effectiveness of MH Counselling Provided Through Virtual Versus In-Person Settings

We identified 6 SRs,[19-24] 4 of them[20,22-24] with meta-analyses (MAs) that addressed this research question. These 4 SRs[20,22-24] included data from 42 unique primary RCTs; however, there was considerable overlap among their included primary studies. As a result, the pooled effect estimates from separate reviews are based on some of the same data, although not all reviews reported the same outcomes. A citation matrix illustrating the degree of primary study overlap is presented in Appendix 5.

All SRs except for 1[21] limited their search to RCTs; the 6 SRs[19-24] searched for studies published from inception, with the last search date being reported as March 2024.[22]

One SR[19] included studies on children and adolescents, aged 0 to 19 years old, 1 SR[22] included studies with participants aged over 5 years, and 4 SRs[20,21,23,24] included studies on adults (aged ≥ 18 yr). Four SRs[19,21-23] provided information on the age of participants from their included primary studies. Three SRs[19,21,23] provided information on the sex of participants from their included primary studies; however, they did not report how sex was defined or measured. Authors of the SRs included number or percentage of female and/or male participants; other sexes or genders were not reported.

Four SRs[20-22,24] included studies on any form of psychotherapies, such as CBT, BA, cognitive therapy, psychodynamic psychotherapy, PE therapy, or family therapy, which was delivered by a provider via videoconferencing technology (audio and/or video). Two SRs[19,23] limited the included studies to CBT delivered via videoconferencing technology by a provider (therapist-guided). One SR[21] focused on online group treatments that involved the presence or mediation of a therapist within the group and required active participation of group members. Two SRs[22,24] included individual psychotherapy delivered via videoconferencing technology. Three SRs[19,20,23] included a mix of individual and group therapies. One SR[24] specified a duration of 6 sessions or longer for the length of interventions. Length of follow-up was reported in 4 SRs,[19,21-23] which ranged from 0 to 6 months.

The included 6 SRs[19-24] assessed several clinical outcomes to address research question 1. Four SRs[20,22-24] included eligible MAs on various depression outcomes (e.g., depressive symptoms and severity), and 1 SR[22] included eligible MA on anxiety symptoms. One SR[24] conducted 2 MAs on depressive symptoms; the first 1 was based on posttreatment scores of 11 RCTs on depressive symptoms measures of all participants with a variety of primary diagnoses (PTSD [n = 5], depression [n = 3], insomnia [n = 1], bulimia nervosa [n = 1], and a combination of mood and anxiety disorders [n = 1]). The second 1 was focused on depressive symptoms measures of 3 RCTs of participants with depression.

Four SRs[19-21,23] included eligible RCTs on depression (depressive symptoms or episodes and MDD), anxiety (generalized anxiety disorder, social anxiety disorder, panic disorder, and specific phobia), OCD outcomes (e.g., OCD symptoms and severity), and PTSD outcomes (e.g., PTSD symptoms and severity). One SR[24] was limited to studies reporting depressive symptoms as the clinical outcome, 2 SRs[19,22] reported on depression and anxiety symptoms, and 3 SRs reported on a mix of various clinical outcomes (e.g., anxiety, obsessive-compulsive, and trauma-related disorders).[20,21,23] A variety of additional clinical outcomes were

evaluated across the included SRs,[20,21] including quality of life, satisfaction with treatment, therapeutic alliance (refers to the strength of the relationship between a therapist and a client), anger, and psychiatric and social functioning.

Included Studies for Question 2: Recommendations Regarding the Psychotherapy or Clinical Counselling Provided Through Virtual Settings

The 5 included guidelines[18,25-28] all had specific sections providing recommendations on virtual MH counselling or psychotherapy. There were no guidelines that exclusively focused on virtual MH counselling or psychotherapy.

Two guidelines[18,25] provide recommendations for adults with depression: 1 guideline was commissioned by the Canadian Network for Mood and Anxiety Treatments (CANMAT; an academic group)[25] and 1 guideline was commissioned by the German National Disease Management Guideline Group (NDGM; in German: Nationale VersorgungsLeitlinie, a national medical association).[18] Two guidelines[26,27] provide recommendations for older adults and adults with anxiety, which were conducted by the Canadian Coalition for Seniors' Mental Health (CCSMH; a not-for-profit organization)[26] and the German Guidelines for Anxiety Disorders (GGAD) (an academic group).[27] The final guideline was commissioned by the Phoenix Australia Centre for Posttraumatic Mental Health (a not-for-profit public company),[28] and provides recommendations for children and adults with trauma-related symptoms and PTSD (virtual MH recommendations were specific to adults). No guidelines were found regarding virtual psychotherapy or counselling for OCD.

The guidelines considered and included recommendations on the use of several types of virtual MH interventions, including CBT (4 guidelines),[25-28] trauma-focused CBT (1 guideline),[28] psychodynamic therapy (1 guideline),[27] and internet-based BA (iBA) (1 guideline).[25] One guideline[18] provides recommendations on internet- and mobile device–based interventions broadly.

Summary of Critical Appraisal

Critical appraisal summaries are organized by study design. Additional details regarding the strengths and limitations of included publications are provided in Appendix 3.

Systematic Reviews

The authors of all 6 SRs[19-24] clearly defined their objectives and eligibility criteria, conducted comprehensive literature searches across multiple databases, and provided details on key search terms and search dates. They also included flow charts illustrating study selection, along with reasons for excluding studies. These methodological strengths increase the reproducibility of the SRs. The review methods for all 6 SRs were established before conducting the reviews (e.g., they were documented in published protocols), reducing the risk of reporting bias. In all 6 SRs,[19-24] at least 2 independent reviewers conducted study selection and quality assessment. The quality of the included primary studies was assessed using transparent and satisfactory techniques in all 6 SRs. In 3 SRs,[20,21,23] subject matter experts were consulted to ensure the search captured relevant studies. Four SRs[19-21,23] reported the characteristics of included studies in sufficient detail (e.g.,

study design, number of participants, intervention). Five SRs[19,20,22-24] conducted MAs; all used appropriate statistical methods for the MA. Publication bias was assessed by the authors of 3 SRs.[20,23,24] Three SRs[19,20,23] used appropriate methods for the statistical combination of results and assessing statistical heterogeneity (e.g., the I^2 statistic). The authors of all 6 SRs stated their potential conflicts of interest and the sources of funding.[19-24]

As for methodological limitations, 3 SRs[19,21,24] did not conduct a grey literature search, increasing the risk of missing relevant studies that are not published commercially and that may be inaccessible by bibliographic databases (i.e., non-indexed studies). Although the types of study designs included in the reviews are stated, none of the 6 SRs[19-24] provided an explanation for including them. Three SRs[19,20,24] limited included studies to those published in English, potentially introducing language bias and omitting relevant data from non-English studies. In 2 SRs,[19,21] the data extraction was conducted by a single reviewer or was unclear, creating a risk for inaccuracies in these processes. Two SRs[22,24] did not report adequate details on characteristics of included studies (e.g., study design, number of participants, study location, follow-up). One SR[21] did not conduct a MA without providing an explanation. Two SRs[19,22] did not assess the potential impact of risk of bias on MA findings or adequately investigate publication bias or discussed its likely impact on the results. In 1 SR,[22] the authors did not provide an explanation for the considerable statistical heterogeneity observed in the MAs. Not all findings relevant to this review reported relative effects[21,23] and actual P values.[19,20,22-24] Finally, none of the 6 SRs[19-24] reported funding sources for the included primary studies. Although reasons for exclusion were provided, none of the 6 SRs provided a list of excluded studies after full-text review.

Guidelines

All 5 guidelines[18,25-28] reported seeking views and preferences of the target population. Three guidelines[25,26,28] clearly outlined their scope and purpose. The target users and intended population of the guideline were clearly stated for 4 guidelines.[18,25,26,28] All guidelines[18,25-28] conducted SRs and had a grading system for assessing the quality of evidence used to make recommendations. Two guidelines conducted additional SRs and/or a rapid review where no recent high-quality SR was available,[26,28] and 2 guidelines conducted literature searches of RCTs and other methods of searching (e.g., cross-referencing bibliographies, handsearching pre-existing international guidelines).[25,27] Four guidelines[25-28] presented each recommendation in an easily identifiable way (e.g., recommendation statements separated from explanatory text, tables within body of guideline to organize statements).

Two guidelines did not specifically describe the health questions.[18,25] One guideline did not clearly define their target users.[27] For 1 guideline, the methods for formulating the recommendations (e.g., voting, consensus) and an explicit link between the recommendations and the supporting evidence were not clearly described.[18] Three guidelines[18,27,28] were not externally reviewed by experts before their publication. Two guidelines[18,27] did not report supporting documents or tools to aid readers in understanding or implementing recommendations. For 3 guidelines,[18,25,27] it is unclear whether the views of the funding body have not influenced the content of the guideline. For 1 guideline, the conflicts of interest in guideline development were not recorded.[28] None of the guidelines provided a procedure for updating the guideline.[18,25-28]

Summary of Findings

Appendix 4 presents the main study findings.

Clinical Effectiveness of MH Counselling Provided Through Virtual Versus In-Person Settings

Evidence regarding the clinical effectiveness of MH counselling provided through virtual versus in-person settings were available from 6 SRs,[19-24] 4 of them[20,22-24] with MAs relevant to the present review. There was considerable overlap in the primary studies that were included in these SRs; the pooled estimates from separate reviews thus contain much of the same data (refer to Appendix 5 for details regarding overlap). Most SRs and their included RCTs reported results on reduction of depression and anxiety, followed by PTSD and OCD. In general, the effectiveness of MH counselling in the reduction of depression, PTSD and various anxiety outcomes was similar in both virtual and in-person settings. However, the results on OCD were inconclusive across intervention modalities.

Depression

Five SRs[19,20,22-24] evaluated the effectiveness of MH counselling provided through virtual versus in-person settings on reduction of depression.

- The results from 3 SRs, including 4 MAs,[22-24] indicated that virtual MH counselling demonstrates comparable efficacy to in-person interventions in reducing the symptoms of depression.
  - Two SRs with MAs[22,23] on depressive symptoms showed no difference in effectiveness of CBT delivered either virtually or in-person.
  - One SR conducted 2 MAs[24] on RCTs comparing multiple video-based versus in-person MH counselling modalities (e.g., CBT and PE) in reducing depressive symptoms for people with various primary diagnoses (11 RCTs) and a subgroup of participants specifically based on depressive diagnoses (3 RCTs). Both MAs showed no evidence that video-based psychotherapy is inferior to in-person psychotherapy in the reduction of depressive symptoms. There was no significant difference between the pooled efficacy effect size estimate of the primary depression subgroup and the pooled estimate of the studies with primary diagnoses of other psychological diagnoses. Prespecified subgroup analyses assessing whether video-based MH counselling might be more effective than in-person counselling for people with a diagnosis of depression found no evidence of differences between the 2 approaches in reducing depressive symptoms or in the risk of participants' attrition.
- Results from 1 SR[20] with MAs of 2 RCTs, including veterans and active-duty military participants, indicated that for those with symptoms or diagnosis of depression, in-person delivery was associated with better outcomes compared to video teleconference. The quality of evidence for this comparison was rated as low because of study-specific risk of bias and imprecision.
- Results from 1 SR[20] that included 1 RCT on telephone-based versus in-person CBT indicated a comparable reduction in depressive symptoms in both groups.

- One SR[19] including 2 relevant RCTs indicated that virtual CBT was not inferior to in-person CBT in terms of its effectiveness for reducing depressive symptoms in children and youth populations.

Anxiety

Two SRs[22,23] evaluated the effectiveness of MH counselling provided through virtual versus in-person settings on reduction of anxiety. All RCTs included in these 2 SRs focused on CBT.

- One SR with MA[22] indicates that virtual CBT was comparable to in-person CBT in reducing symptoms of anxiety with a follow-up of more than 12 weeks.
- One SR[23] evaluated the effectiveness of therapist-guided virtual versus in-person CBT on various anxiety outcomes, including health anxiety (1 RCT), social anxiety disorder (1 RCT), panic disorder (4 RCTs) and social phobia (1 RCT). Results of these RCTs indicated that both forms of CBT were comparable and equally effective in improving these various anxiety outcomes of participants.

Obsessive-Compulsive Disorder

Two SRs[19,23] including 3 RCTs described the clinical effectiveness of virtual MH counselling, with a focus on CBT, versus in-person counselling for OCD.

- One SR[19] included 1 RCT on the effectiveness of telephone-based CBT for adolescents (aged 11 to 18 years old) with OCD compared to standard clinic-based, in-person CBT. The results indicated that telephone-based CBT was not inferior to in-person CBT at posttreatment, 3-month, and 6-month follow-up and was similarly effective in reducing OCD symptoms.
- One SR[23] included 2 RCTs on the effectiveness of telephone-based CBT and therapist-guided internet-based CBT (iCBT) versus in-person CBT for adults with OCD. The clinical outcomes including reduction in OCD symptoms and level of satisfaction with treatment were equivalent for telephone-based CBT and in-person CBT. However, the findings on therapist-guided internet-based CBT versus in-person CBT for adults with OCD were less conclusive, as the primary noninferiority results favoured in-person CBT. SR authors concluded that the therapist-guided iCBT could be an alternative to in-person CBT for adults with OCD where traditional in-person CBT is not readily accessible.

Posttraumatic Stress Disorder

Two SRs[20,21] including 12 RCTs provided results for the use of virtual MH counselling on PTSD. Two RCTs were included in both SRs.

- Moderate quality of evidence from 1 SR,[20] which included 10 relevant RCTs on the use of various interventions for PTSD, indicated that video teleconference is comparable to in-person delivery for people with PTSD. However, this body of literature is mostly focused on evaluating PE (in 3 RCTs) and cognitive processing therapy (CPT and CPT- cognitive only version in 5 RCTs).
- One SR,[21] including 4 RCTs (2 overlapping with other SR)[20] explored the efficacy of online group therapies on PTSD and found evidence supporting the efficacy of video teleconference group therapies for populations with PTSD. These interventions included CPT-C in 2 RCTs and CBT and anger management therapy in the other 2 RCTs. In all 4 RCTs, both video teleconference and

in-person group therapies showed significant reductions in PTSD. No significant differences were reported between the groups.

Other Clinical Outcomes

Three SRs[20,21,23] reported on the effectiveness of virtual MH counselling versus in-person counselling on other clinical outcomes. They included studies investigating quality of life (1 RCT), satisfaction with treatment (5 RCTs), therapeutic alliance (5 RCTs), anger (1 RCT) and psychiatric and social functioning (1 RCT each). In general, participants who received virtual versus in-person MH counselling reported comparative degrees of therapeutic alliance and satisfaction with treatment. However, the results were inconclusive for other types of functioning and quality of life. Further, participants who received virtual MH counselling showed a similar reduction of anger symptoms as those who received in-person MH counselling.

Guidelines Regarding the Use of Psychotherapy or Clinical Counselling Provided Through Virtual Settings

Depression

Based on limited, low to moderate level quality or unclear evidence, NDGM (2022)[18] and CANMAT (2023)[25] guidelines provide recommendations for the use of MH counselling through a virtual setting for the treatment of depression. Both guidelines[18,25] include recommendations based on the severity of depressive symptoms and/or MDD in adults. The CANMAT (2023)[25] guideline provides recommendations on specific types of internet-based psychotherapy (i.e., guided iCBT and guided iBA). The NDGM (2022)[18] guideline includes recommendations on the use of internet- and mobile device-based interventions. The NDGM (2022)[18] and CANMAT (2023)[25] guidelines recommend virtual MH counselling as first-line intervention for mild depression in adults. The NDGM (2022)[18] recommends that it is embedded in an overall therapeutic plan. The NDGM (2022)[18] guideline recommends virtual MH counselling as second-line adjunctive intervention for moderate-severe depression in addition to other psychotherapy or antidepressants and for adults with moderate depressive episodes who refuse both psychotherapy and antidepressants.

Anxiety

Based on limited and low-quality evidence, the CCSMH (2024)[26] and GGAD (2022)[27] guidelines include strong or positive recommendations for the use of MH counselling through virtual settings for the treatment of anxiety. The CCSMH (2024)[26] guideline provides strong recommendations on the use of remote CBT for reducing symptoms of anxiety in older adults. The GGAD (2022)[27] guideline provides positive recommendations on the use of virtual MH counselling for adults with 3 types of anxiety disorders, as an adjunctive intervention to other standard treatments or for adults waiting for initiation of in-person psychotherapy.[27] This includes internet-based CBT for adults with generalized anxiety disorder, social anxiety disorder (SAD) or panic disorder with or without agoraphobia (PDA) (refers to an anxiety disorder characterized by recurrent unexpected panic attacks with or without a fear of being in situations where escape might be difficult), and virtual psychodynamic therapy for people with SAD.[27]

Obsessive-Compulsive Disorder

No guideline or recommendation on the use of virtual MH counselling was found for OCD.

Posttraumatic Stress Disorder

The Phoenix Australia (2021) guideline[28] provides recommendations on the use of MH counselling through virtual setting for treatment of trauma-related symptoms and PTSD in adults.[28] Based on insufficient evidence, the guideline[28] does not recommend internet-based CBT for treatment of PTSD symptoms in adults within the first 3 months of trauma. Based on low-quality evidence, the guideline[28] also includes conditional recommendations for use of trauma-focused iCBT and trauma-focused CBT delivered via telehealth (videoconferencing) for adults with PTSD, where face-to-face trauma-focused CBT or Eye Movement Desensitization and Reprocessing (EMDR) are unavailable or unacceptable. Based on insufficient evidence, the Phoenix Australia (2021) guideline[28] was not able to make a recommendation on telephone-based CBT for adults within the first 3 months of trauma. Similarly, the guideline[28] was not able to make recommendations on BA, Therapeutic Exposure, or group non–trauma-focused CBT delivered via telehealth (videoconferencing) for adults with PTSD.[28]

Limitations

Limitations to SRs

Evidence Gaps

Across the 6 SRs,[19-24] significant gaps in evidence were identified. Mental illnesses such as OCD, or specific types of anxiety and depressive disorders were either included in very few studies or not studied at all. Similarly, virtual group counselling for common conditions were notably limited, restricting our understanding of their potential scalability and effectiveness. There is also a lack of long-term follow-up data to assess the sustained efficacy of these interventions. Most studies focused on immediate or short-term outcomes, leaving a critical knowledge gap about the durability of treatment effects over time. Furthermore, site-specific differences in virtual settings (e.g., home-based versus clinic-based delivery) were not adequately explored, even though such factors may influence treatment outcomes and people's experiences.

Another critical gap involves the range of interventions studied under virtual CBT. Reviews often grouped diverse modalities, such as telephone-based, therapist-guided internet-based, and video-based therapy, under a broad umbrella. Still, there was insufficient evidence to clarify the differences in effectiveness among these approaches. For example, while therapist-guided, internet-based CBT showed comparable outcomes to in-person therapy, findings for telephone-based CBT were inconclusive, suggesting a need for further investigation.

Risk of Bias of Included Studies in SRs

Several limitations related to the risk of bias were apparent across SRs. A common issue was the potential for publication bias, as some reviews excluded unpublished data, which may overestimate the effectiveness of interventions. Moreover, a heavy reliance on self-reported measures for assessing MH symptoms was noted. Self-report tools can introduce bias, as they may not fully capture the clinical outcomes compared to clinician-rated assessments, which are typically more rigorous.

The narrow inclusion criteria in some reviews also restricted the diversity of studies analyzed. For example, some MAs focused exclusively on direct comparison RCTs, excluding studies with other relevant control conditions. While this approach reduced between-study heterogeneity, it also limited the scope of the analysis and potentially excluded valuable insights. Another significant concern was the unexplained heterogeneity in the pooled estimates, such as compliance rates. In some cases, subgroup analyses were hindered by the small number of trials available for specific conditions, such as anxiety or depression.[20,22] This limitation may obscure clinically meaningful effects within subgroups, further complicating interpretations of the data.

Generalizability

The generalizability of findings from these SRs was a recurring challenge. Most of the studies included were conducted in high-income, developed countries and involved participants from relatively affluent and well-educated backgrounds. This demographic profile limits the applicability of findings to low- and middle-income countries or populations with fewer resources. Similarly, populations who may face additional barriers to using technology, such as people with disabilities, were underrepresented in the studies, raising concerns about whether the findings extend to this group. One SR[23] was conducted in Canada. However, of the 4 SRs[19,21-23] that reported country of study for the included RCTs, 2 RCTs were conducted in Canada. The lack of studies from Canada may limit the generalizability of the evidence to health care settings in Canada.

Other limitations were the age range and sex and gender of participants, with adolescents or younger children (under 12 years old) rarely studied and sex and gender-diverse groups often not specified or included, making it difficult to generalize the results to these populations. However, 2 guidelines[25,26] developed by organizations in Canada (i.e., CCSMH (2024) and CANMAT (2023) guidelines) may enhance their relevance to the health care context in Canada. In addition, the reviews grouped diverse delivery methods under broad terms, such as “technology-assisted CBT,” without addressing whether interventions like telephone-based therapy or internet-based therapy provide equivalent outcomes. This lack of distinction undermines the ability to generalize findings across different modalities. Furthermore, the variability in virtual delivery settings — such as home-based versus supervised environments like clinics — was not adequately addressed, even though these factors may significantly influence treatment outcomes.

Limitations to Guidelines

The limitations of the guidelines for virtual MH counselling primarily relate to the quality and scope of the evidence used to inform their recommendations, as well as gaps in addressing specific populations (i.e., children and youth, sex and gender-diverse groups) and conditions (e.g., OCD). Many recommendations were based on limited, low-quality, or unclear evidence, reducing the confidence in their generalizability and applicability. Some guidelines provided broad recommendations without specifying the strength of the evidence or detailing the optimal conditions for intervention.

The guidelines were based on evidence largely derived from studies in high-income countries, limiting their applicability to low- and middle-income settings and culturally diverse populations. Children, adolescents, and individuals in remote or underserved areas were underrepresented in the evidence base. While virtual MH counselling is recommended as an adjunctive or alternative treatment for moderate-to-severe conditions,

the guidelines do not provide detailed guidance on how to effectively integrate these interventions with existing treatments (e.g., medication or in-person psychotherapy).

Conclusions and Implications for Decision- or Policy-Making

This review includes 6 SRs,[19-24] with 4 including MAs,[20,22-24] regarding the effectiveness of MH counselling provided through virtual versus in-person settings. It also includes 5 evidence-based guidelines[18,25-28] with specific recommendations on the use of virtual MH counselling for people with depression, anxiety, or PTSD. The evidence summarized in this report is drawn from SRs with substantial overlap in primary studies, meaning that data from the same participants were included in more than 1 SR (refer to Appendix 5 for a citation matrix illustrating the degree of primary study overlap). As a result, some evidence may be disproportionally represented in the overall conclusions.

Summary of Evidence

The evidence summarized in this report indicates virtual MH counselling showed comparable clinical effectiveness to in-person counselling for PTSD and depressive and anxiety disorders. However, findings for OCD, specific clinical settings or subpopulations presented mixed results, highlighting areas where virtual counselling may serve as an alternative to in-person therapy when traditional services are unavailable. Virtual MH counselling may be especially valuable in settings where access to in-person services is limited, though further research is needed to explore long-term outcomes and applicability to diverse populations and contexts. Variability in results may have been due to differences in included populations in studies, study designs, and the specific MH intervention used. For example, 3 SRs with MAs,[22-24] which included a large number of participants of diverse backgrounds with depressive symptoms, showed no difference in effectiveness of CBT delivered either virtually or in-person. In contrast, the SR by Kelber et al.,[20] which included data from 2 RCTs on veterans and active-duty military participants in their MA, indicated that in-person delivery was associated with better depression outcomes compared to virtual delivery, highlighting certain populations may experience different outcomes than others.

The guidelines for virtual MH counselling provide recommendations for its use across conditions such as depression, anxiety, and PTSD, while no specific guidelines were identified for OCD. Overall, the recommendations reflect limited but generally positive evidence supporting virtual counselling, with suggestions for its use either as a first-line intervention for mild conditions or as an adjunctive or alternative treatment for moderate-to-severe cases or specific conditions when in-person therapy is not feasible.

Considerations for Future Research

More studies are needed to evaluate the efficacy of virtual interventions for conditions such as OCD and co-occurring psychiatric or medical conditions to assess the utility of virtual MH counselling in managing these conditions. It is also needed to evaluate the long-term effectiveness of virtual MH counselling, including symptom recurrence, maintenance of therapeutic gains, and functional outcomes. Future research may consider comparing different virtual delivery methods (e.g., telephone-based, internet-based,

video teleconferencing) to identify which approaches work best for specific conditions, populations, and settings. Additional research will benefit from adopting consistent, validated clinical and functional outcome measures, including clinician-rated tools, to improve comparability across studies. In addition, larger and adequately powered trials are needed to strengthen the evidence base. Future research is needed to assess the effectiveness of blended MH counselling models, combining virtual and in-person interventions, and integration with other treatments (e.g., pharmacological treatment) to optimize flexibility and accessibility.

Additional research is needed to address the generalizability of findings to diverse populations and settings. Future studies may include underrepresented groups, such as children and adolescents, culturally diverse populations, and individuals in low- and middle-income countries. Few RCTs included in SRs were conducted on veterans from living in rural areas. Additional research is needed with other groups living in areas where access to in-person services is limited.

The guidelines reflect the evolving state of evidence on virtual MH counselling and its growing role in clinical practice. However, their limitations underscore the need for more robust and inclusive research, particularly in areas like long-term outcomes, diverse populations, and underrepresented conditions (e.g., OCD). Addressing these gaps will enhance future guidelines' relevance, specificity, and strength.

Implications for Clinical Practice and Policy-Making

The integration of virtual interventions into clinical practice and policy frameworks requires addressing various practical, systemic, and person-centred considerations. Virtual MH counselling has demonstrated comparable effectiveness to in-person therapy for conditions such as depression, anxiety, PTSD, and some forms of OCD. This emerging evidence suggests that it may be a valuable option for expanding access to MH counselling, particularly in underserved areas (e.g., rural and remote communities) and underserved populations, such as individuals with mobility issues or transportation constraints. Notwithstanding, assessing people’s preferences, comfort with technology, and specific MH needs are important considerations when determining the appropriateness of virtual versus in-person counselling.[30] For conditions such as OCD or PTSD, where virtual therapy may be less effective in some modalities (e.g., internet-based CBT), it will be helpful to consider hybrid or stepped-care approaches.[31] While virtual counselling has shown high levels of satisfaction and therapeutic alliance in people who received these services, clinicians may consider strategies to build rapport in virtual settings.[32] Techniques may include maintaining regular contact through video or telephone check-ins, and ensuring a supportive environment for group therapies, which have shown comparable effectiveness for PTSD and other conditions.[32] Virtual therapy delivery may necessitate clinicians requiring training to navigate technology and maintain engagement.[33] This points to the consideration of policy-makers and organizations developing standardized training programs for delivering evidence-based virtual MH counselling and providing technical and psychological support for clinicians to reduce burnout in virtual MH delivery.[33]

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Appendix 1: Detailed Methods and Selection of Included Studies

Please note that this appendix has not been copy-edited.

Literature Search Methods

An information specialist conducted a literature search on key resources including MEDLINE, PsycInfo, the Cochrane Database of Systematic Reviews, the International HTA Database, the websites of health technology assessment agencies in Canada and major international HTA agencies, as well as a focused internet search. The search approach was customized to retrieve a limited set of results, balancing comprehensiveness with relevancy. The search strategy comprised both controlled vocabulary, such as the National Library of Medicine's MeSH (Medical Subject Headings), and keywords. Search concepts were developed based on the elements of the research questions and selection criteria. The main search concepts were virtual or remote care, psychotherapy or counselling, and anxiety, depression, posttraumatic stress disorder, or obsessive-compulsive disorder. Search filters were applied to limit retrieval to health technology assessments, systematic reviews, meta-analyses, indirect treatment comparisons, or guidelines. The search was completed on November 15, 2024, and limited to English-language documents published since January 01, 2019.

Selection Criteria and Methods

One reviewer screened citations and selected studies: the reviewer screened the health technology assessments, systematic reviews (SRs), and meta-analyses (MAs) from the past 3 years (published since November 15, 2021) and screened the guidelines from the past 5 years (published since January 1, 2019). In the first level of screening, titles and abstracts were reviewed and potentially relevant articles were retrieved and assessed for inclusion. The final selection of full-text articles was based on the inclusion criteria presented in Table 1.

Exclusion Criteria

Articles were excluded if they met any of the following criteria:

- did not meet the selection criteria outlined in Table 1
- were SRs in which all relevant studies were captured in other more recent or more comprehensive SR
- were guidelines with unclear methodology.

In addition, articles with a focus on the following criteria were excluded:

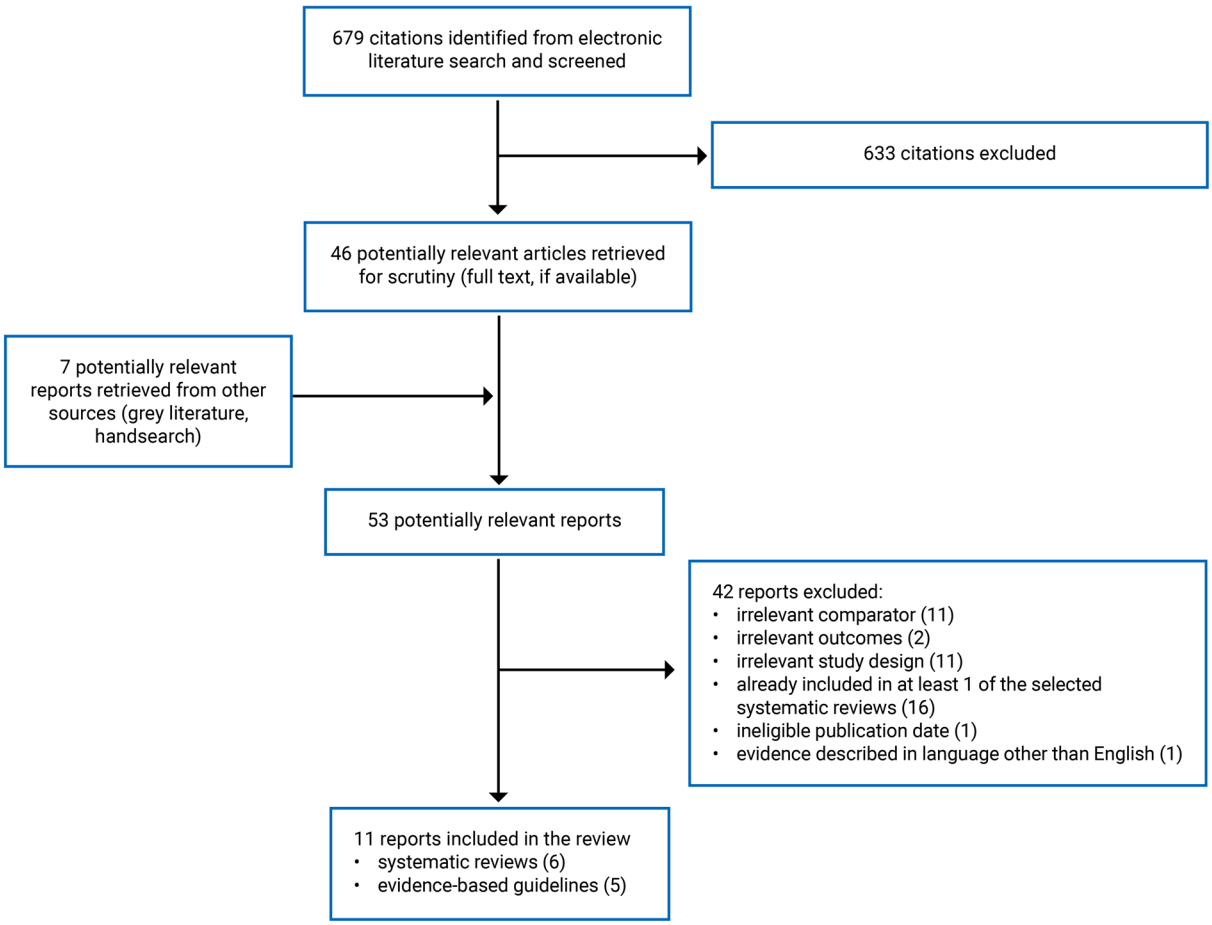
- people receiving counselling for neurodevelopmental conditions (e.g., autism)
- psychotherapy or clinical counselling provided by other health care providers not listed in Table 1 (e.g., psychiatrists, medical doctors)
- facilities-based or residential-based addictions treatment

- non-clinical counselling (e.g., life skills coaching, vocational coaching)
- asynchronous communication (text, email, secured messaging) and AI-based software, apps or bots.

Critical Appraisal of Individual Studies

The included publications were critically appraised by 1 reviewer using the following tools as a guide: A MeaSurement Tool to Assess systematic Reviews 2 (AMSTAR 2)[34] for SRs, and the Appraisal of Guidelines for Research and Evaluation (AGREE) II instrument[35] for guidelines. Summary scores were not calculated for the included studies; rather, the strengths and limitations of each included publication were described narratively.

Figure 1: Selection of Included Studies



Appendix 2: Characteristics of Included Publications

Table 2: Characteristics of Included Systematic Reviews

Study citation, country, funding source	Study designs and numbers of primary studies included	Population characteristics	Intervention and comparator(s)	Clinical outcomes, length of follow-up
Bevilacqua et al. (2024)[19] UK **Funding source:** No funding	**Study design:** SR and MA of English-language RCTs published up to 1 November 2023. **Number of included studies:** 10 RCTs in total; 2 relevant to the present review.	Young people aged 0 to 19 (studies which included slightly older participants were accepted if they still included adolescents). **Sex:** The number of male participants from included primary studies ranged from 13 to 66 (when reported) (20 and 38 for relevant RCTs); the number of female participants was reported for 1 study (25); other sexes or genders were NR. **Diagnosis:** Anxiety and/or depression. **Comorbidities:** NR **Treatment history:** NR **Other criteria:** Age range of participants in both control and intervention arms had to be 18 or lower.	**Intervention:** • Eligible interventions. A form of technology-assisted CBT (including but not limited to CBT delivered via telephone, videoconferencing and/or any other platform other than f2f, online CBT, or CBT-derived app or videogame). • Relevant Interventions. Technology-assisted CBT that has a person behind it (i.e., registered psychologist, psychotherapist, psychiatric nurse, licensed counselling therapist, or social worker). **Comparator**: f2f CBT (if more than 2 control groups were present [e.g., online CBT vs. waitlist control vs. f2f CBT] then the study had to include data (e.g., mean and standard deviation at posttreatment) that allowed for a formal comparison between the intervention group and the f2f CBT group).	**Outcomes:** Anxiety and/or depression (measured by standardized instruments and/or clinical diagnosis) **Length of Follow-up:** NR
Kelber et al. (2024)[20] US **Funding source:** No funding	**Study design:** SR and MA of English-language RCTs published up to April 2022. **Number of included studies:** 29	Adult patients with symptoms or diagnoses of PTSD, depression, or anxiety disorder **Sex:** NR **Diagnosis:** PTSD, depression, or	**Intervention:** Evidence-based telehealth psychotherapies for patients with symptoms or diagnoses of PTSD, depression, or anxiety disorder. The telehealth	**Outcomes:** The efficacy of evidence-based behavioural health treatment for symptoms or diagnosis of PTSD, depression, or anxiety

Study citation, country, funding source	Study designs and numbers of primary studies included	Population characteristics	Intervention and comparator(s)	Clinical outcomes, length of follow-up
	RCTs in total; 10 relevant to the present review.	anxiety disorder **Comorbidities:** NR **Treatment history:** NR **Other criteria:** NA	modality had to be delivered synchronously by a provider in real-time via telephone or video. **Comparator:** • eligible comparator. In-person delivery or telephone delivery • relevant comparator, in-person delivery.	disorder. **Length of Follow-up:** NR
Oliveira et al. (2024)[22] Brazil **Funding source:** Rio Grande do Sul Research Support Foundation, the National Research Council of Brazil, and the Coordination for the Improvement of Higher Education Personnel.	**Study design:** SR and MA of any language RCTs published up to March 2024. **Number of included studies:** 6 RCTs in total; all relevant to the present review.	Patients diagnosed with symptoms of anxiety and or depression of both sexes and aged over 5 years. **Sex:** NR **Diagnosis:** Anxiety and/or depression **Comorbidities:** NR **Treatment history:** Other intervention received is presented (when reported). **Other criteria:** NA	• **Intervention:** Different models of remote psychological therapy, such as behavioural therapy, cognitive therapy, CBT, psychodynamic psychotherapy, or family therapy. All remote treatments should be administered by synchronous videoconferencing technology (audio and or video). **Comparator**: The same treatment of remote psychological therapy administered f2f	**Outcomes:** Impact of remote therapy for the treatment of depression and anxiety symptoms. **Length of Follow-up:** Ranged between 4 and 48 weeks.
Zandieh et al. (2024)[23] Canada **Funding source:** Canadian Institutes of Health Research Canada Research Chair in the prevention and management of chronic pain (Jason Busse).	**Study design:** SR and MA of any language RCTs published up to 4 July 2023. **Number of included studies:** 54 RCTs in total; 30 relevant to the present review.	Adults (aged ≥ 18 years) presenting with any clinical condition. **Sex:** The percentage of female participants from included primary studies ranged from 0% to 100% (the same for relevant RCTs) (when reported); other sexes or genders were NR. **Diagnosis:** Any clinical condition **Comorbidities:** NR **Treatment history:** NR **Other criteria:** NA	**Intervention:** Therapist-guided remote CBT (e.g., teleconference, videoconference). **Comparator:** In-person CBT	**Outcomes:** • eligible outcomes. Any primary patient-important outcomes. • relevant outcomes. Depression, anxiety symptoms, PTSD and OCD-related symptoms and/or diagnosis. **Length of Follow-up:** Ranged between 42 and 1,095 days.

Study citation, country, funding source	Study designs and numbers of primary studies included	Population characteristics	Intervention and comparator(s)	Clinical outcomes, length of follow-up
Laurito et al. (2023)[21] Brazil **Funding source:** No funding	**Study design:** SR of RCTs and non-RCTs, observational studies, and case series published in English, Portuguese, German, or Spanish up to 11 March 2023. **Number of included studies:** 2 Open label and 8 RCTs in total; 4 RCTs relevant to the present review.	Individuals aged 18 years or older who had received a formal diagnosis of anxiety disorder, OCD, and PTSD as per criteria outlined in the DSM or ICD. **Sex:** The percentage of female participants from included primary studies ranged from 20% to 61% (0% for relevant RCTs); other sexes or genders were NR. **Diagnosis:** anxiety disorder, OCD (tic disorders), and PTSD. **Comorbidities:** Major comorbidities are presented (when reported). **Treatment history:** NR. **Other criteria:** NA.	**Intervention:** Online group treatments that involved the presence or mediation of a therapist within the group and required active participation of group members. The interventions were required to emphasize interaction among the participants as a fundamental aspect of the protocol, rather than merely suggesting or encouraging their engagement. **Comparator**: • Eligible comparator. No control or comparator group required. • Relevant comparator. The same group treatment of remote therapy administered in person.	**Outcomes:** Changes in symptoms related to anxiety disorder, OCD, and PTSD, as measured by formal or validated instruments, both before and after the intervention. **Length of Follow-up:** 0 to 6 months.
Giovanetti et al. (2022)[24] US **Funding source:** No funding	**Study design:** SR and MA of English-language RCTs published from 1 January 2000 to 1 February 2021 **Number of included studies:** 11 RCTs in total; all relevant to the present review	Individuals who were at least 18 years of age and receiving psychotherapy for depression. **Sex:** NR **Diagnosis:** PTSD, chronic insomnia disorder, (major) depressive disorder, bulimia nervosa, and mood or anxiety disorder. **Comorbidities:** NR **Treatment history:** NR **Other criteria:** NA	**Intervention:** Video-based individual psychotherapy for a duration of 6 sessions or longer. **Comparator**: in-person individual psychotherapy for a duration of 6 sessions or longer.	**Outcomes:** Depressive symptoms severity assessed and reported at pretreatment and posttreatment. **Length of Follow-up:** NR

CBT = cognitive behavioural therapy; DSM = Diagnostic and Statistical Manual of Mental Disorders; f2f = face to face; ICD = International Classification of Diseases; MA = meta-analysis; NA = not applicable; NR = not reported; OCD = obsessive-compulsive disorder; PTSD = posttraumatic stress disorder; RCT = randomized controlled trial; SR = systematic review.

Note: This table has not been copy-edited.

Table 3: Characteristics of Included Guidelines

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
CCSMH (2024)[26]						
Intended users: health care providers caring for the MH of older adults, including primary care physicians, nurses and nurse practitioners, psychiatrists, psychologists, social workers, and other allied health professionals. **Target population**: older adults, defined as those 65 and older (a cut-off of 60 and older was included to ensure that all of the relevant evidence in older adults was captured).	Guidelines for prevention, diagnosis, and management of anxiety; recommendations on remote CBT, including iCBT and telephone CBT; virtual MH recommendations are relevant to the present review	Symptoms of anxiety and DSM-5 anxiety disorders in older adults, specifically GAD, panic disorder, agoraphobia, specific phobia, and social anxiety disorder (social phobia). Also included fear of falling, which can be a cause of anxiety later in life.	Systematic literature review of available SR. When no recent high-quality SR was available, conducted SRs and a rapid review.	GRADE	For recommendations addressed through SRs, the certainty of evidence was graded. Working group members met and voted on the direction and strength of recommendations, which reflected the extent to which the panel was confident that the desirable effects of an intervention outweighed the undesirable effects. For best practice recommendations and those which were not directly addressing an SR question, the available evidence was reviewed and its level classified based on its susceptibility to bias. Working group members voted on recommendations and their strength.	The draft recommendations were reviewed by the external expert guidance group, a panel of older adults and caregivers with lived experience of anxiety, and in consultation with health care providers and academic experts.
CANMAT (2023)[25]						
Intended users: community-based psychiatrists and MH providers	Guidelines for assessment and management of MDD;	MDD, Severity of MDD: mild, moderate, and severe, based on the	SR of SRs and MAs published since 2015, literature search of the CANMAT 2016	GRADE	Recommendations were organized by lines of treatment, which were informed	Internal review, external peer review, review by patient partners

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
Target population: adults with MDD	recommendations on iCBT and iBA; virtual MH recommendations are relevant to the present review	rating of symptom severity and degree of functional impairment, whichever is higher.	guidelines, RCTs and other studies when SRs/MAs were unavailable. Cross-referencing bibliographies, reviews of other major reports and guidelines, expert feedback to identify additional studies. Two independent reviewers selected relevant studies, with consensus adjudication by a third reviewer in cases of disagreement. Data from the included studies were extracted by research staff.		by CANMAT-defined levels of evidence and supplemented by clinical support (consisting of expert consensus on safety, tolerability, and feasibility). Consensus was sought after each level of review, initially within the authors of each section, then by the core editorial group (consisting of the co-editors and the section editors), and finally by all co-authors.	
NDGM (2022)[18]						
Intended users: primary care physicians, psychiatrists, psychotherapists, and complementary care providers. **Target population**: adults with acute and chronic depressive disorders.	Guidelines on the diagnosis and treatment of acute and chronic depressive disorders; recommendations on internet- and mobile device-based interventions; virtual MH recommendations	Depressive disorders and depressive episodes based on their severity: acute mild, moderate, and severe; chronic depression.	SR	GRADE	Structured, formalized consensus process; also, clinical considerations and practical aspects of care provision, together with issues raised by the patient representatives.	A draft of the guideline was made available for public scrutiny, received comments were discussed by the guideline group and led to incorporation of several revisions in the final version

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
	are relevant to the present review					
GGAD (2022)[27]						
Intended users: NR **Target population**: adults with anxiety disorders.	Guidelines on anxiety disorders; recommendations on internet-based psychological interventions, mostly iCBT; virtual MH recommendations are relevant to the present review	Any anxiety disorder.	Evidence was identified by a search of RCTs published between 16/09/2013 and 20/06/2019, handsearching pre-existing international guidelines on the treatment of anxiety disorders as well as from research identified by an expert panel. RCTs were screened and selected based on inclusion criteria.	SIGN Statement criteria	Voting of the group members, considerations of risks, e.g., adverse effects of drugs.	NR
Phoenix Australia (2021)[28]						
Intended users: general and MH practitioners planning and providing treatment across clinical settings; people affected by trauma making decisions about their treatment; and funding bodies making service purchasing decisions. **Target population**: children and adults who are exposed to trauma,	Guidelines on acute stress disorder, PTSD and complex PTSD; recommendations on universal and indicated interventions; recommendation on internet-based trauma-focused CBT; virtual MH recommendations for	Experience of trauma, PTSD symptoms severity and diagnosis, increased recognition of acute stress disorder, PTSD and complex PTSD, increased uptake of evidence-based care, and ultimately, better outcomes for people affected by trauma.	Existing SRs published by ISTSS (inception to October 10, 2018), An update of the ISTSS SRs (October 10, 2018 to June 6, 2019), a new SR, search of trials published between June 2019 and December 31, 2020. Two independent reviewers screened	GRADE	Consensus by Guideline Development Group with consideration of balance of benefits and harms, certainty of evidence, patients' values and preferences, resources, equity, acceptability and feasibility.	These guidelines are under continual review, and recommendations are updated in response to new evidence. The most recent update was approved by the Chief Executive Officer of the National Health and Medical Research Council in December 2021 under Section 14A of the

Intended users, target population	Intervention and practice considered	Major outcomes considered	Evidence collection, selection, and synthesis	Evidence quality assessment	Recommendations development and evaluation	Guideline validation
people with PTSD symptoms.	adults are relevant to the present review		the studies and extracted data from included studies. All available data addressing specific scoping questions were meta-analyzed.			National Health and Medical Research Council Act 1992.

CANMAT = Canadian Network for Mood and Anxiety Treatments; CBT = cognitive behavioural therapy; CCSMH = Canadian Coalition for Seniors' Mental Health; DSM-5 = Diagnostic and Statistical Manual of Mental Disorders-5th edition; GAD = generalized anxiety disorder; GGAD = German Guidelines for Anxiety Disorders; GRADE = Grading of Recommendations, Assessment, Development, and Evaluations; iBA = internet-based behavioural activation; iCBT = internet-based cognitive behavioural therapy; ISTSS = International Society for Traumatic Stress Studies; MA = meta-analysis; MDD = major depressive disorder; MH = mental health; NDGM = German National Disease Management Guideline on Unipolar Depression; NR = not reported; Phoenix Australia = Phoenix Australia Centre for Posttraumatic Mental Health; PTSD = posttraumatic stress disorder; RCT = randomized controlled trial; SIGN = Scottish Intercollegiate Guidelines Network; SR = systematic review.

Note: This table has not been copy-edited.

Appendix 3: Critical Appraisal of Included Publications

Please note that this appendix has not been copy-edited.

Table 4: Strengths and Limitations of SRs Using AMSTAR 2[34]

Strengths	Limitations
Bevilacqua et al. (2024)[19]	
• The population, intervention, comparators, and outcomes of interest were clearly stated. • The review methods were established before conducting the review (a protocol was registered in PROSPERO). • The systematic search included multiple databases (CINAHL, PsycINFO, PubMed/MEDLINE, Web of Science, and Scopus). • Database searches were supplemented by a snowball search of bibliographies and references from included studies to identify additional relevant studies. • Key search terms were provided. • At least 2 independent reviewers conducted study selection and quality assessment. • Review authors described the included studies in adequate detail. • The quality of included primary studies was assessed using a satisfactory technique (i.e., an adapted version of a tool developed to assess the methodological validity of trials evaluating psychological interventions and considering the criteria listed by the Cochrane Collaboration). • Appropriate statistical methods were used for the MA. • The review authors accounted for the RoB in individual studies when interpreting and discussing the results of the review. • The study provided a satisfactory explanation for, and discussion of any heterogeneity observed in the results of the review. • The authors declared their funding sources and potential conflicts of interest.	• Authors did not conduct a grey literature search. • There is no explicit mention of searching trial or study registries. • The authors did not provide an explanation for including only RCTs. • There is no indication that content experts were consulted during the search process. • Authors did not provide justification for restricting to studies published in English. • The authors did not explicitly assess the risk of selective reporting in individual studies included in the review. • A list of studies excluded after full-text review was not provided (although reasons for exclusion were). • The authors did not explicitly report on the sources of funding for the individual studies included in the review. • There is no explicit statement that authors performed data extraction in duplicate. • There is no explicit statement that authors performed the RoB assessment in duplicate. • The authors did not assess the potential impact of RoB in individual studies on the results of the MA. • The authors did not adequately investigate publication bias or discuss its likely impact on the results.
Kelber et al. (2024)[20]	
• The population, intervention, comparators, and outcomes of interest were clearly stated. • The review methods were established before conducting the review (a protocol was registered in PROSPERO). • The systematic search included multiple databases (PubMed, PsycInfo, and Embase). • Database searches were supplemented by a search of reference lists of previously published systematic reviews. • The search included ClinicalTrials.gov, the WHO International	• Authors did not provide justification for restricting to studies published in English. • Reference lists of included studies were not searched. • The authors did not provide an explanation for including only RCTs. • A list of studies excluded after full-text review was not provided (although reasons for exclusion were). • The authors did not explicitly report on the sources of funding for the individual studies included in the review.

Strengths	Limitations
Clinical Trials Registry Platform, and PROSPERO for additional trials. • The authors consulted subject matter experts to ensure the search captured relevant studies. • Key search terms were provided. • At least 2 independent reviewers conducted study selection and quality assessment. • The authors performed data extraction in duplicate. • Review authors described the included studies in adequate detail. • The quality of included primary studies was assessed using a satisfactory technique (i.e., Cochrane RoB Tool). • The authors performed the RoB assessment in duplicate. • The authors used GRADE to assess the quality of the evidence. • Appropriate statistical methods were used for the MA. • The authors assessed the potential impact of RoB in individual studies on the results of the MA. • The review authors accounted for the RoB in individual studies when interpreting and discussing the results of the review. • The study provided a satisfactory explanation for, and discussion of any heterogeneity observed in the results of the review. • The authors conducted statistical tests for publication bias, and discussion of the potential impact of publication bias on the results of the review. • The authors declared their funding sources and potential conflicts of interest.	• They authors stated that they used funnel plots, when possible, but it is not included in the article.
Oliveira Machado et al. (2024)[22]	
• The population, intervention, comparators, and outcomes of interest were clearly stated. • The review methods were established before conducting the review (a protocol was registered in PROSPERO). • The systematic search included multiple databases (MEDLINE (via PubMed), Embase, Latin American and Caribbean Health Sciences Literature (LILACS), Cochrane Central Register of Controlled Trials (CENTRAL), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Web of Science (Thomson Reuters), Scientific Electronic Library Online (SciELO), American Psychological Association PsycINFO (APA PsycINFO), and SCOPUS). • Database searches were supplemented by a search of bibliographies of included studies for additional references. • Grey literature was searched by checking reference lists of other systematic reviews.	• There is no indication that content experts were consulted during the search process. • A list of studies excluded after full-text review was not provided (although reasons for exclusion were). • Although interventions were broadly described, details like session frequency, duration, and specific techniques varied between studies and were not consistently detailed. • Settings (e.g., clinical or home environments) were not consistently described for all included studies. • Follow-up periods were reported but not consistently detailed for every study. • The authors did not provide an explanation for including only RCTs. • While the review acknowledged randomization, it did not consistently evaluate whether allocation sequences were truly random for all studies.

Strengths	Limitations
• Key search terms were provided. • The review authors use a comprehensive literature search strategy. • Studies published in any language were included. • At least 2 independent reviewers conducted study selection and quality assessment. • The authors performed data extraction in duplicate. • The quality of included primary studies was assessed using a satisfactory technique (i.e., RoB-II tool). • The authors performed the RoB assessment in duplicate. • Appropriate statistical methods were used for the MA. • The review authors accounted for the RoB in individual studies when interpreting and discussing the results of the review. • The authors declared their funding sources and potential conflicts of interest.	• The review did not explicitly address whether the studies selectively reported results from among multiple measurements or analyses. • The authors did not explicitly report on the sources of funding for the individual studies included in the review. • The study did not fully assess the potential impact of the RoB in individual studies on the results of the MA or other evidence synthesis. • The study did not fully provide a satisfactory explanation for, or discussion of heterogeneity observed in the results. • The authors did not adequately investigate publication bias (small study bias) or discuss its likely impact on the results.
Zandieh et al. (2024)[23]	
• The population, intervention, comparators, and outcomes of interest were clearly stated. • The review methods were established before conducting the review (a protocol was registered on the Open Science Framework [https://osf.io/7asrc]). • The systematic search included multiple databases (MEDLINE, Embase, PsycINFO, CINAHL). • The grey literature search included the Cochrane Central Register of Controlled Trials (CENTRAL). • Database searches were supplemented by a search of reference lists of included studies and relevant systematic reviews. • The authors consulted subject matter experts to ensure the search captured relevant studies. • Key search terms were provided. • The review authors use a comprehensive literature search strategy. • Studies published in any language were included. • At least 2 independent reviewers conducted study selection and quality assessment. • The authors performed data extraction in duplicate. • Review authors described the included studies in adequate detail. • The quality of included primary studies was assessed using a satisfactory technique (i.e., Cochrane RoB 2 tool). • The authors used GRADE to assess the quality of the evidence. • The authors performed the RoB assessment in duplicate.	• A list of studies excluded after full-text review was not provided (although reasons for exclusion were). • The authors did not provide an explanation for including only RCTs. • The authors did not explicitly report on the sources of funding for the individual studies included in the review.

Strengths	Limitations
• Appropriate statistical methods were used for the MA. • The review authors assess the potential impact of RoB in individual studies on the results of the MA. • The review authors accounted for the RoB in individual studies when interpreting and discussing the results of the review. • The study provided a satisfactory explanation for, and discussion of any heterogeneity observed in the results of the review. • The review authors carry out an adequate investigation of publication bias and discuss its likely impact on the results of the review. • The authors declared their funding sources and potential conflicts of interest.	
Laurito et al. (2023)[21]	
• The population, intervention, comparators, and outcomes of interest were clearly stated. • The review methods were established before conducting the review (a protocol was registered in PROSPERO). • The systematic search included multiple databases (PUBMED, PsycInfo, Web of Science, and ClinicalTrials.gov). • Database searches were supplemented by a hand search of the reference lists from the included articles. • The study included subject matter experts to ensure the search captured relevant studies. • Key search terms were provided. • At least 2 independent reviewers conducted study selection and quality assessment. • Review authors described the included studies in adequate detail. • The quality of included RCTs and NRSI was assessed using a satisfactory technique (i.e., Downs and Black checklist). • The authors performed the RoB assessment in duplicate. • The review authors accounted for the RoB in individual studies when interpreting and discussing the results of the review. • The study provided a satisfactory explanation for, and discussion of any heterogeneity observed in the results of the review. • The authors declared their funding sources and potential conflicts of interest.	• Authors did not explicitly mention grey literature searches. • Only studies published in English, Portuguese, German, or Spanish were included. • The authors did not provide an explanation for including both RCTs and NRSI. • Only 1 reviewer extracted the data. • A list of studies excluded after full-text review was not provided (although reasons for exclusion were). • The quality of included NRSI, while the review assessed selective outcome reporting as part of the checklist, it did not go into detail about whether studies selectively reported results from among multiple analyses or measurements for each specified outcome. • Did not conduct a MA without providing an explanation. • The authors did not explicitly report on the sources of funding for the individual studies included in the review.
Giovanetti et al. (2022)[24]	
• The population, intervention, comparators, and outcomes of interest were clearly stated. • The review methods were established before conducting the	• Authors did not conduct a grey literature search. • Authors did not search reference lists of included studies. • Only studies published in English were included.

Strengths	Limitations
review (a protocol was registered in PROSPERO). • The systematic search included multiple databases (PubMed, PsycINFO, and the Cochrane Central Register of Controlled Trials [CENTRAL]). • Key search terms were provided. • At least 2 independent reviewers conducted study selection and quality assessment. • The authors performed data extraction in duplicate. • The quality of included primary studies was assessed using a satisfactory technique (i.e., revised Cochrane RoB Tool [RoB 2]). • The authors performed the RoB assessment in duplicate. • Appropriate statistical methods were used for the MA. • The review authors assess the potential impact of RoB in individual studies on the results of the MA. • The review authors accounted for the RoB in individual studies when interpreting and discussing the results of the review. • The study provided a satisfactory explanation for, and discussion of any heterogeneity observed in the results of the review. • The review authors carry out an adequate investigation of publication bias and discuss its likely impact on the results of the review. • The authors declared their funding sources and potential conflicts of interest.	• There is no indication that content experts were consulted during the search process. • The authors did not provide an explanation for including only RCTs. • A list of studies excluded after full-text review was not provided (although reasons for exclusion were). • The review covers basic descriptions of populations, interventions, comparators, outcomes, and research designs, but adequate details are not provided on these topics. • The review did not explicitly evaluate and report on risks related to random allocation sequences and selective reporting of outcomes. • The authors did not explicitly report on the sources of funding for the individual studies included in the review.

AMSTAR 2 = A MeaSurement Tool to Assess systematic Reviews 2; CINAHL = Cumulative Index to Nursing and Allied Health Literature; GRADE = Grading of Recommendations, Assessment, Development, and Evaluations; MA = meta-analysis; NRSI = nonrandomized studies on interventions; PROSPERO = International Prospective Register of Systematic Reviews; RCT = randomized controlled trial; RoB = risk of bias.

Table 5: Strengths and Limitations of Guidelines Using AGREE II[35]

Item	CCSMH (2024)[26]	CANMAT (2023)[25]	NDGM (2022)[a18]	GGAD (2022)[27]	Phoenix Australia (2021)[28]
Domain 1: Scope and purpose					
1. The overall objective(s) of the guideline is (are) specifically described.	Yes	Yes	Yes	Yes	Yes
2. The health question(s) covered by the guideline is (are) specifically described.	Yes	Yes	No	No	Yes
3. The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.	Yes	Yes	Yes	Yes	Yes
Domain 2: Stakeholder involvement					
4. The Guideline Development Group includes individuals from all relevant professional groups.	Yes	Yes	Yes	Yes	Yes

Item	CCSMH (2024)[26]	CANMAT (2023)[25]	NDGM (2022)[a18]	GGAD (2022)[27]	Phoenix Australia (2021)[28]
5. The views and preferences of the target population (patients, public, etc.) have been sought.	Yes	Yes	Yes	Yes	Yes
6. The target users of the guideline are clearly defined.	Yes	Yes	Yes	No	Yes
Domain 3: Rigour of development					
7. Systematic methods were used to search for evidence.	Yes	Yes	Yes	Yes	Yes
8. The criteria for selecting the evidence are clearly described.	Yes	Yes	No	Yes	Yes
9. The strengths and limitations of the body of evidence are clearly described.	Yes	Yes	No	Yes	Yes
10. The methods for formulating the recommendations are clearly described.	Yes	Yes	No	Yes	Yes
11. The health benefits, side effects, and risks have been considered in formulating the recommendations.	Yes	Yes	Yes	Yes	Yes
12. There is an explicit link between the recommendations and the supporting evidence.	Yes	Yes	No	Yes	Yes
13. The guideline has been externally reviewed by experts before its publication.	Yes	Yes	No	No	Unclear
14. A procedure for updating the guideline is provided.	No	No	No	No	No
Domain 4: Clarity of presentation					
15. The recommendations are specific and unambiguous.	Yes	Yes	Yes	Yes	Yes
16. The different options for management of the condition or health issue are clearly presented.	Yes	Yes	Yes	Yes	Yes
17. Key recommendations are easily identifiable.	Yes	Yes	No	Yes	Yes
Domain 5: Applicability					
18. The guideline describes facilitators and barriers to its application.	Yes	Yes	Yes	No	Yes
19. The guideline provides advice and/or tools on how the recommendations can be put into practice.	Yes	Yes	Unclear	No	Yes
20. The potential resource implications of applying the recommendations have been considered.	Yes	Yes	Unclear	No	Yes
21. The guideline presents monitoring and/or auditing criteria.	Yes	Yes	No	Yes	No

Item	CCSMH (2024)[26]	CANMAT (2023)[25]	NDGM (2022)[a18]	GGAD (2022)[27]	Phoenix Australia (2021)[28]
Domain 6: Editorial independence					
22. The views of the funding body have not influenced the content of the guideline.	Yes	Unclear	Unclear	Unclear	Yes
23. Competing interests of Guideline Development Group members have been recorded and addressed.	Yes	Yes	Yes	Yes	No

AGREE II = Appraisal of Guidelines for Research and Evaluation II; CANMAT = Canadian Network for Mood and Anxiety Treatments; CCSMH = Canadian Coalition for Seniors' Mental Health; GGAD = German Guidelines for Anxiety Disorders; NDGM = German National Disease Management Guideline on Unipolar Depression; Phoenix Australia = Phoenix Australia Centre for Posttraumatic Mental Health.

Note: All materials related to this guideline (Harter et al., 2023) are available free of charge at www.leitlinien.de and at www.awmf.org. However, since the language of the documents is German, some materials or information may be presented that are not accounted in this evaluation.

Appendix 4: Main Study Findings

Table 6: Summary of Findings by Outcome — Depression

Citation	Evidence source, number of participants	Intervention and modality, outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
Kelber et al. (2024)[20]	SR with MA (2 RCTs); 362 participants	VTC BA vs. FtF BA, Depression (BDI)	NR	NR	NR	NR	SMD = 0.28 (0.03 to 0.54)	NR
Oliveira Machado et al. (2024)[22]	SR with MA (4 RCTs); 468 participants	Remote CBT vs. in-person CBT, depression (various measures)	NR	NR	NR	NR	SMD = −0.10 (−0.57 to 0.37)	NR
Zandieh et al. (2024)[23]	SR with MA (13 RCTs); 1,410 participants	Therapist-guided remote CBT vs. in-person CBT, depression (various measures)	NR	NR	NR	NR	SMD = 0.02 (−0.21 to 0.25)	NR
Giovanetti et al. (2022)[a24]	SR with MA (11 RCTs); 1,494 participants	Various virtual vs. in-person interventions, depressive symptoms (various measures)	NR	NR	NR	NR	SMD = 0.04 (−0.12 to 0.20)	0.60
Giovanetti et al. (2022)[b24]	SR with MA (3 RCTs); NR	Various virtual vs. in-person interventions, depressive symptoms (various measures)	NR	NR	NR	NR	SMD = −0.06 (−0.56 to 0.45)	NR
Bevilacqua et al. (2024)[19]	1 RCT; Nelson et al. (2003); 28 participants	VCBT with child/parent vs. FtF CBT with child/parent, depression (CDI)	14.36 (SD = 9.85)	13.57 (SD = 8.75)	6.71 (SD = 4.78)	11.64 (SD = 11.63)	NR	NR
	1 RCT; Turner et al (2014); 72 participants	Telephone-based vs. FtF CBT, depression (BDI-Y)	14.58 (SD = 8.73)	14.44 (SD = 8.77)	11.08 (SD = 11.28)	10.98 (SD = 10.16)	NR	NR

Citation	Evidence source, number of participants	Intervention and modality, outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
Kelber et al. (2024)[20]	1 RCT; Mohr et al. (2012); 325 participants	Telephone CBT vs. FtF CBT, depression (PHQ9)	NR	NR	NR	NR	*d* = −0.02 (−0.24 to 0.20)	NR

BA = behavioural activation; BDI = Beck Depression Inventory; BDI-Y = Beck Depression Inventory for youth; CBT = cognitive behavioural therapy; CDI = Children's Depression Inventory; CI = confidence interval; *d* = Cohen's d effect size; FtF = face to face; M = mean; MA = meta-analysis; NR = not reported; PHQ9: Patient Health Questionnaire; RCT = randomized controlled trial; SD = Standard Deviation; SMD = standardized mean difference; SR = systematic review; VCBT = video conferencing cognitive behavioural therapy; VTC = video teleconference.

Note: There was overlap in the primary studies that were included in the SRs; the pooled estimates from separate reviews presented in this table thus contain some of the same data. Refer to Appendix 5 for a citation matrix illustrating the degree of overlap.

[a]Meta-analysis based on posttreatment scores on depressive symptom measures. The primary diagnostic focus of the included studies in this analysis was listed as follows: PTSD (n = 5), depression (n = 3), insomnia (n = 1), bulimia nervosa (n = 1), and a combination of mood and anxiety disorders (n = 1).

[b]Subgroup meta-analysis focused on studies recruited participants specifically based on depressive diagnoses.

Note: This table has not been copy-edited.

Table 7: Summary of Findings by Outcome — Anxiety

Citation	Evidence source, number of participants	Intervention and modality, Outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
Anxiety symptoms								
Oliveira Machado et al. (2024)[22]	SR with MA (3 RCTs). 201 participants	Remote CBT vs. in-person CBT, anxiety symptoms (various measures)	NR	NR	NR	NR	SMD = −0.06 (−0.34 to 0.21)	NR
GAD								
Zandieh et al. (2024)[23]	1 RCT; Axelsson et al. (2020); 204 participants	Therapist-guided iCBT vs. in-person CBT, Health anxiety (Health Anxiety Inventory)	NR	NR	20.70 (SD = 9.3)	18.00 (SD = 8.50)	NR	NR
SAD								
Zandieh et al. (2024)[23]	1 RCT; Hedman et al. (2011); 126 participants	Therapist-guided iCBT vs. in-person	NR	NR	32.10 (SD = 23.10)	40.70 (SD = 23.70)	NR	NR

Citation	Evidence source, number of participants	Intervention and modality, Outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
		CBT, SAD (Liebowitz Social Anxiety Scale)						
PD								
Zandieh et al. (2024)[23]	1 RCT; Bergstrom et al. (2010); 104 participants	Therapist-guided iCBT vs. in-person CBT, PD severity (Panic Disorder Severity Scale)	NR	NR	4.10 (SD = 4.20)	5.00 (SD = 5.3)	NR	NR
	1 RCT; Carlbring et al. (2005); 49 participants	Therapist-guided iCBT vs. in-person CBT, anxiety associated with physiologic sensations, PD (Body Sensations Questionnaire)	NR	NR	32.10 (SD = 11.50)	31.90 (SD = 10.70)	NR	NR
	1 RCT; Kenardy et al. (2003); 95 participants	Therapist-guided computer-based CBT vs. in-person CBT, PD (panic-anxiety composite score)	NR	NR	−1.21 (SD = 0.76)	−1.52 (SD = 0.70)	NR	NR
	1 RCT; Kiropoulos et al. (2008); 86 participants	Therapist-guided iCBT vs. in-person CBT, panic severity (Panic Disorder Severity Scale)	NR	NR	9.92 (SD = 5.88)	9.24 (SD = 5.65)	NR	NR
Specific phobia								
Zandieh et al. (2024)[23]	1 RCT; Andrews et al. (2011); 37 participants	Therapist-guided iCBT vs. in-person CBT, social phobia score (Social	NR	NR	44.00 (SD = 15.9)	31.50 (SD = 23.30)	NR	NR

Citation	Evidence source, number of participants	Intervention and modality, Outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
		Interaction Anxiety Scale)						

CBT = cognitive behavioural therapy; CI = confidence interval; GAD = generalized anxiety disorder; iCBT = internet-based cognitive behaviour therapy; M = mean; MA = meta-analysis; NR = not reported; PD = panic disorder; RCT = randomized controlled trial; SAD = social anxiety disorder; SD = standard deviation; SMD: standardized mean difference; SR = systematic review.

Note: There was overlap in the primary studies that were included in the SRs; the pooled estimates from separate reviews presented in this table thus contain some of the same data. Refer to Appendix 5 for a citation matrix illustrating the degree of overlap.

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Table 8: Summary of Findings by Outcome — OCD

Citation	Evidence source, number of participants	Intervention and modality, Outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
Bevilacqua et al. (2024)[19]	1 RCT; Turner et al (2014); 72 participants	Telephone-based vs. FtF CBT, OCD (CY-BOCS)	25.64 (SD = 3.86)	24.11 (SD = 4.2)	12.99 (SD = 8.56)	11.72 (SD = 7.06)	NR	NR
Zandieh et al. (2024)[23]	1 RCT; Lovell et al. (2006); 72 participants	Telephone-based CBT vs. in-person CBT, OCD (Y-BOCS)	NR	NR	14.20 (SD = 7.80)	13.30 (SD = 8.60)	NR	NR
	1 RCT; Lundstrom et al. (2022); 80 participants	Therapist-guided iCBT vs. in-person CBT, OCD (Y-BOCS)	NR	NR	10.80 (SD = 5.81)	11.70 (SD = 5.49)	NR	NR

CBT = cognitive behavioural therapy; CI = confidence interval; CY-BOCS = Children's Yale-Brown Obsessive-Compulsive Scale; FtF = face-to-face; iCBT = internet-based cognitive behaviour therapy; M = mean; NR = not reported; OCD = obsessive-compulsive disorder; RCT = randomized controlled trial; SD = Standard Deviation; Y-BOCS = Yale-Brown Obsessive-Compulsive Scale.

Note: There was overlap in the primary studies that were included in the SRs; the pooled estimates from separate reviews presented in this table thus contain some of the same data. Refer to Appendix 5 for a citation matrix illustrating the degree of overlap.

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Table 9: Summary of Findings by Outcome — PTSD

Citation	Evidence source, number of participants	Intervention and modality, Outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
Kelber et al. (2024)[20]	1 RCT; Acierno et al. (2016); 265 participants	VTC BA + Therapeutic Exposure vs. FtF BA + Therapeutic Exposure, PTSD (PCL)	NR	NR	NR	NR	*d* = 0.01 (−0.27 to 0.28)	NR
	1 RCT; Acierno et al. (2017); 150 participants	VTC PE vs. FtF PE, PTSD (PCL)	NR	NR	NR	NR	*d* = 0.29 (−0.06 to 0.63)	NR
	1 RCT; Acierno et al. (2021); 136 participants	VTC PE vs. FtF PE, PTSD (PCL)	NR	NR	NR	NR	*d* = 0.37 (−0.04 to 0.77)	NR
	1 RCT; Frueh et al. (2007); 38 participants	VTC Group CBT vs. FtF Group CBT, PTSD (PCL)	67.00 (SD = 9.4)[a]	62.30 (SD = 12.8)[a]	Posttreatment: 68.10 (SD = 11.0)[a] f/u[b]: 61.40 (SD = 14.6)[a]	Posttreatment: 56.50 (SD = 10.1)[a] f/u[b]: 60.50 (SD = 9.8)[a]	*d* = 0.38 (−0.49 to 1.25)	0.39
	1 RCT; Liu et al. (2020); 207 participants	VTC CPT vs. FtF CPT, PTSD (CAPS)	NR	NR	56.60 (SD = 28.5)[c]	57.30 (SD = 26.9)[c]	*d* = 0.55 (0.28 to 0.83)	NR
	1 RCT; Maieritsch et al. (2016); 90 participants	VTC CPT vs. FtF CPT, PTSD (CAPS)	NR	NR	50.02 (SD = 22)[c]	48.24 (SD = 21.42)[c]	*d* = −0.16 (−0.71 to 0.39)	NR
	1 RCT; Morland et al. (2014); 144 participants	VTC Group CPT-C vs. In-person group CPT-C, PTSD (CAPS)	72.00 (SD = 14.60)[a]	68.90 (SD = 13)[a]	Posttreatment: 55.60 (SD = 18.80)[a]	Posttreatment: 58.70 (SD = 21)[a]	*d* = −0.27 (−0.66 to 0.12)	NR

Citation	Evidence source, number of participants	Intervention and modality, Outcome (measure)	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
			Intervention group	Control group	Intervention group	Control group		
					f/u[b]: 56.20 (SD = 18)[a]	f/u[b]: 57.80 (SD = 18.7[d])[a]		
	1 RCT; Morland et al. (2015); 98 participants	VTC CPT vs. FtF CPT, PTSD (CAPS)	NR	NR	NR	NR	*d* = −0.18 (−0.53 to 0.18)	NR
	1 RCT; Morland et al. (2020); 175 participants	Home-Based VTC PE vs. Office-Based VTC PE, PTSD (CAPS)	NR	NR	NR	NR	*d* = 0.22 (−0.14 to 0.59)	NR
	1 RCT; Peterson et al. (2020); 120 participants	VTC CPT vs. FtF (in-office) CPT vs. FtF (in-home) CPT, PTSD (CAPS)	NR	NR	26.00 (SD = 10.26)[c]	26.20 (SD = 17.02)[c]	*d* = −0.19 (−0.74 to 0.37)	NR
Laurito et al. (2023)[21]	1 RCT; Morland et al. (2010); 125 participants	VTC group AMT vs. In-person group AMT, PTSD (CAPS)	64.50 (SD = 11.60)	65.80 (SD = 10.80)	59.20 (SD = 15)	57.40 (SD = 16)	NR	NR
	1 RCT; Morland et al. (2011); 13 participants	VTC group CPT-C vs. In-person group CPT, PTSD (CAPS)	82.50 (NR[e])	77 (NR[e])	Posttreatment: 69 (NR[e])	Posttreatment: 62 (NR[e])	NR	Posttreatment: P > 0.05 6M f/u: P > 0.05

AMT = anger management therapy; BA = behavioural activation; CAPS = Clinician-Administered PTSD Scale for DSM-5; CBT = cognitive behavioural therapy; d = Cohen's d effect size; CI = confidence interval; CPT = cognitive processing therapy; CPT-C: cognitive processing therapy - cognitive only version; FtF = face-to-face; f/u = follow-up; M = mean; NR = not reported; PE = prolonged exposure; PCL = PTSD Checklist; PTSD = posttraumatic stress disorder; RCT = randomized controlled trial; SD = standard deviation; VTC = video teleconference.

Note: There was overlap in the primary studies that were included in the SRs; the pooled estimates from separate reviews presented in this table thus contain some of the same data. Refer to Appendix 5 for a citation matrix illustrating the degree of overlap.

This table has not been copy-edited.

[a]These data are reported from another SR, Laurito et al. (2023).[21]

[b]Length of follow-up not reported.

[c]These data are reported from another SR, Zandieh et al. (2024).[23]

[d]The standard deviation is reported as 19.8 in Zandieh et al. (2024).[23]

[e]Presented data on median scores.

Table 10: Summary of Findings by Outcome — Additional Clinical Outcomes

Citation	Evidence source, number of participants	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
		Intervention group	Control group	Intervention group	Control group		
Quality of life							
Kelber et al. (2024)[20]	1 RCT; Egede et al. (2015); 141 participants	NR	NR	NR	NR	*d* = −0.12 (−0.37 to 0.13)	NR
Satisfaction with treatment							
Kelber et al. (2024)[20]	1 RCT; Acierno et al. (2017); 150 participants	NR	NR	NR	NR	Appearance of facility: *d* = −0.14 (−0.63 to 0.35)	NR
						Convenience of facility: *d* = 0.11 (−0.38 to 0.60)	
						Recommendation: *d* = 0.06 (−0.43 to 0.55)	
						Respectful care: *d* = −0.06 (−0.55 to 0.43)	
	1 RCT; Egede et al. (2015); 241 participants	NR	NR	NR	NR	*d* = −0.05 (−0.30 to 0.20)	NR
	1 RCT; Luxon et al. (2016); 121 participants	NR	NR	NR	NR	*d* = 0.39 (−0.04 to 0.81)	NR
	1 RCT; Morland et al. (2014); 144 participants	NR	NR	NR	NR	Convenience of facility: *d* = 0.25 (−0.13 to 0.64)	NR

Citation	Evidence source, number of participants	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
		Intervention group	Control group	Intervention group	Control group		
	1 RCT; Morland et al. (2015); 98 participants	NR	NR	NR	NR	*d* = −0.21 (−0.56 to 0.14)	NR
Therapeutic alliance[a]							
Kelber et al. (2024)[20]	1 RCT; Mohr et al. (2012); 325 participants	NR	NR	NR	NR	Client: *d* = −1.02 (−1.27 to −0.78)	NR
						Therapist: *d* = −0.36 (−0.59 to −0.12)	
	1 RCT; Maieritsch et al. (2016); 90 participants	NR	NR	NR	NR	*d* = −0.12 (−0.67 to 0.44)	NR
	1 RCT; Morland et al. (2014); 144 participants	NR	NR	NR	NR	Leaders: *d* = 0.00 (−0.38 to 0.38)	NR
						Leader self: *d* = 0.25 (−0.14 to 0.63)	
						Member: *d* = 0.18 (−0.20 to 0.56)	
						Total: *d* = 0.25 (−0.14 to 0.63)	
	1 RCT; Morland et al. (2015); 98 participants	NR	NR	NR	NR	Client: *d* = −0.03 (−0.38 to 0.32)	NR

Citation	Evidence source, number of participants	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
		Intervention group	Control group	Intervention group	Control group		
						Therapist: *d* = −0.04 (−0.39 to 0.31)	
Zandieh et al. (2024)[23]	1 RCT; Watts et al. (2020); 115 participants	NR	NR	240.73 (SD = 16.05)	233.96 (SD = 13.76)	NR	NR
Anger							
Laurito et al. (2023)[21]	1 RCT; Morland et al. (2010); 125 participants	**STAXI-2 (AE)**				NR	NR
		56.70 (SD = 12)	55 (SD = 10.3)	Posttreatment: 42.40 (SD = 16.20) f/u: 42 (SD = 15.60)	Posttreatment: 46.60 (SD = 12.20) f/u: 46.60 (SD = 15.30)		
		STAXI-2 (TA)					
		28 (SD = 6)	27.80 (SD = 5.60)	Posttreatment: 22.10 (SD = 6.20) f/u: 22.40 (SD = 7.30)	Posttreatment: 23.30 (SD = 6) f/u: 25.60 (SD = 8.20)		
		NAS-T					
		109.30 (SD = 16.10)	109.8 (SD = 14)	Posttreatment: 94.20 (SD = 19.10) f/u: 97.70 (SD = 20.20)	Posttreatment: 99.20 (SD = 17.10) f/u: 101 (SD = 22.50)		

Citation	Evidence source, number of participants	Baseline M (SD)		Follow-up M (SD)		Relative effect (95% CI)	P value (between groups)
		Intervention group	Control group	Intervention group	Control group		
Psychiatric functioning							
Kelber et al. (2024)[20]	1 RCT; Frueh et al. (2007); 38 participants	NR	NR	NR	NR	*d* = 0.47 (−0.41 to 1.34)	NR
Social functioning							
Kelber et al. (2024)[20]	1 RCT; Frueh et al. (2007); 38 participants	NR	NR	NR	NR	*d* = −0.70 (−1.59 to 0.19)	NR

CI = confidence interval; *d* = Cohen's d effect size; f/u = follow-up; M = mean; NAS-t = Novaco anger scale-total score; NR = not reported; RCT = randomized controlled trial; SD = Standard Deviation; STAXI-2 (AE) = State-Trait Anger Expression Inventory-2 (anger expression); STAXI-2 (TA) = State-Trait Anger Expression Inventory-2 (trait anger).

Note: This table has not been copy-edited.

[a]Refers to the strength of the relationship between a therapist and a client.

Table 11: Summary of Recommendations in Included Guidelines — Depression

Recommendations and supporting evidence	Quality of evidence and strength of recommendations
CANMAT (2023)[25]	
"Guided iCBT is recommended as a first-line monotherapy for mild depression, and as a first-line adjunctive treatment for moderate severity MDD." (p. 666)[25] Evidence from an umbrella review of iCBT reported medium to large effect sizes across 4 MAs. The Good Days Ahead program, incorporating therapist or telephone support, demonstrated efficacy in 2 large RCTs.	**Level of evidence:** level 2[a] **Line of treatment:** first line[b]
"Guided iBA is recommended as a second-line adjunctive treatment for mild–moderate MDD when supported by clinicians." (p. 666)[25] Evidence from 1 MA indicated that iBA for depression was more effective than psychoeducation or treatment as usual, and noninferior in effectiveness to other behavioural therapy and mindfulness formats. One RCT of guided email support showed no differences when compared to a waitlist control group.	**Level of evidence:** level 3[c] **Line of treatment:** second line[d]
NDGM (2022)[18]	
"Internet- and mobile device-based interventions (IMI) should be offered in mild depressive episodes, embedded in an overall therapeutic concept." (p. 357)[18] Supporting evidence: NR	NR
"Internet- and mobile device-based interventions may be offered to patients with moderate depressive episodes in addition to treatment with antidepressants or psychotherapy, embedded in an overall therapeutic concept." (p. 358)[18] Supporting evidence: NR	NR
"Internet- and mobile device-based interventions should be offered as an alternative treatment option to patients with moderate depressive episodes who refuse both psychotherapy and antidepressants." (p. 358)[18] Supporting evidence: NR	NR
"Internet- and mobile device-based interventions may be offered to patients with severe depressive episodes in addition to treatment with antidepressants and/or psychotherapy." (p. 358)[18] Supporting evidence: NR	NR

CANMAT = Canadian Network for Mood and Anxiety Treatments; iBA = internet-based behavioural activation; iCBT = internet-based cognitive behavioural therapy; MA = meta-analysis; MDD = major depressive disorder; RCT = randomized controlled trial; NDGM = German National Disease Management Guideline on Unipolar Depression; NR = not reported.

Note: This table has not been copy-edited.

[a]Lower-quality MA with wide confidence intervals and/or 1 or more RCTs with adequate sample size.

[b]Level 1 or 2 evidence, plus clinical support. Clinical support refers to the application of expert consensus by the CANMAT editorial group to ensure that evidence-supported interventions are feasible and relevant to clinical practice.

[c]Small-sample RCTs or nonrandomized, controlled prospective studies or high-quality retrospective studies.

[d]Level 3 evidence or higher, plus clinical support.

Table 12: Summary of Recommendations in Included Guidelines — Anxiety

Recommendations and supporting evidence	Quality of evidence and strength of recommendations
CCSMH (2024)[26]	
"Remote CBT is effective and should be offered as a treatment option for anxiety in older adults." (p. 3)[26] Evidence from 5 studies indicated that remote CBT was effectively reduced anxiety symptoms in older adults compared to usual care. There was no difference between remote and in-person CBT for reduction of anxiety symptoms.	**Quality of evidence:** Low **Strength of recommendation:** Strong
GGAD (2022)[27]	
For panic disorder with or without agoraphobia: "Patients can be offered CBT-based internet interventions for bridging the waiting period until standard CBT starts or as add-on measure to standard CBT." (p. 580)[27] "CBT-based internet interventions should not be offered as monotherapy." (p. 580)[27] Expert consensus based on CCP[a]	**Level of evidence:** expert consensus **Recommendation grade:** CCP +[b]
For generalized anxiety disorder: "Patients can be offered CBT-based internet interventions for bridging the waiting period until standard CBT starts or as add-on measure to standard CBT." (p. 580)[27] "CBT-based internet interventions should not be offered as monotherapy." (p. 580)[27] Expert consensus based on RCTs and CCP[a] Evidence from RCTs showed that internet-based psychological interventions were more effective than a waitlist control. There is insufficient evidence showing that internet-based psychological interventions are as effective as individual face-to-face CBT.	**Level of evidence:** expert consensus **Recommendation grade:** CCP +[b]
For social anxiety disorder: "Patients can be offered CBT- or PDT-based internet interventions for bridging the waiting period until standard CBT starts or as add-on measure to standard CBT." (p. 580)[27] "CBT-based internet interventions should not be offered as monotherapy." (p. 580)[27] Expert consensus based on RCTs and CCP[a] Evidence from RCTs showed that internet-based psychological interventions were more effective than a waitlist control. There is insufficient evidence showing that internet-based psychological interventions are as effective as individual face-to-face CBT.	**Level of evidence:** expert consensus **Recommendation grade:** CCP+[b]

CBT = cognitive behavioural therapy; CCP = clinical consensus point; CCSMH = Canadian Coalition for Seniors' Mental Health; GGAD = German Guidelines for Anxiety Disorders; PDT = psychodynamic therapy; RCT = randomized controlled trial.

Note: This table has not been copy-edited.

[a]Clinical consensus point: if no unequivocal evaluation of a relevant clinical topic was possible, recommendations were formulated by expert consensus.

[b]Positive recommendation based on clinical consensus point.

Table 13: Summary of Recommendations in Included Guidelines — PTSD

Recommendations and supporting evidence	Quality of evidence and strength of recommendations
Phoenix Australia (2021)[28]	
"For adults within the first 3 months of trauma, we[a] suggest usual practice in preference to iCBT." (p. 16)[28] Insufficient supporting evidence Evidence from 1 study indicated a small but clinically important benefit of iCBT on PTSD diagnosis rates and symptom severity in adults within the first 3 months following a serious injury. The Guideline Development Group agreed that the current evidence is insufficient to make a recommendation for iCBT.	**Certainty (quality) of evidence:** Low **Strength of recommendation:** NA
"For adults within the first 3 months of trauma, there was insufficient evidence to make a recommendation on telephone-based CBT." (p. 18)[28] Insufficient supporting evidence. Evidence from 1 study indicated that telephone-based CBT may have minimal or no impact on PTSD symptom severity. The Guideline Development Group was uncertain whether telephone-based CBT increases or decreases PTSD symptom severity.	**Certainty (quality) of evidence:** Very low **Strength of recommendation:** NA
"For adults with PTSD where trauma-focused CBT or EMDR are unavailable or unacceptable, trauma-focused iCBT is conditionally recommended." (p. 23)[28] Evidence from 3 RCTs demonstrated a large clinically important benefit of guided trauma-focused iCBT compared to waitlist or attention control. Evidence from 1 RCT indicated a modest clinically important advantage of guided trauma-focused iCBT over internet-based supportive counselling without a trauma focus. Evidence from 1 RCT found no significant difference between guided trauma-focused iCBT and internet-based psychotherapy. Evidence from 1 RCT indicated a moderate clinically important benefit of in-person present-centred therapy compared to guided internet-based prolonged exposure.	**Certainty (quality) of evidence:** low **Strength of recommendation:** Conditional[b]
"For adults with PTSD, where face-to-face trauma-focused CBT or EMDR are unavailable or unacceptable, trauma-focused CBT delivered via telehealth (videoconferencing) is conditionally recommended." (p. 39)[28] Evidence from 3 RCTs indicated large clinically important benefit from guided trauma-focused iCBT compared to waitlist or attention control. Evidence from 1 RCT indicated a small clinically important benefit of guided trauma-focused iCBT above that of internet-based supportive counselling without a trauma focus. Evidence from 1 RCT indicated no important difference between guided trauma-focused iCBT and internet-based psychotherapy. Evidence from 1 RCT showed a moderate clinically important benefit from present--	**Certainty (quality) of evidence:** Low **Strength of recommendation:** Conditional[b]

Recommendations and supporting evidence	Quality of evidence and strength of recommendations
centred therapy delivered in person compared to guided internet-based prolonged exposure.	
"For adults with PTSD, there was insufficient evidence to make a recommendation on Behavioural Activation and Therapeutic Exposure delivered via telehealth (videoconferencing)." (p. 39)[28] Insufficient supporting evidence. Evidence from 1 study; the Guideline Development Group was uncertain if there is a difference between BA and Therapeutic Exposure delivered via telehealth (videoconferencing) vs. in person on PTSD symptom severity.	**Certainty (quality) of evidence:** Very low **Strength of recommendation:** NA
"For adults with PTSD, there was insufficient evidence to make a recommendation on group non–trauma-focused CBT delivered via telehealth (videoconferencing)." (p. 39)[28] Insufficient supporting evidence. Evidence from 2 studies with small sample sizes; the Guideline Development Group was uncertain if there is a significant difference between group non–trauma-focused CBT delivered via telehealth (videoconferencing) vs. in person on PTSD symptom severity.	**Certainty (quality) of evidence:** very low **Strength of recommendation:** NA

BA = behavioural activation; CBT = cognitive behavioural therapy; CBT-t = cognitive behavioural therapy with a trauma focus; EMDR = Eye Movement Desensitization and Reprocessing; iCBT = internet-based Cognitive behavioural therapy; NA = not applicable; Phoenix Australia = Phoenix Australia Centre for Posttraumatic Mental Health; PTSD = posttraumatic stress disorder; RCT = randomized controlled trial.

Note: This table has not been copy-edited.

[a]Refers to the Guideline Development Group.

[b]There is lower certainty in the evidence and clinicians should provide the intervention to most people, but not all.

Appendix 5: Overlap Between Included SRs

Please note that this appendix has not been copy-edited.

Table 14: Overlap in Relevant Primary Studies Between Included Systematic Reviews

Primary study citation	Bevilacqua et al. (2024)[19]	Kelber et al. (2024)[20]	Oliveira Machado et al. (2024)[22]	Zandieh et al. (2024) [23]	Laurito et al. (2023)[19]	Giovanetti et al. (2022)[24]
Acierno R, et al. Depress Anxiety. 2016; 33: 415 to 423.	—	Yes	—	—	—	Yes
Acierno R, et al. Behav Res Ther. 2017; 89: 57 to 65.	—	Yes	—	—	—	Yes
Acierno R, et al. J Anxiety Disord. 2021; 83: 102461.	—	Yes	—	—	—	—
Alegría M, et al. Med Care. 2014; 52: 989 to 97.	—	—	—	Yes	—	—
Andersson G, et al. J Affect Disord. 2013; 151: 986 to 94.	—	—	—	Yes	—	—
Andrews G, et al. Aust N Z J Psychiatry. 2011; 45: 337 to 40.	—	—	—	Yes	—	—
Arnedt JT, et al. Sleep. 2021; 44: zsaa136.	—	—	—	—	—	Yes
Axelsson E, et al. JAMA Psychiatry. 2020; 77: 915 to 24.	—	—	—	Yes	—	—
Bergström J, et al. BMC Psychiatry. 2010; 10:54.	—	—	—	Yes	—	—
Bouchard S, et al. J Clin Med. 2022; 11(19): 5924.	—	—	Yes	—	—	—
Carlbring P, et al. Behav Res Ther. 2005; 43: 1321 to 33.	—	—	—	Yes	—	—
Choi NG, et al. Depress Anxiety. 2014a; 31: 653 to 61.	—	—	—	Yes	—	—
Choi NG, et al. Am J Geriatr Psychiatry. 2014b; 22: 263 to 271.	—	—	—	—	—	Yes
Egede LE, et al. Lancet Psychiatry. 2015; 2: 693 to 701.	—	—	—	Yes	—	Yes
Frueh BC, et al. J Telemed Telecare. 2007; 13: 142 to 7.	—	Yes	—	Yes	Yes	—
Glueckauf RL, et al. Rehabil Psychol. 2012; 57: 124 to 39.	—	—	—	Yes	—	—
Hedman E, et al. PLoS One. 2011; 6: e18001.	—	—	—	Yes	—	—

Primary study citation	Bevilacqua et al. (2024)[19]	Kelber et al. (2024)[20]	Oliveira Machado et al. (2024)[22]	Zandieh et al. (2024) [23]	Laurito et al. (2023)[19]	Giovanetti et al. (2022)[24]
Himelhoch S, et al. AIDS Behav. 2013; 17:2756 to 64.	—	—	—	Yes	—	—
Kenardy JA, et al. J Consult Clin Psychol. 2003; 71: 1068 to 75.	—	—	—	Yes	—	—
Kheirkhah F, et al. Heliyon. 2023; 9: e15760.	—	—	—	Yes	—	—
Kiropoulos LA, et al. J Anxiety Disord. 2008; 22: 1273 to 84.	—	—	—	Yes	—	—
Liu L, et al. J Telemed Telecare. 2020; 26 (9): 507 to 19.	—	Yes	—	Yes	—	Yes
Lovell K, et al. BMJ. 2006; 333: 883.	—	—	—	Yes	—	—
Lundström L, et al. JAMA Network Open. 2022; 5: e221967-e.	—	—	—	Yes	—	—
Luxton DD, et al. J Consult Clin Psychol. 2016; 84(11): 923 to 934.	—	—	Yes	Yes	—	Yes
Maieritsch KP, et al. J Telemed Telecare. 2016; 22 (4): 238 to 43.	—	Yes	—	Yes	—	Yes
Milgrom J, et al. J Med Internet Res. 2021; 23:e17185.	—	—	—	Yes	—	—
Mitchell JE, et al. Behav Res Ther. 2008; 46: 581 to 592.	—	—	—	—	—	Yes
Mohr DC, et al. JAMA. 2012; 307(21): 2278 to 2285.	—	—	Yes	Yes	—	—
Morland LA, et al. J Clin. Psychiatry. 2010; 71: 855 to 863.	—	—	—	—	Yes	—
Morland LA, et al. J Trauma Stress. 2011; 24: 465 to 469.	—	—	—	—	Yes	—
Morland LA, et al. J Clin Psychiatry. 2014; 75: 470 to 6.	—	Yes	—	Yes	Yes	—
Morland LA, et al. Depress Anxiety. 2015; 32(11): 811 to 820.	—	Yes	—	—	—	—
Morland LA, et al. Depress Anxiety. 2020; 37: 346 to 355.	—	Yes	—	—	—	Yes
Nelson EL, et al. Telemed J E Health. 2003; 9(1): 49 to 55.	Yes	—	Yes	—	—	—
Peterson AL, et al. BMC Psychiatry. 2022; 41: 22.	—	Yes	—	Yes	—	—
Stubbings DR, et al. J Med Internet Res. 2013; 15(11): e258.	—	—	Yes	Yes	—	Yes

Primary study citation	Bevilacqua et al. (2024)[19]	Kelber et al. (2024)[20]	Oliveira Machado et al. (2024)[22]	Zandieh et al. (2024) [23]	Laurito et al. (2023)[19]	Giovanetti et al. (2022)[24]
Thase ME, et al. Am J Psychiatry. 2018; 175: 242 to 50.	—	—	—	Yes	—	—
Turner CM, et al. JAACAP. 2014; 53(12): 1298 to 1307.e2.	Yes	—	—	—	—	—
Wagner B, et al. J Affect Disord. 2014; 152 to 154:113 to 121.	—	—	Yes	Yes	—	—
Watts S, et al. J Psychother Integration. 2020; 30: 208 to 25.	—	—	—	Yes	—	—
Ying Y, et al. Psychol Med. 2023; 53: 3932 to 42.	—	—	—	Yes	—	—

Appendix 6: References of Potential Interest

Please note that this appendix has not been copy-edited.

Previous CDA-AMC Reports

Internet-Delivered Cognitive Behavioural Therapy for Post-traumatic Stress Disorder or Acute Stress Disorder. Ontario Health. Accessed December 9, 2024. https://www.hqontario.ca/evidence-to-improve-care/health-technology-assessment/reviews-and-recommendations/internet-delivered-cognitive-behavioural-therapy-for-post-traumatic-stress-disorder-or-acute-stress-disorder With Ontario Health

Internet-Delivered Cognitive Behavioural Therapy for Major Depression and Anxiety Disorders. Health Quality Ontario. Accessed December 9, 2024. https://www.hqontario.ca/evidence-to-improve-care/health-technology-assessment/reviews-and-recommendations/internet-delivered-cognitive-behavioural-therapy-for-major-depression-and-anxiety-disorders With Health Quality Ontario

Additional References

Williams S, Bornstein S. Indigenous Tele-Psychiatry: A Jurisdictional Scan. Newfoundland and Labrador Centre for Applied Health Research. Accessed December 4, 2024. https://www.mun.ca/nlcahr/media/production/memorial/administrative/nl-centre-for-applied-health-research/media-library/chrsp/Indigenous_Telepsychiatry_March2020.pdf

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