

Telebehavioral health

Clinical Policy ID: CCP.1349

Recent review date: 4/2024

Next review date: 8/2025

Policy contains: Mental health telemedicine; telemental health; telebehavioral health; telepsychiatry; videoconferencing telepsychiatry.

FirstChoice VIP Care has developed clinical policies to assist with making coverage determinations. FirstChoice VIP Care's clinical policies are based on guidelines from established industry sources, such as the Centers for Medicare & Medicaid Services (CMS), state regulatory agencies, the American Medical Association (AMA), medical specialty professional societies, and peer-reviewed professional literature. These clinical policies along with other sources, such as plan benefits and state and federal laws and regulatory requirements, including any state- or plan-specific definition of "medically necessary," and the specific facts of the particular situation are considered by FirstChoice VIP Care when making coverage determinations. In the event of conflict between this clinical policy and plan benefits and/or state or federal laws and/or regulatory requirements, the plan benefits and/or state and federal laws and/or regulatory requirements shall control. FirstChoice VIP Care's clinical policies are for informational purposes only and not intended as medical advice or to direct treatment. Physicians and other health care providers are solely responsible for the treatment decisions for their patients. FirstChoice VIP Care's clinical policies are reflective of evidence-based medicine at the time of review. As medical science evolves, FirstChoice VIP Care will update its clinical policies as necessary. FirstChoice VIP Care's clinical policies are not guarantees of payment.

Coverage policy

Telebehavioral health is clinically proven and, therefore, may be medically necessary, when all of the following criteria are met and when provided in accordance with state laws and regulatory requirements (American Psychiatric Association and American Telemedicine Association, 2022):

- A mental health diagnosis is documented.
- A secure, two-way, real-time interactive telecommunication system is used.
- A physician licensed in the state where the patient resides must render the service, and be located at the distant site.
- Medical records of each session are maintained.

Telebehavioral health services considered medically necessary include assessment and diagnosis, psychotherapy, and medical management (American Psychiatric Association and American Telemedicine Association, 2022).

Limitations

There are no absolute contraindications to telebehavioral health. Factors such as accessibility and usability, appropriateness of modality, privacy safeguards, patient safety, and adequate equipment testing are important considerations for ensuring a seamless transition to, and use of, telebehavioral health services (American Psychiatric Association and American Telemedicine Association, 2022; American Psychological Association, 2013).

Phone-based services, remote medical monitoring devices, virtual reality devices, and internet-based services such as Skype and chat rooms are not interactive telecommunication systems, and, thus, not medically necessary telebehavioral health services.

Group or family psychotherapy from providers at different sites is not a medically necessary telebehavioral health service. Telebehavioral health is not medically necessary for emergency cases, such as homicidal, suicidal, or acutely psychotic members, unless no other option exists.

Alternative covered services

Various mental health services delivered in person by the provider to the member.

Background

Medicaid considers telemedicine as distinct from the broader concept of telehealth (Centers for Medicare & Medicaid Services, undated):

- Telemedicine is a means of improving a patient's health by permitting two-way, real time interactive (synchronous) communication between the patient and the physician or practitioner at the distant site. At a minimum, audio and video equipment are used.
- Telehealth (or telemonitoring) is the use of telecommunications and information technology to provide access to health assessment, diagnosis, intervention, consultation, supervision and information across distance. Telehealth may employ synchronous and asynchronous (also called "store and forward") technologies as telephones, facsimile machines, electronic mail systems, and remote patient monitoring devices, which collect and transmit patient data for surveillance and interpretation.

Medicaid models its definition of telemedicine on Medicare's definition of telehealth services and allows states to choose the telehealth services to cover under Medicaid (Centers for Medicare & Medicaid Services, undated). As a result, the list of covered telehealth services under each state's Medicaid program may be more or less restrictive than that of Medicare. All states and the District of Columbia cover some form of live video (synchronous communication) in Medicaid fee-for-service, and a majority of states cover store and forward, remote patient monitoring, or audio-only telehealth services (Federation of State Medical Boards, 2023). An underlying principle in care delivery is that telehealth technology is not the service provided, but rather the evaluation, management, diagnosis, or treatment services that are enabled by the telehealth technology (Centers for Medicare & Medicaid Services, 2021).

Telebehavioral health encompasses mental health services by videoconference, including assessment, treatment, education, monitoring, and collaboration. Various locations can accommodate telebehavioral health, including hospitals, clinics, nursing facilities, schools, prisons, and homes. Providers can include psychiatrists, psychologists, nurse practitioners, physician assistants, and social workers. Telebehavioral health can improve continuity of care between facilities, assist remote and underserved patients, and provide "distance" that is especially helpful for post-traumatic stress disorder, agoraphobia, and eating disorders. Telebehavioral health programs have been used for adults and for children and adolescents in clinics, community mental health centers, schools, day care, prisons, and private practice (Grady, 2011).

The COVID-19 pandemic has changed the role of telebehavioral health dramatically. A large increase of telebehavioral health visits, with the provider often working remotely, has occurred to address concerns about the risks associated with visiting medical facilities and the risks borne by health care workers. Behavioral health visits via video teleconferencing within the Department of Veterans Administration rose from 1,739 to 11,406 between March 11, 2020 and April 22, 2020. Of the visits (n = 114,714) in this 53-day period, 77.5% were first-time users of video teleconferencing (Connolly, 2021).

The Centers for Medicare & Medicaid Services supports states in expanding their use of telehealth in Medicaid for behavioral health services during and after this public health emergency (Centers for Medicare & Medicaid Services, 2021).

Findings

The American Psychiatric Association recognizes telemedicine as an important tool in the delivery of behavioral health services. An updated policy statement from the Association supports using video conferencing as a validated and effective practice of medicine that increases access to care (American Psychiatric Association, 2018).

The American Psychiatric Association and American Telemedicine Association Joint Committee (2022) produced a best practices document on synchronous videoconferencing-based telemental health to support evidence-based service provision. The document addresses 1) program development/needs assessment; 2) legal/regulatory issues; 3) standard operating procedures and protocols; and 4) clinical considerations, e.g., patient selection, settings, ethics, and specific populations.

The Association also produced a written and video toolkit covering more than 20 key topics on issues of training, clinical practice, legal, and reimbursement (American Psychiatric Association, undated). Included in the toolkit was a review of telepsychiatry clinical outcomes, which identified several positive preliminary findings (Hilty, undated):

- Telepsychiatry may be preferred to in-person for children and adolescents on the autism spectrum and is preferred for adults with disabling anxiety (and often coupled with other communication options).
- For geriatric patients and patients with different cultural backgrounds, telepsychiatry services may facilitate cultural, ethnic and language matching between patients and providers.
- Care models with good supportive evidence include direct care, consultation to primary care, and collaborative care.

A guideline on telepsychology by the American Psychological Association's Joint Task Force (2013) included seven recommendations directed at psychologists. Included in these recommendations are provider competence in telepsychology, maintaining care standards, ensuring informed consent, and ensuring data confidentiality and security.

Guidelines exist for subsets of telebehavioral health patients. The American Academy of Child and Adolescent Psychiatry (2017) issued a lengthy guideline addressing telebehavioral health for young persons. In 2023, they emphasized telepsychiatry as one urgent priority for delivering safe and effective treatment of child and adolescent depressive disorders, in light of current practitioner shortages (Walter, 2023). Some experts believe that stronger and more updated guidelines are needed for telehealth in children (Hilty, 2016), along with better-defined measures of effectiveness (Comer, 2016).

The number of publications assessing efficacy of telebehavioral health services is growing. The efficacies of telebehavioral interventions and in-person treatment are generally comparable for improving symptoms for a range of psychiatric disorders. The best available evidence from systematic reviews and meta-analyses found patients with depressive disorders and post-traumatic stress disorder appear to benefit most from behavioral health services delivered by synchronous telecommunication, while for patients with other psychiatric disorders, results from low quality and single studies suggest there may be some advantages in accessing behavioral health services remotely. Other factors, such as disease type, disease severity, treatment duration, quality of rapport (therapeutic alliance), and presence of comorbidities, may affect efficacy.

Evaluating the effectiveness of telebehavioral health employs various measurements. An assessment of 452 studies identified six commonly used measures, including satisfaction, reliability, treatment outcomes, implementation outcomes, cost effectiveness, and legal issues (Hubley, 2016).

Summaries of some large reviews by category – population groups, levels/settings, and diagnosis - follow:

Population groups

A systematic review of nine articles of telebehavioral health services rendered to elderly persons revealed a significant reduction in emergency visits, hospital admissions, and depressive symptoms, and improved cognitive functioning (Harerimana, 2019).

A systematic review/meta-analysis of 23 controlled trials of telebehavioral health (“Ehealth”) services for employees observed improvements at the end of treatment, and to a lesser extent, at follow-up. Mindfulness based interventions had larger effects than cognitive behavior therapy and stress management (Stratton, 2017).

A Cochrane review of five trials (n = 463) of telebehavioral health treatment included children age 10 to 18 who have chronic physical conditions, plus anxiety and depression. Low-quality evidence prevented authors from concluding whether various telebehavioral health methods were or were not effective (Thabrew, 2018).

A meta-analysis of five studies (n = 342) of telepsychology used in criminal justice subjects and substance abusers found mental health symptoms, therapeutic processes, program engagement, program performance, and service satisfaction, were similar to those treated in person (Batastini, 2016).

Levels/settings of care

One systematic review of 23 studies concluded that in acute care facilities, use of telebehavioral health is associated with high patient satisfaction and reduced admissions to psychiatric inpatient units; quality of clinical interaction was similar to that in face-to-face care and was cost effective (Salmoiraghi, 2015).

A review of eight studies of varying quality determined that telebehavioral health had no effect on inpatient readmission rates in psychiatric settings (Koblauch, 2018).

Alcoholism

A systematic review of 22 studies of persons with alcohol use disorder discovered that telemedicine reduced alcohol consumption, and improved depression, patient satisfaction, accessibility, and quality of life, while decreasing cost (Kruse, 2020).

Obsessive compulsive disorder

A meta-analysis of 18 studies (n = 823) comparing remote vs. face-to-face treatments of obsessive compulsive disorder observed that remote therapy decreased symptoms of a large magnitude; was more effective than controls; and had similar outcomes to face-to-face treatment. Even low-intensity remote methods produced a decrease in symptoms similar to higher-intensity therapy (Wootton, 2016).

Depression/anxiety/posttraumatic stress disorder

A systematic review of 14 studies on depression (10) and anxiety (4) treated by telephone found generally positive results in reducing symptoms, despite many studies lacking controls and/or significance (Coughtrey, 2018).

A systematic review of 20 studies (n = 1,191) analyzed dropout rates from psychotherapy treatment by soldiers who had served in the Iraq and Afghanistan wars and suffered from posttraumatic stress disorder. The pooled dropout rate was 36%, with no difference between those treated in person or by telebehavioral health (Goetter, 2015).

Another review of posttraumatic stress disorder in 11 studies (n = 472) showed short term (one to six months) improvements after telepsychology (internet and video-based) in cognitive and behavioral depression symptoms, generalized anxiety, and posttraumatic stress (Bolton, 2015).

A systematic review of 10 studies of maternal post-partum depression treated using cognitive behavioral therapy, behavioral activation, and other psychoeducation. Eight trials revealed significant improvement in depression scores post-intervention, four of which continued after follow-up. High attrition rates and lack of blinding limited evidence (Nair, 2018).

A systematic review of 10 studies of depression, mostly among military veterans, found a strong pattern for telebehavioral health either having superior or similar outcomes to in-person treatment (Guaiana, 2020).

A systematic review of 21 studies of depression in elderly persons concludes that video consultations support mental health practice, especially as a useful alternative when face-to-face therapy is not possible. Concerns about these consultations quickly disappeared after being used (Christensen, 2020).

Psychotherapy

Another systematic review of 33 studies (14 of which were randomized) found that videoconferencing psychotherapy generally produced similar outcomes for depression as did in-person therapy (Berryhill, 2019).

A systematic review of 14 studies from 2004 – 2014 comparing telehealth with face-to-face care for psychotherapy generally show comparable treatment satisfaction as well as similar ratings of therapeutic alliance. Potential for lower patient comfort is possible in telehealth group treatment (Jenkins-Guarnieri, 2015).

Support group psychotherapy using videoconferencing was the topic of a systematic review of 17 studies, which replicated improvements in face-to-face groups and videoconference groups (Banbury, 2018).

Telebehavioral health during the COVID-19 pandemic

While assessment of efficacy of telebehavioral health visits since March 2020 is ongoing, some information is available. Persons using telebehavioral health services in 18 centers in 11 states (April to June 2020, n = 3,070) responded to a survey, rating the experience as excellent or good in 82.2% who used video and 81.5% using telephone. A majority (63.6%) agreed or strongly agreed remote sessions were as helpful as in-person treatment, and 64.2% agreed or strongly agreed they would consider using remote treatment in the future (Guinart, 2020).

A survey of 170 telebehavioral professionals, 93.5% of whom were psychiatrists, therapists, counselors, and advanced practice nurses, was conducted at a Florida health care system that implemented primary care provision via telephone and televideo as of March 18, 2020. Most (84.7%) had used televideo for less than one year, but felt comfortable and satisfied using telephone or televideo, and telebehavioral methods met patients' needs (Wright, 2020). In 2022, we added several systematic reviews and meta-analyses that attempt to address knowledge gaps within telebehavioral health. The new results suggest telebehavioral health services can be a feasible alternative to in-person services by improving access to specialized care, hospital length of stay, and patient and provider satisfaction, and by reducing the cost of services particularly for populations with physical barriers to access, young people, and culturally diverse populations. However, the evidence base consists of low-quality studies that fail to substantiate the impact of these services on important morbidity and mortality outcomes (Batastini, 2021; Finley, 2021; Mitra, 2023; O'Keefe, 2021; Orsolini, 2021; Ruiz-Cosignani, 2022).

We modified the Medicare coverage section that allows for modifications to federal policy during a Public Health Emergency. No other policy changes are warranted.

In 2023, we removed old references and the Medicare coverage section from the policy and added coverage language requiring that telebehavioral health services be provided in accordance with state requirements.

While patients generally prefer face-to-face therapy, current evidence suggests patients with a range of behavioral health diagnoses can achieve at least comparable outcomes with synchronous telebehavioral health interventions (e.g., telephone or video teleconferencing) led by health professionals (Bellanti, 2022; Currie, 2022; Farrell, 2022; Forte, 2021; Greenwood, 2022; Hatami, 2022). The most common outcomes measured were rates of anxiety, depression, and emotional distress. In general, randomized controlled trials included in the systematic reviews described below had a low risk of bias. The optimal telehealth communication strategy for each behavioral health diagnosis in different populations cannot be determined. Safeguarding privacy, minimizing technical difficulties, and adequate equipment testing are important to ensuring a seamless transition to telebehavioral health services. Limitations of the evidence includes insufficient representation of patients with some serious mental health conditions, such as schizophrenia and bipolar disorders, and telehealth for suicide prevention in adolescents and young adults.

The new systematic reviews are summarized below:

For patients with posttraumatic stress disorder, depression, and mixed diagnoses, the provision of psychotherapy and psychiatry services through synchronous telehealth platforms, including video conference and telephone modalities, produced comparable outcomes as those of face-to-face services. The majority of study participants were veterans with posttraumatic stress disorder. Outcome measures were symptom control, quality of life, remission, treatment adherence, treatment discontinuation, and satisfaction (Bellanti, 2022; 22 randomized controlled trials).

For community-dwelling adults, group interventions led by videoconference and those that provided eight to 12 hours of live health professional-led group contact produced moderate improvements in anxiety and moderate-to-small improvements in depression, and mixed effects on mental distress and coping (Currie, 2022; 21 randomized controlled trials, $n = 2,438$).

For patients age 17 or older with bipolar disorder, the evidence suggests synchronous telepsychiatry services may enable reliable diagnoses, produce comparable satisfaction, and improve some patient outcomes comparable to in-person services. The evidence of safety or efficacy in pediatric patients with bipolar disorder is largely absent (Farrell, 2022; six studies).

For suicide prevention in adolescents, telemedicine is the most adopted tool, especially web-based approaches. These technologies were well accepted and tolerated. Insufficient evidence demonstrated efficacy in preventing suicide, and further studies are warranted to address this knowledge gap (Forte, 2021; 12 studies, including three randomized controlled trials).

For patients with addiction disorders, eating disorders, childhood mental health problems, and chronic behavioral health conditions, there were no significant differences in symptom severity or other outcomes between patients receiving telehealth versus in-person psychotherapy (cognitive behavioral and family therapies) (Greenwood, 2022; 12 randomized controlled trials, $n = 931$).

For adults susceptible to mood and anxiety disorders during the COVID-19 pandemic, use of synchronous telebehavioral health services improved levels of anxiety and depression. The optimal method cannot be determined, however, and patients still prefer face-to-face therapy (Hatami, 2022; 12 comparative studies including eight randomized controlled trials, $n = 1,900$).

In 2024, we identified multiple new systematic reviews/meta-analyses published in the last year. We included the two most comprehensive analyses with updated trial data, with no policy changes warranted.

Telepsychiatry and face-to-face treatment achieved similar symptom improvement for several psychiatric disorders, although efficacy may vary according to disease type. Compared to face-to-face treatment, telepsychiatry was superior for patients with depressive disorders (six studies; $n = 561$) but inferior for patients with eating disorders (one study; $n = 128$). Additionally, telepsychiatry had significantly fewer all-cause discontinuations for mild cognitive impairment (one study; $n = 61$), but more all-cause discontinuations for substance misuse (one study, $n = 85$) (Hagi, 2023; 32 total studies; $n = 3,592$ including 11 behavioral health diagnoses).

Telepsychiatry intervention was effective in reducing suicide rates (odds ratio = 0.68, 95% confidence interval - 0.47 to 0.98, $P = .04$) and suicidal reattempts, with high acceptance and high retention rates (Shoib, 2023; 16 studies).

References

On January 24, 2024, we searched PubMed and the databases of the Cochrane Library, the U.K. National Health Services Centre for Reviews and Dissemination, the Agency for Healthcare Research and Quality, and the Centers for Medicare & Medicaid Services. Search terms were “telebehavioral health,” “telepsychiatry,” “telehealth AND psychiatry,” “telemedicine AND psychiatry,” “telehealth AND psychotherapy” and “telemedicine AND psychotherapy.” We included the best available evidence according to established evidence hierarchies (typically systematic reviews, meta-analyses, and full economic analyses, where available) and professional guidelines based on such evidence and clinical expertise.

American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Telepsychiatry and AACAP Committee on Quality Issues. Clinical update: Telepsychiatry with children and adolescents. *J Am Acad Child Adolesc Psychiatry* 2017;56(10):875-893. Doi: 10.1016/j.jaac.2017.07.008.

American Psychiatric Association. Telepsychiatry toolkit.
<https://www.psychiatry.org/psychiatrists/practice/telepsychiatry/toolkit>. Undated.

American Psychiatric Association. Telepsychiatry.
<https://www.psychiatry.org/psychiatrists/practice/telepsychiatry>. Updated 2018.

American Psychiatric Association and American Telemedicine Association. Resource document on best practices in synchronous videoconferencing-based telemental health.
<https://www.psychiatry.org/getmedia/49f487ae-7b83-416a-8812-b2b25c717f6a/Resource-Document-Telemental-Health-Best-Practices.pdf>. Published October 2022.

American Psychological Association Joint Task Force for the Development of Telepsychology Guidelines for Psychologists. Guidelines for the practice of telepsychology. *Am Psychol*. 2013;68(9):791-800. Doi: 10.1037/a0035001.

Banbury A, Nancarrow S, Dart J, Gray L, Parkinson L. Telehealth interventions delivering home-based support group videoconferencing: Systematic review. *J Med Internet Res*. 2018;20(2):e25. Doi: 10.2196/jmir.8090.

Batastini AB, King CM, Morgan RD, McDaniel B. Telepsychological services with criminal justice and substance abuse clients: A systematic review and meta-analysis. *Psychol Serv*. 2016;13(1):20-30. Doi: 10.1037/ser0000042.

Batastini AB, Paprzycki P, Jones ACT, MacLean N. Are videoconferenced mental and behavioral health services just as good as in-person? A meta-analysis of a fast-growing practice. *Clin Psychol Rev*. 2021;83:101944. Doi: 10.1016/j.cpr.2020.101944.

Bellanti DM, Kelber MS, Workman DE, Beech EH, Belsher BE. Rapid review on the effectiveness of telehealth interventions for the treatment of behavioral health disorders. *Mil Med*. 2022;187(5-6):e577-e588. Doi: 10.1093/milmed/usab318.

Berryhill MB, Culmer N, Williams N, et al. Videoconferencing psychotherapy and depression: A systematic review. *Telemed J E Health*. 2019;25(6):435-446. Doi: 10.1089/tmj.2018.0058.

Bolton AJ, Dorstyn DS. Telepsychology for posttraumatic stress disorder: A systematic review. *J Telemed Telecare*. 2015;21(5):254-267. Doi: 10.1177/1357633X15571996.

Centers for Medicare & Medicaid Services. State Medicaid & CHIP Telehealth Toolkit. Policy considerations for states expanding use of telehealth. COVID-19 version: Supplement #1. <https://www.medicaid.gov/medicaid/benefits/downloads/medicaid-chip-telehealth-toolkit-supplement1.pdf>. Published December 6, 2021.

Centers for Medicare & Medicaid Services. Telemedicine. <https://www.medicaid.gov/medicaid/benefits/telemedicine/index.html>. Undated.

Christensen LK, Moller AM, Hansens JP, Nielsen CT, Gildberg FA. Patients and providers' experiences with video consultations used in the treatment of older patients with unipolar depression: A systematic review. *J Psychiatr Ment Health Nurs*. 2020;27(3):258-271. Doi: 10.1111/jpm.12574.

Comer JS, Myers K. Future directions in the use of telemental health to improve the accessibility and quality of children's mental health services. *J Child Adolesc Psychopharmacol*. 2016;26(3):296-300. Doi: 10.1089/cap.2015.0079.

Connolly SL, Stolzmann KL, Heyworth L, Weaver KR, Bauer MS, Miller CJ. Rapid increase in telemental health within the Department of Veterans Affairs during the COVID-19 pandemic. *Telemed J E Health*. 2021;27(4):454-458. Doi: 10.1089/tmj.2020.0233.

Coughtrey AE, Pistrang N. The effectiveness of telephone-delivered psychological therapies for depression and anxiety: A systematic review. *J Telemed Telecare*. 2018;24(2):65-74. Doi: 10.1177/1357633X16686547.

Currie CL, Larouche R, Voss ML, et al. Effectiveness of live health professional-led group ehealth interventions for adult mental health: Systematic review of randomized controlled trials. *J Med Internet Res*. 2022;24(1):e27939. Doi: 10.2196/27939.

Duncan C, Serafica R, Williams D, Kuron M, Rogne A. Telepsychiatry during the COVID-19 pandemic. *Nurse Pract*. 2020;45(12):6-9. Doi: 10.1097/01.NPR.0000722356.37937.9a.

Farrell A, George N, Amado S, Wozniak J. A systematic review of the literature on telepsychiatry for bipolar disorder. *Brain Behav*. 2022;12(10):e2743. Doi: 10.1002/brb3.2743.

Federation of State Medical Boards. Telemedicine policies. Board-by-board overview. https://www.fsmb.org/siteassets/advocacy/key-issues/telemedicine_policies_by_state.pdf. Last updated October 2023.

Finley BA, Shea KD, Maixner R, Slebodnik M. Advanced practice registered nurses using synchronous telepsychiatry: An integrative systematic review. *J Am Psychiatr Nurses Assoc*. 2021;27(4):271-282. Doi: 10.1177/1078390320939159.

Forte A, Sarli G, Polidori L, Lester D, Pompili M. The role of new technologies to prevent suicide in adolescence: A systematic review of the literature. *Medicina (Kaunas)*. 2021;57(2). Doi: 10.3390/medicina57020109.

- Goetter EM, Bui E, Ojserkis RA, Zakarian RJ, Brendel RW, Simon NM. A systematic review of dropout from psychotherapy for posttraumatic stress disorder among Iraq and Afghanistan combat veterans. *J Trauma Stress*. 2015;28(5):401-409. Doi: 10.1002/jts.22038.
- Grady B, Myers KM, Nelson EL, et al. American Telemedicine Association Telemental Health Standards and Guidelines Working Group. Evidence-based practice for telemental health. *Telemed J E Health*. 2011;17(2):131-148. Doi: 10.1089/tmj.2010.0158.
- Greenwood H, Krzyzaniak N, Peiris R, et al. Telehealth versus face-to-face psychotherapy for less common mental health conditions: Systematic review and meta-analysis of randomized controlled trials. *JMIR Ment Health*. 2022;9(3):e31780. Doi: 10.2196/31780.
- Guaiana G, Mastrangelo J, Hendriks S, Barbui C. A systematic review of the use of telepsychiatry in depression. *Community Ment Health J*. 2020;1-8. Doi: 10.1007/s10597-020-00724-2.
- Guinart D, Marcy P, Hauser M, Dwyer M, Kane JM. Patient attitudes toward telepsychiatry during the COVID-19 pandemic: A nationwide, multisite survey. *JMIR Ment Health*. 2020;7(12):e24761. Doi: 10.2196/24761.
- Hagi K, Kurokawa S, Takamiya A, et al. Telepsychiatry versus face-to-face treatment: Systematic review and meta-analysis of randomised controlled trials. *Br J Psychiatry*. 2023;223(3):407-414. Doi: 10.1192/bjp.2023.86.
- Harerimana B, Forchuk C, O'Regan T. The use of technology for mental healthcare delivery among older adults with depressive symptoms: A systematic literature review. *Int Ment Health Nurs*. 2019;28(3):657-670. Doi: 10.1111/inm.12571.
- Hatami H, Deravi N, Danaei B, et al. Tele-medicine and improvement of mental health problems in COVID-19 pandemic: A systematic review. *Int J Methods Psychiatr Res*. 2022;31(3):e1924. Doi: 10.1002/mpr.1924.
- Hilty DM. Clinical outcomes. Telepsychiatry toolkit. American Psychiatric Association website. <https://www.psychiatry.org/psychiatrists/practice/telepsychiatry/toolkit/clinical-outcomes>. Undated.
- Hilty DM, Shoemaker EZ, Myers K, Snowdy CE, Yellowlees PM, Yager J. Need for and steps toward a clinical guideline for the telemental healthcare of children and adolescents. *J Child Adolesc Psychopharmacol*. 2016;26(3):283-295. Doi: 10.1089/cap.2015.0129.
- Hubley S, Lynch SB, Schneck C, Thomas M, Shore J. Review of key telepsychiatry outcomes. *World J Psychiatry*. 2016;6(2):269-282. Doi: 10.5498/wjp.v6.i2.269.
- Jenkins-Guarnieri MA, Pruitt LD, Luxton DD, Johnson K. Patient perceptions of telemental health: Systematic review of direct comparisons to in-person psychotherapeutic treatments. *Telemed J E Health*. 2015;21(8):652-660. Doi: 10.1089/tmj.2014.0165.
- Koblauch H, Reinhardt SM, Lissau W, Jensen PL. The effect of telepsychiatric modalities on reduction of readmissions in psychiatric settings: A systematic review. *J Telemed Telecare*. 2018;24(1):31-36. Doi: 10.1177/1357633X16670285.
- Kruse CS, Lee K, Watson JB, Lobo LG, Stoppelmoor AG, Oyibo SE. Measures of effectiveness, efficiency, and quality of telemedicine in the management of alcohol abuse, addiction, and rehabilitation: Systematic review. *J Med Internet Res*. 2020;22(1):e13252. Doi: 10.2196/13252.
- Mitra A, Veerakone R, Li K, et al. Telemedicine in paediatric emergency care: A systematic review. *J Telemed Telecare*. 2023;29(8):579-590. Doi: 10.1177/1357633x211010106.
- Nair U, Armfield NR, Chatfield MD, Edrippulige S. The effectiveness of telemedicine interventions to address maternal depression: A systematic review and meta-analysis. *J Telemed Telecare*. 2018;24(10):639-650. Doi: 10.1177/1357633X18794332.

- O'Keefe M, White K, Jennings JC. Asynchronous telepsychiatry: A systematic review. *J Telemed Telecare*. 2021;27(3):137-145. Doi: 10.1177/1357633x19867189.
- Orsolini L, Pompili S, Salvi V, Volpe U. A systematic review on telemental health in youth mental health: Focus on anxiety, depression and obsessive-compulsive disorder. *Medicina (Kaunas)*. 2021;57(8):793. Doi: 10.3390/medicina57080793.
- Ruiz-Cosignani D, Chen Y, Cheung G, et al. Adaptation models, barriers, and facilitators for cultural safety in telepsychiatry: A systematic scoping review. *J Telemed Telecare*. 2022:1357633x211069664. Doi: 10.1177/1357633x211069664.
- Salmoiraghi A, Hussain S. Systematic review of the use of telepsychiatry services in acute settings. *J Psychiatr Pract*. 2015;21(5):389-393. Doi: 10.1097/PRA.0000000000000103.
- Shoib S, Shaheen N, Anwar A, et al. The effectiveness of telehealth interventions in suicide prevention: A systematic review and meta-analysis. *Int J Soc Psychiatry*. 2023:207640231206059. Doi: 10.1177/00207640231206059.
- Stratton E, Lampit A, Choi I, Calvo RA, Harvey SB, Glozier N. Effectiveness of eHealth interventions for reducing mental health conditions in employees: A systematic review and meta-analysis. *PloS One*. 2017;12(12):e0189904. Doi: 10.1371/journal.pone.0189904.
- Thabrew H, Stasiak K, Hetrick SE, Wong S, Huss JH, Merry SN. E-Health interventions for anxiety and depression in children and adolescents with long-term physical conditions. *Cochrane Database Syst Rev*. 2018;8:CD012489. Doi: 10.1002/14651858.CD012489.pub2.
- Walter HJ, Abright AR, Bukstein OG, et al. Clinical practice guideline for the assessment and treatment of children and adolescents with major and persistent depressive disorders. *J Am Acad Child Adolesc Psychiatry*. 2023;62(5):479-502. <https://www.jaacap.org/action/showPdf?pii=S0890-8567%2822%2901852-4>.
- Wootton BM. Remote cognitive-behavior therapy for obsessive-compulsive symptoms: A meta-analysis. *Clin Psychol Rev*. 2016;43:103-113. Doi: 10.1016/j.cpr.2015.10.001.
- Wright J, Dewan S, Hilty D, Dewan NA. Health care providers' perceptions of quality, acceptance, and satisfaction with telebehavioral health services during the COVID-19 pandemic: Survey-based study. *JMIR Ment Health*. 2020;7(12):e23245. Doi: 10.2196/23245.

Policy updates

- 11/2017: initial review date and clinical policy effective date: 2/2018
- 5/2018: Policy references updated.
- 5/2019: Policy references updated. Policy number changed to CCP.1349.
- 4/2020: Policy references updated.
- 3//2021: Policy references updated. Policy name changed to "Telebehavioral health."
- 3/2022: Policy references updated. Medicare coverage modified.
- 3/2023: Policy references updated. Coverage section modified. Medicare coverage deleted.
- 4/2024: Policy references updated.