Telemental Health Services for Youth in Rural Areas: Meeting Service Gaps and Best Practices

Literature Review

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Contents

Background

In 2017, Minnesota's Department of Human Services (DHS) was awarded a four-year System of Care grant by the Substance Abuse and Mental Health Services Administration (SAMHSA). The Minnesota System of Care for Children's Mental Health is a coordinated network of effective, community-based supports and services designed to meet the needs of children, youth, and young adults with serious mental health challenges, and their parents and caregivers. This initiative aims to improve outcomes for children and youth in Minnesota and their families by bringing together the work of many partners across the state. An accessible and collaborative network of mental health care enables families to connect to the right level of care at the right time and place, which lessens the need for more restrictive and costly interventions. System of Care values youth-guided, family-driven, and culturally responsive services.

One System of Care grantee, Carlton County, is implementing a pilot to expand mental health care providers' use of telepresence to provide services for youth and young adults. The initial goals of the pilot were to increase access to mental health services, increase collaboration across providers (e.g., education, primary health care), and improve systems-wide mental health services integration. To achieve these goals, Carlton County planned to promote a single platform—DHS-supported Vidyo—to improve collaboration, increase access, and reduce costs. COVID-19 rapidly increased adoption of telepresence, but also ushered in the use of a host of other platforms (e.g., Zoom, Webex, Microsoft Teams). As such, cost savings that may have resulted from adoption of a single platform are not likely to be realized.

The pandemic also significantly impacted how other System of Care grantees in Minnesota provide mental health services. While telemental health has reduced travel time and increased access to services for some families, it has posed a number of challenges. Grantees have reported difficulties building rapport with new families, keeping youth and families engaged during online sessions, privacy for youth participating in sessions from their homes, and accessing reliable internet and devices for some families.

This literature review explores the benefits of providing telemental health services to youth, with a particular focus on how this delivery format may help close service gaps in rural areas. In addition, this review identifies several common challenges in providing and implementing telemental health services, best practice recommendations for providers and agencies to address these challenges, and strategies state agencies can take to encourage the use and expansion of telemental health services.

Definitions

The terminology used to describe health care services provided using technology varies widely (Doarn et al., 2014). For example, while the definition of telemental health used by the American Telemedicine Association (ATA, 2017) refers to services provided synchronously (i.e., in real time), the definitions used by the American Psychological Association (APA, 2014b) and the Anxiety and Depression Association of America (ADAA, n.d.) includes services provided asynchronously, such as email. Similarly, the definition used by the ADAA (n.d.) refers solely to psychotherapy services, while the definition used by APA (2014b) includes other services, such as mood tracking applications.

For the purposes of this review, telemental health refers to the synchronous provision of psychotherapy and other adjacent services, such as psychoeducation, skills training, and parenting coaching, to treat mental health and/or substance use disorders via videoconferencing. The term telehealth is used in this review to refer to any type of health care service provided using any type of technology. Carlton County uses the term telepresence to refer to any service, including health services, provided synchronously via videoconferencing.

Delivery format

Although this review focuses on psychotherapy services provided via videoconferencing, it is important to note that there are additional formats that may be used. These include synchronous options, such as telephone services, or asynchronous options, such as email. While not a comprehensive list, other formats include chat groups to prevent relapse after inpatient treatment, web-based and app-based self-guided interventions, symptom tracking applications, therapist chat simulations, gaming interventions, and group-based services and supports via social media (Langarizadeh et al., 2017; Merry et al., 2012; Mucic & Hilty, 2020; Myers & Comer, 2016; for a review of these interventions, see SAMHSA, 2015). These options are generally developed and hosted by third party vendors, but they vary regarding how clients typically access and use them; clients may access them directly through the vendor or the provider may facilitate access, and clients may use them with or without provider oversight (SAMHSA, 2015).

Psychotherapy has long been provided by telephone to reduce barriers to services, and research has demonstrated its efficacy (Brenes et al., 2011; Castro et al., 2020). Research has also found the videoconferencing format and the telephone format are comparable regarding client levels of comfort, therapeutic alliance, levels of distraction, client outcomes, and client participation (Day & Schneider, 2002; Hufford et al., 1999; McGrath et al., 2011), and that these delivery formats are comparable to in-person services (Day & Schneider, 2002; Hufford et al., 1999; Osenbach et al., 2013). Research also suggests the telephone delivery format does not prevent the development of a strong therapeutic alliance, and clients report high levels of satisfaction (Brenes et al., 2011). There is some evidence that the visual component of videoconferencing may encourage a sense of connectedness and familiarity between client and provider, and that providers feel more competent and comfortable delivering services via videoconferencing compared to providing services by telephone (Bouchard et al., 2004; Nelson & Bui, 2010). However, inherent to the provision of services by telephone is a loss of visual cues, both for the provider and the client, which can pose a challenge for the provider in conveying empathy and interpreting client experiences and affect (Brenes et al., 2011).

Available services

This review focuses on the provision of psychotherapy and similar services via videoconferencing. However, providers deliver other mental health services via various telehealth delivery formats. This may include diagnostic and other clinical assessments, psychiatric consultations, medication management and monitoring, support groups, group psychotherapy, follow-up care appointments, and psychoeducational webinars for clients. (ATA, 2017; Langarizadeh et al., 2017; Nelson & Sharp, 2016; Richardson et al., 2009; RTI International, 2017; SAMHSA, 2016).

Efficacy, feasibility, and utility of telemental health services

Extensive research has demonstrated that telemental health services are effective for treating mental health and substance use disorders, and that this delivery format may be particularly helpful for reaching underserved and/or rural communities (Bashshur et al., 2016; Bischoff et al., 2004; Nelson & Sharp, 2016). Research has also demonstrated the efficacy of using this delivery format to provide mental health services to youth (Myers & Comer, 2016; Nelson & Sharp, 2016). Findings on the positive aspects of telemental health include:

- Providing telemental health services is feasible (Backhaus et al., 2012; Bashshur et al., 2016;[a] Nelson & Sharp, 2016[a])
- Telemental health services are applicable to diverse groups of clients (Backhaus et al., 2012)
- Clients are accepting and willing to receive telemental health services (Bashshur et al., 2016;[a] Brooks et al., 2013;[a] Himle et al., 2012;[a] Nelson & Sharp, 2016[a])
- Clients report feeling engaged during telehealth sessions and that they benefit from telehealth services (AspireMN, 2020[a])
- Providers and clients are able to develop a therapeutic alliance (Himle et al., 2012[a])
- Users and/or their families are satisfied with telehealth services (AspireMN, 2020;[a] Backhaus et al., 2012; Bashshur et al., 2016; Deloitte Center for Government Insights, 2019; Nelson & Sharp, 2016; Reese et al., 2015;[a] Richardson et al., 2009; SAMHSA, 2016; Tse et al., 2015[a])
- Clients experience symptom improvement, positive outcomes, and overall quality of life improvement (Backhaus et al., 2012; Bashshur et al., 2016;[a] Nelson & Sharp[a])
- Telemental health services can be used to treat a wide variety of concerns, including:
  - Anxiety disorders (Griffiths et al., 2006)
  - Attention-deficit disorders (Myers et al., 2015;[a] Tse et al., 2015[a])
  - Autism (Heitzman-Powell et al., 2014[a])
  - Bulimia nervosa (Mitchell et al., 2008)
  - Depressive disorders (Griffiths et al., 2006; Nelson et al., 2006[a])
  - Feeding disorders (Clawson et al., 2008[a])
  - Obsessive compulsive disorder (Storch et al., 2011[a])
  - Panic disorder with agoraphobia (Bouchard et al., 2004)
  - Post-traumatic stress disorder (Germain et al., 2009)
  - Schizophrenia (Hasson-Ohayon & Lysaker, 2020)
  - Sleep disorders (Witmans et al., 2008[a])
  - Tic disorders (Himle et al., 2012[a])
  - Trauma exposure (Stewart et al., 2017;[a] Stewart et al., 2019[a])
- Telehealth and telemental health services can improve medication and appointment adherence and reduce unnecessary service utilization (Bashshur et al., 2016; Deloitte Center for Government Insights, 2019; Tse et al., 2015[a])

[a] Article focuses on youth and/or their caregivers

The value of telemental health services in closing service gaps and improving services

Telemental health services may help meet mental health service needs in rural areas as well as improve the provision of services generally. Telemental health services eliminate geographic and transportation barriers, allow caregivers and other stakeholders to attend client sessions, connect clients with specialty providers and culturally responsive services, provide opportunities to coordinate and consult with other providers, reduce some concerns regarding privacy and stigma, and reduce agency costs.

Eliminating geographic and transportation barriers

One of the most apparent benefits of telemental health is the elimination of physical distance and transportation barriers, two particularly critical issues for rural areas that lack sufficient mental health services (Bashshur et al., 2016; Lal & Adair, 2014; Nelson & Sharp, 2016). Telemental health provides a more convenient option for receiving services, requiring less time and effort than in-person services. As Lal and Adair (2014) note, telemental health services can be much easier to schedule as they don't require transportation time, providers and clients can be in any private location, and sessions can more easily occur during off-hours, such as evenings and weekends. This convenience and flexibility can be critical for caregivers of youth with challenging work schedules, caregivers who do not hold driver's licenses, and families who do not own a reliable car or lack access to public transportation (Nelson & Sharp, 2016; SAMHSA, 2016). In a recent survey of clients or their caregivers, respondents frequently endorsed convenience, saving time, and not having to travel to appointments when asked about the aspects of telehealth services that work for them (AspireMN, 2020). Receiving telemental health services in school may be especially helpful to increase access to care, as clients receive services during the school day, do not need to travel to receive services, and are already familiar with the setting (ATA, 2017; Pradhan et al., 2018; Stewart et al., 2019).

Transportation-related costs are also lower for telemental health services compared to in-person services (Bischoff et al., 2004; Lal & Adair, 2014). The cost savings to families can be significant, as these costs may include gas, vehicle maintenance, parking, public transportation, and time spent away from work (Bashshur et al., 2016). With fewer financial, logistical, and temporal barriers to services, telemental health options may also increase adherence to services (Nelson & Sharp, 2016; SAMHSA, 2016). As described in another section, agencies may also benefit from transportation-related cost savings, particularly for providers delivering services for which travel time is not reimbursed or who would typically travel long distances to visit clients. In addition, Jones and colleagues (2014) describe how providing telemental health services can cause ripple effects; by reducing travel time for providers, provider availability increases, which improves the likelihood of clients accessing services, and ultimately clients are more likely to attend appointments and require a shorter duration of services.

However, it is important to note that the potential for telemental health services to fill the mental health services gap in rural areas depends on a sufficient supply of mental health providers in other areas. Some researchers have posited that the current and projected workforce supply is not adequate to meet current or future needs (Lambert et al., 2015). Access to services for rural individuals and families is also dependent on reliable internet access.

Inclusion of caregivers and other stakeholders

Telemental health can also ease the burden for caregivers and other individuals involved in the client's life to attend sessions. Family members, school staff, peers, and other stakeholders can provide additional context about the client and receive information about the client's care without the need to attend in-person sessions (ATA, 2017; Nelson et al., 2017; Nelson & Sharp, 2016). This may be especially useful when serving clients from collectivist cultures, as it may be easier to involve immediate and extended family members in treatment (Carlisle, 2013). In addition, clients and stakeholders do not need to be in the same location to participate in telemental health sessions as is necessitated with in-person sessions, increasing access for students served at residential treatment centers, correctional settings, and schools, while stakeholders attend sessions from home or elsewhere (ATA, 2017).

Telemental health services may also facilitate caregiver involvement beyond solely providing and receiving information, such as parenting education and training (Gloff et al., 2015). Providers may also wish to conduct more formal observation of client behavior, in conjunction with skill coaching or guiding parents in implementing interventions (ATA, 2017). Observing how a client behaves in certain settings and interacts with certain stakeholders may also provide clinically useful information to the provider (ATA, 2017).

Receiving input from teachers and other school staff may be helpful when serving clients with certain diagnoses, such as attention-deficit hyperactivity disorder (ADHD) or conduct disorder (Gloff et al., 2015). Bringing in teachers and school staff perspectives can be helpful in treatment planning, and mental health therapists can provide important input into individual education plans (IEPs) or identifying appropriate accommodations in school (Gloff et al., 2015). School-based settings may be particularly suited to multidisciplinary planning and coordination among teachers, administrators, and other school staff (Gloff et al., 2015). Moreover, schools are often the first setting in which students demonstrate mental health concerns, and schools play a critical role in identifying issues and facilitating access to services (Blackstock et al., 2018). Providing telemental health services in schools could further simplify accessing services.

Connecting with specialty providers

Rural areas often lack providers with specific expertise, such as substance use, psychiatry, and specific diagnoses, and primary care providers may also lack experience with these issues (Nelson & Sharp, 2016; RTI International, 2017; SAMHSA, 2016). Telemental health services can improve access to substance use disorder treatment by connecting clients in rural areas with specialty providers in other geographic areas (RTI International, 2017). This may be particularly critical for serving clients who may benefit from medication-assisted treatment (MAT) and other treatments requiring even further specialization beyond treating substance use disorders generally (RTI International, 2017).

Rural areas face a significant shortage of psychiatrists (Findling & Steanova, 2018; Gloff et al., 2015; Guerrero et al., 2019), including child psychiatrists (Gloff et al., 2015; Guerrero et al., 2019; Nelson & Sharp, 2016). Telemental health services may be suited to address unmet psychiatry needs in rural areas; as with substance use specialists, psychiatrists are able to provide services remotely to individuals living in rural areas (Becevic et al., 2016). There is strong evidence that telepsychiatry performs as well as standard in-person psychiatry regarding assessment reliability, treatment outcomes, and cost-effectiveness (Lal, 2019).

Telemental health may also be useful for ensuring access to care for clients with specific diagnoses, including:

- Anxiety disorders: Although access to evidence-based treatment for anxiety disorders is often limited, Carpenter and colleagues (2018) demonstrated the feasibility and acceptability of delivering services via videoconferencing to youth with anxiety disorders, connecting these clients with providers based in anxiety specialty clinics.
- Autism spectrum disorders: There is a lack of providers specializing in autism spectrum disorders and other intellectual or developmental disorders, and clients with autism spectrum disorder may find it difficult to attend in-person sessions, as the unfamiliar environment can reduce engagement (Hepburn et al., 2016). Telemental health services may help connect clients to providers with specializations in treating autism spectrum disorders and allow clients to receive services in an environment they are already comfortable in (Hepburn et al., 2016).
- Eating disorders: Treating eating disorders requires highly specialized education and training, and there is a lack of providers with this background and specialization (Sproch & Anderson, 2019). However, telemental health services may help clients with eating disorder concerns connect with specialty providers, and they could provide additional benefits, such as enabling providers to observe environmental modifications or conduct in vivo exposure interventions (i.e., interventions that involve direct exposure to real-world situations that cause anxiety or distress; Sproch & Anderson, 2019).
- Trauma: Jones and colleagues (2014) describe the barriers to receiving services for rural youth who have experienced trauma, including a lack of local providers with trauma expertise. They identify telemental health services as a potential solution to the lack of access to specialty care for trauma exposure. Other researchers have found that youth who receive telemental health services to treat trauma experience reductions in post-traumatic stress symptoms, and these reductions occur at a similar rate to in-person services; the same authors also found evidence that the telemental health delivery format may improve treatment dropout rates (Stewart et al., 2017).

Connecting with culturally responsive services

Access to mental health services may be even more limited for individuals who would most benefit from culturally responsive services, such as refugees, immigrants, asylum seekers, LGBTQIA+ individuals, and individuals of Hispanic, African American, Indigenous, and other racial or ethnic minority backgrounds (Brooks et al., 2013; Mucic & Hilty, 2020; Stewart et al., 2017; Stewart et al., 2019; Toombs et al., 2020; Whaibeh et al., 2020a). Research has demonstrated the importance of providing culturally responsive interventions, as they can improve access to services, improve treatment completion rates, increase patient satisfaction, and improve outcomes (Griner & Smith, 2006; Huey & Tilley, 2018; McCleary, 2017).

These populations may also face additional obstacles, such as language barriers, transportation barriers, a lack of culturally competent providers, a lack of trust in the health care system and providers, previous experiences receiving culturally inappropriate or discriminatory services, and a lack of knowledge of available services (Brooks et al., 2013; Ekblad, 2020; SAMHSA, 2016; Stewart et al., 2017; Stewart et al., 2019; Toombs et al., 2020; Whaibeh et al., 2020a).

Language barriers and a lack of cultural understanding can pose significant challenges; providers and clients may not speak the same language, and providers may not understand or have familiarity with the client's culture. As

Mucic and Hilty (2020) note, "Pathology [varies] across cultures for specific types of behavior…differences between the clinician and client have implications for accuracy, mutual understanding, acceptance of illness, treatment planning, and prognosis" (p. 219). Research has demonstrated that client trust and confidence in their provider is greater when communicating in a shared language, and that clients prefer to receive services in their native or preferred language (Mucic, 2009; Mucic & Hilty, 2020).

Matching providers and clients based on a shared language, ethnicity, race, or cultural background may be a helpful strategy, as this can increase use of care and improve treatment outcomes (Long, 2011; Mucic, 2009; Mucic & Hilty, 2020; Ziguras et al., 2003). There is some evidence that clients prefer remote delivery formats if a provider is fluent in the client's preferred language compared to in-person services with the use of an interpreter (Mucic & Hilty, 2020). This may be most easily achieved through telemental health, which can connect "matched" provider and client pairs without the barrier of physical distance.

Synchronous interpreter services may also be an option, but the use of ad hoc interpreters such as family members should be avoided; interpreters should have training relevant to the services provided (Brooks et al., 2013; Mucic, 2009). The presence of an additional person (i.e., an interpreter) in a clinical encounter may also reduce client satisfaction (Mucic & Hilty, 2020).

Unfortunately, there is limited research on providing culturally responsive services via telemental health or assessing the feasibility and/or suitability of telemental health services for specific populations (Brooks et al., 2013). However, some studies have investigated the utility of telemental health services in serving specific populations, including:

- African American youth: In an assessment of trauma-focused cognitive behavioral therapy tailored to African American youth delivered via school-based telemental health, Stewart and colleagues (2019) found evidence of the intervention's feasibility, acceptability, and potential to improve symptoms. The authors also describe how the combination of a school-based and telemental health format may be particularly helpful to youth facing multiple barriers to accessing care. Additionally, the authors discuss how providers were able to ensure cultural responsiveness by integrating issues relevant to African American youth in the client's session, including mental health stigma, lack of trust in the health care system, racial identity and pride, the history of racial oppression in the United States, and experiences of discrimination (Stewart et al., 2019).
- Hispanic youth: Stewart and colleagues (2017) describe how telemental health services can increase access to culturally competent and evidenced-based services provided in the client's preferred language. In their exploration into the provision of trauma-focused cognitive behavioral school-based services to Hispanic youth, the authors found evidence of its feasibility, and youth served experienced symptom improvement.
- Indigenous youth: Toombs and colleagues (2020) conducted a review of the limited existing research on electronic mental health interventions (e.g., interventions delivered via apps, text messaging, and other formats in addition to videoconferencing), for serving Indigenous youth. In addition to challenges regarding access to mental health services, the authors also describe how Indigenous youth often receive culturally inappropriate services. The authors conclude that these delivery formats are promising, but more research is needed to better understand which delivery formats are best suited to treating specific mental health concerns in Indigenous youth.

- LGBT individuals: In an exploration of how telemental health can help reduce barriers to mental health care for LGBT individuals, including youth, Whaibeh and colleagues (2020a) discuss the stigma often faced in rural areas regarding mental health concerns and LGBT identity, and how both can prevent individuals from seeking needed health services. The authors also describe the shortage of culturally competent providers with training and experience providing services to LGBT individuals, particularly in rural areas. Telemental health services allow clients to more easily access culturally competent care, and there is some evidence that LGBT individuals may feel more comfortable using this delivery format than receiving services in person (Shore, 2013).

Provider coordination, consultation, and education

In addition to providing telemental health services, providers may also use videoconferencing to coordinate and consult with one another, share information, and receive training or education (ATA, 2017; Deloitte Center for Government Insights, 2019; Langarizadeh et al., 2017; RTI International, 2017; SAMHSA, 2016). These efforts include consultation sessions and formal groups; clinical supervision; support networks; trainings and continuing education workshops; telementoring programs; and implementing collaborative care models, in which multiple providers and a care manager work together to serve clients (ATA, 2017; Gloff et al., 2015; SAMHSA, 2016; Wood et al., 2005). These options may also increase access to training and education on specialty care topics for mental health providers (RTI International, 2017), which may be particularly helpful for providers based in rural areas with fewer training and education opportunities. In addition, they may also help providers without expertise in mental health issues better serve their clients. In a study of child psychiatric telephone consultation programs, Stein and colleagues (2019) found that these programs allow primary care providers to consult with mental health specialists, and that youth living in states with consultation programs had significantly greater levels of mental health service use.

The ability to easily communicate and collaborate may also help providers and agencies meet the increasing care coordination expectations of medical home efforts and help primary care providers meet increasing expectations to diagnose mental health conditions early and provide ongoing care management to youth with these diagnoses (ATA, 2017; Nelson & Sharp, 2016). Similarly, telemental health services may allow health care providers in other fields to more easily access education on mental health issues (SAMHSA, 2016). Lastly, telemental health may also help reduce isolation among providers, which may be particularly crucial for those working in rural areas with a low density of providers (SAMHSA, 2016).

Reducing concerns regarding privacy and stigma

Youth served in smaller communities may face challenges maintaining their privacy regarding services they receive, and privacy concerns are often one of the most significant barriers to seeking mental health treatment (SAMHSA, 2016). In addition, research suggests mental health stigma is higher in rural areas than in urban areas (Bischoff et al., 2004; Hirsch & Cukrowicz, 2014; Rost et al., 1993). The physical distance and travel time often required of rural clients to receive services may make it more difficult to prevent community members from discovering a client receives mental health services, as caregivers may need to take time off of work and youth may need to miss school (Bischoff et al., 2004). The telemental health delivery format may help prevent inadvertent disclosures (SAMHSA, 2016). Young (2005) found that privacy was the most frequently identified reason for choosing telemental

health. However, there are other privacy challenges unique to telemental health; these are discussed in another section.

Telemental health also offers the opportunity for youth to receive services from a provider who is not a community member, which may reduce privacy concerns and increase a youth's willingness to receive services (Deloitte Center for Government Insights, 2019; Hilty et al., 2016; Nelson & Sharp, 2016). Additionally, receiving services in school or at home may also be less stigmatizing for youth than a hospital or a mental health clinic (Nelson & Sharp, 2016).

Reducing agency costs

Although providing telemental health services requires start-up costs, research suggests agencies may ultimately save money. Transportation costs are lower, and as providers spend less time traveling, they are able to see a greater number of clients (Bashshur et al., 2016; SAMHSA, 2016).). In addition, travel time may not be reimbursed in all situations or for all types of services provided. For example, Minnesota Health Care Programs (MHCP), including Medical Assistance, will only reimburse travel time for clients who have an individual treatment plan that indicates the need and purpose for mental health services to be provided elsewhere than the provider's normal setting (Minnesota Department of Human Services, 2020). MHCP also does not cover time spent transporting clients, travel to site-based programs, and travel to no-show appointments, and travel time is not reimbursed for case managers. With lower travel costs, less time spent on un-reimbursable travel, and more time spent providing reimbursable services, agencies may ultimately experience cost savings. Agencies may also spend less on educational materials and other expenses required for in-person services (Lal & Adair, 2014). In addition, cost savings may also be found in increased efficiency regarding communication and providers optimizing their time (Lal & Adair, 2014).

Researchers suggest that the cost-effectiveness of telemental health services programs is greatest with a larger number of clients, a high level of telemental health services usage, and greater distances between the client and the care site where they would otherwise have received treatment (Bashshur et al., 2016).

Best practices for providers

Despite the benefits of telemental health, challenges also exist for providers who offer telemental health services and for agencies designing and implementing new telemental health infrastructure. This section reviews best practices to help address challenges faced by providers.

Consider client resources, abilities, and characteristics that may affect their experience

Although telemental health is generally considered a useful strategy to increase access to care for underserved populations, receiving services in this format also requires the user to provide or have access to several resources, including internet access. Unfortunately, rural areas are generally underserved in internet access (Deloitte Center for Government Insights, 2019; SAMHSA, 2016; Summers-Gabr, 2020). Telemental health also requires users to purchase or have access to a device capable of accessing the program used to deliver services (Langarizadeh et al., 2017; Summers-Gabr, 2020). Consistent access to a reliable device and internet connection may pose a significant barrier to youth from families with fewer resources (Racine et al., 2020). In a recent survey of clients or their

caregivers in Minnesota, 19% of respondents shared that increased access to a device would improve their experience with telehealth services (AspireMN, 2020).

In addition, users need to be capable of operating the program used to receive services (Langarizadeh et al., 2017; Summers-Gabr, 2020). Although this may not be as much of a concern when serving youth who may have higher levels of technological skill than other age groups (ATA, 2017), some youth still may need assistance from a caregiver or staff member at the site in which services are received.

Individuals from marginalized communities, such as refugees and individuals with disabilities, may have even less access to the required technology (APA, 2013; Hames et al., 2020). APA (2013) further notes that for individuals with disabilities that do have internet access, the connection is generally slower. Langarizadeh and colleagues (2017) describe provider concerns that operating the necessary software or equipment may pose a challenge to clients with physical or cognitive disabilities, reducing their access to services. Individuals with disabilities may also require adaptive equipment, services such as video relay programs, or assistance from a caregiver or provider during telemental health sessions (APA, 2013). Individuals with more serious mental health conditions often have limited access to the internet and use it a lower levels; however, there is evidence that these concerns can be partially addressed by using programs with an accessible and user-friendly design (Lal & Adair, 2014).

Privacy may also pose a challenge for some clients receiving telemental health services, particularly for youth receiving services at home and youth living with caregivers or others in small living spaces. Not all clients may have access to a private area to use during sessions; multiple family members at home, a small number of rooms or private spaces, and insufficient sound proofing may all reduce client privacy. Social distancing guidelines may further complicate finding a private space, as household members may be spending more time at home (Golberstein et al., 2020). Additionally, Racine and colleagues (2020) note that confidentiality may be particularly crucial during the COVID-19 pandemic, as telemental health services may be one of the options for a young client to disclose neglect or maltreatment. Although AspireMN (2020) found that 89% of clients or their caregivers agreed or strongly agreed with the statement, “I felt like I had privacy during my session,” the remaining clients and caregivers did not; providers should not assume all clients have access to a private area in which to receive services.

Some clients may also prefer in-person sessions, despite having sufficient resources and skills to use telemental health services. In a recent study of college student clients, 93% preferred in-person sessions (Petersen et al., 2020). In a survey of clients or their caregivers in Minnesota, AspireMN (2020) found that 27% disagreed or strongly disagreed that, “The telehealth visit was as good as a face-to-face visit.” Thirty-nine percent of clients reported they would choose in-person services over telemental health services once the COVID-19 pandemic has passed.

When asked what is not working for them as they receive telemental health services, respondents from the AspireMN (2020) survey reported technical issues or poor audio/video quality, privacy concerns, that the delivery format feels more impersonal, and distractions. In a survey of college students, Petersen and colleagues (2020) found that 81% of clients were at least somewhat concerned about the effectiveness of telehealth services, and 67% were at least somewhat concerned about the delivery format’s impact on the therapeutic relationship. However, most clients also identified convenience, greater frequency of interaction, and ease of access as advantages of the delivery format (Petersen et al., 2020). Unfortunately, there is very little research on perceptions, attitudes, and preferences regarding telemental health among youth, particularly youth under age 18.

There are no indications or contraindications for telemental health services for youth (ATA, 2017), and there is a lack of research and guidance on determining whether telemental health services are appropriate for youth with certain needs or characteristics (Racine et al., 2020). However, providers may want to consider several factors when deciding whether to use telemental health services:

- Client preference
- Access to in-person options
- Access to an adequate internet connection and device
- Access to a private space with a door (Racine et al., 2020)
- Technological familiarity and ability
- Access to needed adaptive equipment
- Cognitive ability (American Psychiatric Association, 2018)
- Safety concerns, such as significant suicidal ideation, emotion regulation concerns, severe externalizing behaviors, substance abuse, history of violence or physical aggression, or history of self-harm (American Psychiatric Association, 2018; Racine et al., 2020)
- Client age and developmental stage; it may be more appropriate to focus on providing services to the caregivers of very young children (Hames et al., 2020)
- Whether a client has developmental disorders; it may be more appropriate to focus on providing services to the caregivers of children with developmental disorders (Hames et al., 2020)
- Distance from client's location to client's support system and medical facilities (American Psychiatric Association, 2018)
- Persistent high level of discomfort with telemental health services, even after several sessions and modifications (Glueck, 2013)

Additional cultural considerations are included in another section.

When implementing telemental health services, providers should consider and minimize or otherwise address the resources required of clients. For example, providers may wish to provide telephone services in addition to videoconferencing to better serve clients without internet access. For individuals with disabilities, this may include exploring accessibility functions available in the telemental health program (APA, 2013). To address client concerns regarding telemental health, providers may wish to provide information on existing research regarding the efficacy of telemental health and its impact on the therapeutic relationship (Petersen et al., 2020). Providers should tailor the delivery of telemental health services to the client and the client's needs rather than using a universal approach (Brooks et al., 2013), and they should continually assess the appropriateness of telemental health services for each client throughout the duration of services (Hames et al., 2020).

Provide an introduction to telemental health services

Research suggests many clients do not feel comfortable using telemental health services. In a recent survey of college students, 42% of students reported feeling "not comfortable" with using videoconferencing and 46% reported feeling "not comfortable" with using a telephone to receive services (Petersen et al., 2020). To help acclimate clients to telemental health services, Glueck (2013) suggests discussing what clients can expect and how the services work when the provider first meets with a client. This introduction could include:

- Discussing previous experiences the client may have had with telehealth, including positive and negative experiences.

- Sharing an explanation of how telemental health works and why this method of service delivery was chosen (e.g., the student doesn't have to miss school, there are no local providers available).
- Remembering younger clients may need an explanation that the session is happening in real time, and that the client and provider can both see and hear one another.
- Addressing privacy, confidentiality, and security concerns as appropriate, depending on the client's age and cognitive ability.
- Providing a "tour" of the provider's room to provide context, acclimate the client to the setting, and demonstrate that there is no one else in the room.
- Acknowledging the possibility of technical issues and address them as they happen (e.g., acknowledge lags, add pauses).
- Leaving time to discuss any questions or concerns the client may have and explicitly ask clients whether they have concerns about using telemental health services.

Glueck, 2013; Seager van Dyk et al., 2020

Adjust strategies to develop therapeutic alliance and engage clients

Rapport and therapeutic alliance are crucial to providing effective mental health services, and a strong provider-client relationship is considered the strongest predictor of positive outcomes in psychotherapy (Horvath & Symonds, 1991). Although research suggests that therapeutic alliances developed via telemental health are comparable to in-person services (Glueck, 2013; Goldstein & Glueck, 2016), there are challenges unique to developing a therapeutic alliance over videoconferencing.

Providers and youth may have a reduced sense of accountability and connection to one another, and it is much easier to engage in other activities during the session, reducing engagement (Mucic & Hilty, 2020). The lack of non-verbal cues and visual range may also make it more difficult to notice details about the youth, such as smelling alcohol, dilated pupils, facial expressions, and crying (Bischoff et al., 2004; Mucic & Hilty, 2020). Signal delays, losing connection, and other technical difficulties are likely to occur and may slow or otherwise impact the development of a therapeutic alliance (Bischoff et al., 2004). However, research suggests users are generally able to make necessary changes and ultimately adjust to these challenges (Bischoff et al., 2004).

Researchers have identified several strategies providers can use to build rapport when providing telemental health services to youth. In addition to the strategies mentioned in the previous section, these include:

- Offer to meet clients in person before or during the first session.
- Maximize audio and video quality as possible; the ability to provide fluid responses during telemental health sessions is critical to demonstrating understanding and empathy.
- Minimize distractions in the provider's room and, as possible, in the room clients in which receive services.
- Ensure the video window frames the provider's face, allowing clients to see facial expressions.
- Maintain eye contact and avoid looking away from the camera or monitor; providers may want to alternate eye contact between the camera, the monitor, and any other materials required for the session, such as electronic records, to convey a sense of connection and attentiveness. If the camera and monitor are two separate pieces of equipment, rather than integrated into one device (e.g., a laptop with an integrated webcam), camera placement can also help approximate the perception of in-person eye contact by placing it as close to the monitor as possible.
- Use a more exaggerated or explicit communication style.

- Assess understanding and confirm observations more frequently.
- Utilize features as appropriate, such as playing games or allowing clients to select the background of the video (e.g., in the jungle, in outer space, etc.).
- Allow clients to draw, color, or play with a minimally distracting toy during the session.
- Play games that translate well to telemental health, such as hide and seek: the provider closes their eyes or minimizes the screen while the client hides; the provider then "finds" the client by guessing the client's hiding spot.
- Give clients privacy as appropriate, such as allowing clients to turn off the video if they are feeling overwhelmed.
- Disable the picture-in-picture function if is too distracting or causing too much discomfort in clients.
- Reduce session lengths to accommodate the need of some youth, as they may find it challenging to stay attentive and engaged for the length of a normal session.

Bischoff et al., 2004; Carlisle, 2013; Glueck, 2013; Goldstein & Glueck, 2016; Seager van Dyk et al., 2020

Adapt to cultural differences

Communication styles vary across cultures regarding tone, pace, eye contact, and use of silence, and these differences may pose more of a challenge when conducting sessions via telemental health (Brooks et al., 2013). For example, Brooks and colleagues (2013) describe how silence is often used in psychotherapy to allow clients time to reflect, but different cultures value silence differently, and some may view it as uncomfortable. The authors note that the videoconferencing delivery format may complicate the perception of silence, as transmission delays may inadvertently cause pauses, and users may also pause in response to a delay.

It is also important to note that acceptance and willingness to use technology varies across cultural communities, and communities use technology at different levels and in different ways (Brooks et al., 2013; Yellowlees et al., 2008). Concerns regarding mental health services also vary depending on the cultural community. For example, undocumented individuals may avoid seeking services due to concerns regarding their immigration status and deportation (Brooks et al., 2013; Ekblad, 2020). Due to historic oppression and discrimination and potential previous experiences receiving culturally insensitive care, many cultural communities may also lack trust in the health care system (Brooks et al., 2013; Ekblad, 2020; SAMHSA, 2016; Toombs et al., 2020). Rural areas may also experience rapid turnover for many health care positions, further reducing perceptions of reliability and consistency (Brooks et al., 2013).

Researchers have identified several strategies providers can use to ensure culturally competent telemental health care:

- Use information collected during the community needs assessment process and community outreach efforts to inform clinical work; these activities are described in further detail in other sections.
- When applicable, emphasize that clients have a choice between telemental health services and in-person services.
- Match providers and clients based on a shared language, ethnicity, race, or cultural background when possible.

- Ask about concerns or previous experience using technology and telehealth specifically and introduce the technology; this may be particularly important for clients who have had limited exposure to technology.
- Modify communication styles and content to best fit each client and do not take a universal approach with all clients or even clients who share a cultural background; services should always be tailored to each individual based on their needs, resources, beliefs, experiences, symptoms, identities, and preferences.
- Maintain patience when establishing rapport and allow time for the client to acclimate and feel more comfortable.
- Take care when interpreting and using silence and when attributing pauses to either the client's intention or a transmission delay.
- Attend to both verbal and non-verbal cues.
- Maintain self-awareness regarding the client's perception of the provider.
- Acknowledge and discuss issues important to the client's community.

ATA, 2017; Brooks et al., 2013; Cooper et al., 2019; Long, 2011; Mucic, 2009; Mucic & Hilty, 2020; SAMHSA, 2016; Toombs et al., 2020; Ziguras et al., 2003

Cooper and colleagues (2019) also developed a series of questions providers may find helpful when considering providing telemental health services; below are adapted versions of these questions:

- Do I have the language skills to understand and communicate electronically when clients are using a language or dialect other than my own?
- Do I understand the cultural context and implications of not meeting with the client in person?
- Do I understand how security or privacy breaches, transmission loss, emergency needs, and other unplanned events may impact the client and their perception of services?

The authors also suggest providers discuss several questions with their clients; below are adapted versions of these questions:

- Would any communication cues or aspects of communication style relevant to the client's culture be lost when using telemental health, relative to in-person treatment?
- What cultural values related to in-person communication might impact the client's comfort level or the effectiveness of services?
- Is culture or cultural identity an integral part of the primary concerns of the client in such a manner that treatment effectiveness could be adversely affected when not seen in person?
- Are there client cultural practices that could be dependent on, or enhanced by, in-person practice?
- Are there cultural factors that the provider should consider in helping the client achieve technological competence?

Anticipate and adjust to technology-related challenges

Technology-related problems are one of the most common barriers cited by providers, such as unstable or slow internet connections, the reliability of devices used by clients, and having to guide clients through setting up the technology (Traube et al., 2020). In addition, low audio and video quality can lead to a loss of verbal and non-verbal cues, such as slight changes in affect, eye contact, small physical movements, and full-body range of vision. These provide important information to the clinician, both during psychotherapy sessions and during diagnostic

assessments (Glueck, 2013). These issues may be compounded when telemental health services are provided to rural areas or marginalized communities with reduced access to reliable and/or high-speed internet. However, AspireMN (2020) found that very few respondents reported audio, visual, and technical issues in a recent survey of clients or their caregivers in Minnesota, with 3% of clients or caregivers disagreeing or strongly disagreeing with the statements, "I could clearly see/hear the therapist during the visit" and "The camera and equipment worked properly."

Researchers have identified several strategies to help providers minimize and address technology-related issues:

- Maximize audio and video quality, including bandwidth, framerate, and resolution. Gloff and colleagues (2015) suggest a speed of 384 kbits/s, which should allow providers to discern subtle movements and facial expressions and to provide fluid responses.
- Ensure the microphone used for telemental health services has a high level of sensitivity and is placed in a location best suited to detect speech.
- Ensure appropriate placement of equipment to partially address challenges related to observing client eye contact; eye contact is often an important non-verbal cue that provides information to the provider, particularly for diagnoses such as anxiety disorders, attachment disorders, and autism spectrum disorders. Providers may also wish to ask the client's caregivers for information about the client's eye contact patterns.
- Develop a plan for addressing session disruptions due to technological problems, such as a loss of internet access or camera failures; this could involve completing sessions by telephone and discussing the plan when a provider first starts telemental health sessions with a client.
- Become familiar with how to access technical support before a technology-related issue arises.
- Confirm visual observations with the client; as Glueck (2013) notes, this can also be a therapeutic opportunity for providers to connect session content to a client's affect.
- Leverage the picture-in-picture function used in many videoconferencing programs. Although this function can be distracting, it also provides an opportunity for providers to assess the extent to which they are mirroring client affect, a technique often used in psychotherapy.
- Acknowledge technical challenges as they arise and demonstrate patience and humor.
- Continue checking in with clients regarding their satisfaction with telemental health services.

Bischoff et al., 2004; Gloff et al., 2015; Glueck, 2013; Goldstein & Glueck, 2016; Seager van Dyk et al., 2020

Best practices for agencies implementing telemental health services

In addition to best practices for providers, research suggests several best practices for agencies to follow when implementing telemental health services; these are presented in the following section.

Develop a strategic plan for implementing telemental health services

In their analysis of interviews with rural health care experts and existing literature on the process of implementing telehealth services in rural areas, the Deloitte Center for Government Insights (2019) suggests agencies take several steps when planning the implementation of telehealth services:

- Conduct a needs assessment of the agency and the communities served to inform planning and implementation.

- Identify and refine the organization's vision of telehealth services.
- Identify and delineate roles, including governing and decision-making responsibilities.
- Develop partnerships with other agencies and organizations to share clinical and technological resources.
- Engage and train staff.
- Educate and engage the communities served on the benefits and availability of services.
- Invest in hardware, software, and/or other technology that align with the type and format of telehealth services provided. When investing in this infrastructure, agencies should consider current and future needs regarding security and data analytics.
- Develop workflows, models of care, and protocols specific to telehealth services.

Some of these processes are described in more detail in this report. Nelson and colleagues (2017) also suggest conducting a pilot phase, in which telemental health services launch on a small scale to test different processes, inform scaling up services, and help ensure long-term sustainability.

Conduct needs assessments and site visits

Conducting a needs assessment may be helpful when implementing a new telemental health services program. This could involve assessing site readiness, scalability, sustainability, current technological capabilities and future needs, and existing resources, as well as working with community organizations to identify communities that may be open to receiving telemental health services (ATA, 2017; Brooks et al., 2013; Deloitte Center for Government Insights, 2019; Gloff et al., 2015). Agencies may also wish to explore the technical support options that may be the best fit for the agency's providers and the communities served (Glueck, 2013).

If providers deliver services through a facilitating site, such as a school, they may also wish to visit the site to strengthen relationships with staff and the community, improve their familiarity of the local community and culture, and gain a better understanding of what telemental health services will look like in practice (ATA, 2017). Researchers have described the importance of providers learning about the culture of the community to whom they are providing services and the expectations community members have of providers and services (Bischoff et al., 2014). As previously described, client resources, abilities, and characteristics will affect their experience with telemental health services, and learning about the community served and its demographics may help agencies prepare for and address any obstacles specific to the community.

This process should also include an assessment of the physical environment of the spaces that services will be provided and received in, including:

- The size of the rooms necessitated by the specific services provided/received and client ages.
- The presence of unnecessary and potentially distracting equipment or other materials.
- Client and provider visibility, including factors such as lighting, window placements, and camera placements.
- Accessibility for providers and clients with mobility impairments.
- Equipment and materials needed for assessments or interventions, such as toys or paper and writing utensils.
- Space availability and scheduling, such as whether clients and providers can consistently use the same space to provide and receive services, which may be particularly challenging in overcrowded educational settings.

- The perceived comfort, neutrality, and safety of the spaces.
- The privacy of the spaces.

ATA, 2017; Gloff et al., 2015; Glueck, 2013; Mucic, 2009; Nelson et al., 2017; SAMHSA, 2016; Seager van Dyk et al., 2017

Build partnerships and conduct community outreach

Partnerships can help agencies interested in implementing telemental health services in several ways. Partnerships with other health care providers may open connections to increase the provision of specialty care, partners can share best practices and technological and data infrastructure, and partnerships can help agencies increase services while reducing costs (Deloitte Center for Government Insights, 2019). Building relationships with the local community can also improve trust and confidence in the services provided; as noted by Blackstock and colleagues (2018), mistrust of providers and skepticism of treatment quality are often higher in rural areas, particularly if the provider is perceived as an outsider.

Community outreach efforts can also improve the implementation of telemental health services. These efforts could include:

- Building relationships with community leaders that can provide information about and access to cultural communities, established organizations, and other stakeholders, as well as insight on local needs, potential impact, and the appropriateness of telemental health services. Local leaders may also be better suited to educating and engaging their communities regarding telemental health services.
- Identifying and refining communication strategies to share information about the availability and benefits of telemental health services to the local community and potential clients.
- Hiring an outreach worker or community liaison to promote telemental health services and build relationships between the agency providing services and the broader community or specific cultural communities. Clients may be particularly willing to engage with this staff member if they are from similar cultural backgrounds.
- Providing on-going opportunities for current and potential clients to meet providers in person and for providers to meet with site staff.

Brooks et al., 2013; Deloitte Center for Government Insights, 2019; Glueck, 2013; Nelson & Bui, 2010; Nelson et al., 2017

Train and engage staff

Providers delivering telemental health services should receive training specific to this delivery format (Nelson et al., 2017), a sentiment echoed by providers themselves (Glueckauf et al., 2018). Unfortunately, providers currently do not receive adequate training or preparation to provide telemental health services, and they often report feeling discomfort with and/or concerns about providing services using this delivery format (Callan et al., 2017; Glueckauf et al., 2018; Petersen et al., 2020). In a recent study of clients and providers, 92% of providers preferred in-person sessions, and providers expressed greater concern regarding the delivery format than clients (Petersen et al., 2020).

In a systematic review of literature exploring the barriers agencies face in adopting telehealth services, Kruse and colleagues (2018) identified a lack of technological skill as one of the most frequent concerns and recommended agencies provide training to help address this issue. Other concerns identified by providers include:

- Lack of training
- Using new software/equipment
- Insufficient client knowledge of technology
- Confidentiality, security, privacy, and/or compliance with the Health Insurance Portability and Accountability Act (HIPAA)
- Establishing a therapeutic alliance or rapport
- Efficacy of the delivery format relative to in-person services
- Additional administrative burden
- Reimbursement issues
- Costs of the delivery format relative to in-person services (e.g., purchasing new equipment)
- Staying abreast of the many options available and the pace at which new technological options emerge

Glueckauf et al., 2018; McClellan et al., 2020; Orlowski et al., 2016; Perry et al., 2019

In addition, providers often report a lack of awareness of professional association guidelines, state and federal laws and regulations, and a lack of skill regarding addressing emergencies that occur while providing telemental health services (Glueckauf et al., 2018).

Researchers suggest agencies provide training to address these concerns (Kruse et al., 2018). Unfortunately, there is a general lack of research on telehealth education or training, including telemental health, and the education and training needs of students and providers (Glueckauf, 2018; McCord et al., 2015; Traube et al., 2020). Moreover, these opportunities are mostly limited to continuing education courses, rather than integrated into degree programs that train future providers (Callan et al., 2017; Traube et al., 2020). As Traube and colleagues (2020) note, "The field cannot scale to meet need or demand when providers do not have adequate training in telehealth provision, with the need to seek post-education training a potential deterrent to engaging in telehealth-based care" (p. 2).

Despite a general lack of research, the existing literature suggests providers are satisfied with the training they receive specific to telemental health services (Felker et al., 2020; McCord et al., 2015; Perle, 2020; Traube et al., 2020). In addition, existing research and professional association guidelines provide information that agencies can use to inform the development of provider training; Cooper and colleagues (2019) note that telemental health trainings and training models should align with existing guidelines or standards. Several professional associations for mental health providers have developed guidelines or standards for providing telehealth services, including:

- The American Psychological Association (APA), in collaboration with the Association of State and Provincial Psychology Boards (ASPPB) and the APA Insurance Trust (APAIT; Joint Task Force for the Development of Telepsychology Guidelines for Psychologists, 2013)
- The Association of Marital and Family Therapy Regulatory Boards (2016)
- The National Association of Social Workers (2017)
- The American Counseling Association (2014)

While not a comprehensive list, some of these standards or guidelines shared across these professional association publications include the following directives for providers:

- Ensure the same ethical and professional standards of care are maintained
- Conduct ongoing assessments of competencies in using the relevant technologies and how the technologies may impact clients, including ongoing assessments of the appropriateness of telemental health services for each client
- Tailor informed consent processes to the technologies used, taking relevant regulations into account
- Maintain data privacy and confidentiality and inform clients of risks specific to the relevant technologies
- Address challenges related to adapting testing and assessment processes typically performed in person
- Maintain familiarity and compliance with relevant laws and regulations, particularly when providing services across jurisdictions

Researchers have also identified several aspects of providing telemental health services that should be included in telemental health training, including:

- Exploring how telemental health services could impact access to services, particularly for marginalized communities.
- Reviewing jurisdictional regulations.
- Selecting technology options that are compliant with HIPAA.
- Explaining and demonstrating how to use the relevant technology.
- Identifying factors to consider when assessing the appropriateness of clients for telemental health services.
- Reviewing considerations specific to various cultural communities.
- Modifying informed consent processes.
- Introducing the delivery format to clients.
- Establishing rapport with clients and adapting to the loss of visual and auditory cues.
- Reviewing existing literature on the use and efficacy of certain interventions or modifications to various delivery formats.
- Planning for emergencies.
- Terminating with clients.

Cooper et al., 2019; Deloitte Center for Government Insights, 2019; Traube et al., 2020

In addition, telemental health trainings should address common concerns endorsed by providers, particularly those not supported by existing research. For example, trainings could include education on the effectiveness and cost-effectiveness of telemental health services, concerns reported frequently by providers (McClellan et al., 2020). Researchers also suggest providing practical opportunities to deliver telemental health services under licensed supervision (Cooper et al., 2019; Traube et al., 2020).

Agencies may also need to further engage staff to encourage buy-in, as the success and sustainability of telehealth services may depend on staff engagement and acceptance (Wade et al., 2014). The transition to telemental health from in-person services may be particularly difficult, as providers may view in-person services as integral to their identities as providers (Orlowski et al., 2016). Agencies may want to highlight the benefits of telemental health to both clients and providers (Deloitte Center for Government Insights, 2019). Increased familiarity with

the relevant technology and more information on the existing evidence may help facilitate providers' use of telemental health (Orlowski et al., 2016).

McClellan and colleagues (2020) suggest assessing staff attitudes toward telemental health and tailoring engagement and education efforts to these attitudes. Providing opportunities to connect with other staff is also critical; quality supervision, real-time access to supervisors, and support from peers all positively affect provider comfort levels (Traube et al., 2020).

Develop staffing and workflow protocols and policies specific to telemental health services

In addition to training, agencies should also work with site staff to develop protocols regarding safety, emergencies, disclosures of imminent harm, mandated reporting, technological issues, and troubleshooting and/or referring clients who may not be a good fit for telemental health (ATA, 2017; Deloitte Center for Government Insights, 2019; Glueck, 2013). Additionally, if agencies are providing family therapy, parent coaching, or other services that involve another individual beyond the youth served, protocols should be developed specific to this situation, such as how providers respond to conflict in session (ATA, 2017). Protocols regarding the use of interpreters may also help providers best serve youth and their family members or caregivers who may have varying levels of fluency across multiple languages (ATA, 2017).

Although telemental health services can partially alleviate some privacy concerns, it is important to note that dual relationships may be more likely to occur in rural areas; site staff may have existing relationships with clients or their family members, posing ethical challenges (Brooks et al., 2013). Agencies should develop and implement clear policies on how to address concerns related to dual relationships.

If services are received at a facilitating site, such as a school, there should be clear delineations regarding staff and provider responsibilities, particularly for tasks such as scheduling, paperwork, technical support, and coordinating with other providers (ATA, 2017; Nelson & Bui, 2010). In most instances, there should be an adult staff member onsite and available to intervene if needed (ATA, 2017). Agencies may also opt to place a staff member at the site in which services are received to schedule and coordinate sessions, assist clients with paperwork, orient clients to the site and the technology, and provide additional technical support as needed (Glueck, 2013; Nelson et al., 2017). Site staff can also play a critical role in helping clients feel comfortable with telemental health services and even in building rapport before the client meets the provider (Glueck, 2013). Agencies should carefully assess the ability of site staff and identify designated parties to respond to active suicidal intent and other potential emergencies or crises (ATA, 2017; Nelson & Sharp, 2016)

Review regulations and assess third party payer requirements

ATA (2017) suggests conducting a review of policies and regulations specific to the types of services provided and the jurisdictions in which services are provided and received. The authors particularly recommend reviewing those related to mandated reporting, provider restrictions based on licensure, professional liability coverage for providers, custody issues, the civil commitment process, and considerations regarding youth placed in correctional settings or foster care. Additionally, agencies should review laws regarding the duty to warn and/or duty to protect (Fitzgerald et al., 2010).

Before implementing telemental health services, agencies may wish to assess potential issues related to health insurance and third party payers. This exploration could include:

- Identifying diagnoses that meet the medical necessity criteria identified by insurers and other third party payers and assessing coverage for the various types of services that are covered by the Current Procedural Terminology (CPT) codes.
- Assessing how parity laws regarding telemental health may affect reimbursement.
- Determining whether services will be provided across state lines, as state licensing regulations generally require providers to be licensed in the state in which a client receives care.
- Identifying restrictions specific to Medicaid, such as site definition, provider, and licensure requirements.
- Determining whether there are requirements regarding the presence of a staff member at the site at which clients receive services.

ATA, 2017; Lambert et al., 2016; Myers & Comer, 2016

Temporary changes regarding coverage and reimbursement of telehealth services were enacted in Minnesota in response to the COVID-19 pandemic (for an overview of the changes relevant to care in Minnesota, see Minnesota Department of Health, 2020). Agencies should assess legislative and third party payer requirement changes on an ongoing basis.

Address issues related to confidentiality, data privacy, and informed consent

There may be increased risk to client confidentiality and data privacy when using telemental health. The level of risk depends on the security of the connection, the security of the program, and whether encryption is used in communications (Fitzgerald et al., 2010; Langarizadeh et al., 2017; Mucic & Hilty, 2020). Agencies and providers should ensure the security of their internet connections, use encrypted modes of communication, select a telemental health program that has demonstrated high levels of security, require passwords to access records or the telemental health program, use network firewalls, and use technical support when needed (Fitzgerald et al., 2010; Langarizadeh et al., 2017; Mucic & Hilty, 2020; SAMHSA, 2016). Providers should also inform clients of these risks and encourage them to also take precautions if possible (Fitzgerald et al., 2010). Agencies and providers interested in providing telemental health services should carefully assess whether a particular software program complies with HIPAA and any other relevant privacy and confidentiality laws (SAMHSA, 2016). Providers and agencies should stay informed of legislation concerning data privacy and confidentiality in telemental health, including policies that vary by jurisdiction (Fitzgerald et al., 2010).

Written consent requirements for telemental health services vary by state, but generally, providers should obtain informed consent from the legal guardian(s) for minor clients, and the consent process should ensure the client and guardian(s) have an understanding of and agree to telemental health services (ATA, 2017). Providers should also inform clients of the advantages and disadvantages of telemental health. Some agencies may allow verbal consent, while others may still require written consent on a physical copy of the informed consent form, while still others may use an online form requiring an electronic signature (ATA, 2017; Fitzgerald et al., 2010). Agencies may wish to place staff at the site to provide assistance to clients filling out consent forms (ATA, 2017). Agencies should familiarize themselves with the regulations regarding consent for telemental health services in their jurisdiction (ATA, 2017).

Recommendations for state agencies

There are a variety of strategies state agencies can take to encourage the expansion of telemental health services to rural areas, including addressing issues related to parity, reimbursement, technological infrastructure, workforce supply and training, the process for applying for state funding, and shifting away from a fee-for-service model.

Prioritize parity and maximize reimbursement flexibility

Although the Mental Health Parity and Addiction Equity Act and the Affordable Care Act mandate that private health insurers provide coverage for mental health concerns comparable to physical health concerns, parity has not yet been achieved (Krueger, 2020). In addition, although the temporary lifting of restrictions related to telemental health services in response to the COVID-19 pandemic improved telemental health parity relative to in-person services, these changes are temporary. Both types of parity can improve expansion and uptake of telemental health services. Similarly, maximizing the flexibility of reimbursement policies can help encourage the use of telemental health services. State agencies can work toward these goals by:

- Making the temporary lifting of reimbursement restrictions permanent.
- Enacting mental health parity laws that are equivalent in strength or stronger than federal regulations.
- Improving enforcement of existing mental health parity laws.
- Adopting policies that encourage telemental health parity relative to in-person services.
- Encouraging and advocating for managed care organizations and private payers to increase telemental health coverage.
- Modifying reimbursement policies to allow flexibility and ensure a broader number of services and formats are reimbursable, including:
  - Using different types of technologies, such as phone, text, and app services, and services provided either synchronously or asynchronously.
  - Individual and group telemental health services.
  - Services provided by peer support specialists and providers with different types of licenses or at different stages of the licensure process.
  - Services provided/received in different jurisdictions (e.g., across state lines).
  - Services provided/received at different types of sites (e.g., at the provider's home).

Center for Law and Social Policy, 2020; Deloitte Center for Government Insights, 2019; Krueger, 2020; Lambert et al., 2016; Myers, 2019; Whaibeh et al., 2020b

Support the development of technological infrastructure

There are also strategies state agencies can take to encourage and support the development of the technological infrastructure needed to expand telemental health services. These include:

- Coordinate efforts to develop technological infrastructure and to increase broadband access statewide.
- Invest in technological infrastructure, including expanding broadband internet to underserved areas.
- Provide funding for broadband and other telecommunications services initiatives.
- Support local initiatives, such as municipal internet, in which municipal electricity providers install fiber-optic cables next to existing electrical cables to create a municipal internet network.

- Review and revise policies that may prevent technological infrastructure development; for example, several states have laws that prevent or discourage local governments from developing municipal internet networks.
- When drafting policies and regulations, anticipate future changes in technology and modify language accordingly (e.g., including the clause "any other telecommunications technology" when referring to videoconferencing or other types of technology that are currently common).

Center for Law and Social Policy, 2020; Deloitte Center for Government Insights, 2019; Whaibeh et al., 2020b

Additional recommendations

In addition to addressing parity, reimbursement, and technology issues, there are additional strategies agencies can use to encourage the growth of telemental health services, including:

- Address shortages in the supply of mental health service providers.
- Support telemental health training and educational opportunities for providers.
- Simplify the funding process for organizations by developing an online funding portal that identifies funding opportunities and allows users to save their information.
- Draft and support legislation that may catalyze a shift from a fee-for-service model to value-based care, a model that emphasizes preventive treatment and may be more amenable to telehealth services.

Deloitte Center for Government Insights, 2019; Lambert et al., 2016; Myers, 2019; RTI International, 2017; Uscher-Pines et al., 2020; Whaibeh et al., 2020b

Conclusions

Telemental health services have the potential to help close mental health service gaps, particularly in rural areas. They eliminate geographic and transportation barriers, more easily allow for the participation of stakeholders in a client's treatment, facilitate connections with specialty providers and culturally responsive services, enable providers to more easily coordinate and receive training, reduce privacy and stigma concerns, and reduce agency costs. Despite these benefits, significant challenges exist. For providers, these include the resources available to clients, client abilities, privacy concerns, developing rapport, technology-related disruptions, and communication and cultural differences. For agencies, these include building relationships with the local community and obtaining buy-in; training and engaging staff; developing new protocols and policies; reimbursement issues; and concerns related to confidentiality, data privacy, and informed consent. This review identified best practices providers and agencies can use to address these challenges. In addition, state agencies can play a significant role in expanding telemental health services and encouraging its uptake, including addressing issues related to parity, reimbursement, technological infrastructure; improving workforce supply and training; simplifying the process for applying for state funding; and shifting away from a fee-for-service model.

References

American Counseling Association. (2014). *American Counseling Association code of ethics.* https://www.counseling.org/docs/default-source/default-document-library/2014-code-of-ethics-finaladdress.pdf?sfvrsn=96b532c_2

American Psychiatric Association. (2018). *Best practices in videoconferencing-based telemental health.* https://www.psychiatry.org/File%20Library/Psychiatrists/Practice/Telepsychiatry/APA-ATA-Best-Practices-in-Videoconferencing-Based-Telemental-Health.pdf

American Psychological Association. (2013). *Tip sheet: Telehealth and persons with disabilities: What psychologists should know.* https://www.apa.org/pi/disability/resources/publications/newsletter/2013/05/telehealth-psychologists

American Psychological Association. (2014a). *Guidelines for the practice of telepsychology*. https://www.apa.org/pubs/journals/features/amp-a0035001.pdf

American Psychological Association. (2014b) *What are telehealth and telepsychology?* https://www.apa.org/pi/disability/resources/publications/telepsychology

American Telemedicine Association. (2017). *Practice guidelines for telemental health with children and adolescents*. https://www.cdphp.com/-/media/files/providers/behavioral-health/hedis-toolkit-and-bh-guidelines/practice-guidelines-telemental-health.pdf?la=en

Anxiety and Depression Association of America. (n.d.) *Telemental health*. https://adaa.org/finding-help/telemental-health

AspireMN. (2020). *Telehealth client survey initiative – Mental health survey report.* https://www.aspiremn.org/resource/resmgr/2020_and_beyond/final_2mh_telehealth_client_.pdf

Association of Marital and Family Therapy Regulation Boards. (2016). *Teletherapy guidelines.* https://amftrb.org/wp-content/uploads/2017/05/Proposed-Teletherapy-Guidelines-DRAFT-as-of-09.12.16.pdf

Backhaus, A., Agha, Z., Maglione, M. L., Repp, A., Ross, B., Zuest, D., Rice-Thorp, N. M., Lohr, J., & Thorp, S. R. (2012). Videoconferencing psychotherapy: a systematic review. *Psychological Services, 9*(2), 111-131. https://doi.org/10.1037/a0027924

Bashshur, R. L., Shannon, G. W., Bashshur, N., & Yellowlees, P. M. (2016). The empirical evidence for telemedicine interventions in mental disorders. *Telemedicine journal and e-health, 22*(2), 87–113. https://doi.org/10.1089/tmj.2015.0206

Becevic, M., Green, T., Walker, L. Y., Hicks, L., & Mutrux, E. R. (2016). Are there other options?: Child and adolescent telepsychiatry services for rural population. *Journal of Health Management, 18*(2), 290–294. https://doi.org/10.1177/0972063416637729

Bischoff, R., Hollist, C. S., & Smith, C. W. (2004). Addressing the mental health needs of the rural underserved: Findings from a multiple case study of a behavioral telehealth project. *Contemporary Family Therapy, 26*(2), 179-198.

Bischoff, R. J., Reisbig, A. M. J., Springer, P. R., Schultz, S., Robinson, W. D., & Olson, M. (2014). Succeeding in rural mental health practice: Being sensitive to culture by fitting in and collaborating. *Contemporary Family Therapy, 36*(1), 1-16. https://doi.org/10.1007/s10591-013-9287-x

Blackstock, J. S., Chae, K. B., Mauk, G. W., & McDonald, A. (2018). Achieving access to mental health care for school-aged children in rural communities: A literature review. *Rural Educator, 39*(1), 12-25. https://doi.org/10.35608/ruraled.v39i1.212

Bouchard, S., Paquin, B., Payeur, R., Allard, M., Rivard, V., Fournier, T., Renaud, P., & Lapierre, J. (2004). Delivering cognitive-behavior therapy for panic disorder with agoraphobia in videoconference. *Telemedicine Journal and E-health, 10*(1), 13-25. https://doi.org/10.1089/153056204773644535

Brenes, G. A., Ingram, C. W., & Danhauer, S. C. (2011). Benefits and challenges of conducting psychotherapy by telephone. *Professional Psychology, Research and Practice, 42*(6), 543–549. https://doi.org/10.1037/a0026135

Brooks, E., Spargo, G., Yellowlees, P., O'Neill, P., & Shore, J. H. (2013). Integrating culturally appropriate care into telemental health practice. In K. Myers & C. L. Turvey (Eds.), *Telemental health: Clinical, technical, and administrative foundations for evidence-based practice* (pp. 63-82). Elsevier.

Callan, J. E., Maheu, M. M., & Bucky, S. F. (2017). Crisis in the behavioral health classroom: Enhancing knowledge, skills, and attitudes in telehealth training. In M. M. Maheu, K. P., Drude, & S. D. Wright (Eds.), *Career paths in telemental health* (pp. 63-82). Springer.

Carlisle, L. L. (2013). Child and adolescent telemental health. In K. Myers & C. L. Turvey (Eds.), *Telemental health: Clinical, technical, and administrative foundations for evidence-based practice* (pp. 197-221). Elsevier.

Carpenter, A. L., Pincus, D. B., Furr, J. M., & Comer, J. M. (2018). Working from home: An initial pilot examination of videoconferencing-based cognitive behavioral therapy for anxious youth delivered to the home setting. *Behavior Therapy, 49*(8), 917-930. https://doi.org/10.1016/j.beth.2018.01.007

Castro, A., Gili, M., Ricci-Cabello, I., Roca, M., Gilbody, S., Ángeles-Perez-Ara, M., Seguí, A., & McMillan, D. (2020). Effectiveness and adherence of telephone-administered psychotherapy for depression: A systematic review and meta-analysis. *Journal of Affective Disorders, 260*, 514-526. https://doi.org/10.1016/j.jad.2019.09.023

Center for Law and Social Policy. (2020). *Reducing the treatment gap.* https://www.clasp.org/sites/default/files/publications/2020/06/2020.06.15%20Unlocking%20Transformation%20and%20Healing%20-%20CBC.pdf

Clawson, B., Selden, M., Lacks, M., Deaton, A. V., Hall, B., & Bach, R. (2008). Complex pediatric feeding disorders: Using teleconferencing technology to improve access to a treatment program. *Pediatric Nursing, 34*(3), 213-216.

Cooper, S. E., Campbell, L. E., & Smucker Barnwell, S. (2019). Telepsychology: A primer for counseling psychologists. *The Counseling Psychologist, 47*(8), 1074-1114. https://doi.org/10.1177%2F0011000019895276

Day, S. X., & Schneider, P. L. (2002). Psychotherapy using distance technology: A comparison of face-to-face, video, and audio treatment. *Journal of Counseling Psychology, 49*(4), 499-503. http://dx.doi.org.ezp2.lib.umn.edu/10.1037/0022-0167.49.4.499

Deloitte Center for Government Insights. (2019). *Narrowing the rural-urban health divide: Bringing virtual health to rural communities.* https://www2.deloitte.com/content/dam/insights/us/articles/6307_Virtual-health-in-rural-communities/DI_Virtual%20health%20in%20rural%20areas.pdf

Doarn, C. R., Pruitt, S., Jacobs, J., Harris, Y., Bott, D. M., Riley, W., Lamer, C., & Oliver, A. L. (2014). Federal efforts to define and advance telehealth-A work in progress. *Telemedicine Journal and E-health, 20*(5), 409-418. https://doi.org/10.1089/tmj.2013.0336

Ekblad, S. (2020). Ethical aspects of therapy in forced migrants. In M. Schouler-Ocak & M. C. Kastrup (Eds.), *Intercultural psychotherapy for immigrants, refugees, asylum seekers, and ethnic minority patients* (pp. 193-204). Springer.

Felker, B., McGinn, M., Shearer, E., Raza, G., Gold, S., Kim, J., Rojas, S., Varkovitzky, R., Morrison, K., & McCann, R. (2020). Implementation of a telemental health training program across a mental health department. Advance online publication. https://doi.org/10.21203/rs.3.rs-51846/v2

Findling, R. L., & Stepanova, E. (2018). The workforce shortage of child and adolescent psychiatrists: Is it time for a different approach? *Journal of the American Academy of Child and Adolescent Psychiatry, 57*(5), 300-301. https://doi.org/10.1016/j.jaac.2018.02.008

Fitzgerald, T. D., Hunger, P. V., Hadjistavropoulos, T., & Koocher, G. P. (2010). Ethical and legal considerations for internet-based psychotherapy. *Cognitive Behaviour Therapy, 39*(3), 173-187. https://doi.org/10.1080/16506071003636046

Germain, V., Marchand, A., Bouchard, S., Drouin, M. S., & Guay, S. (2009). Effectiveness of cognitive behavioural therapy administered by videoconference for posttraumatic stress disorder. *Cognitive Behavior Therapy, 38*(1), 42-53. https://doi.org/10.1080/16506070802473494

Gloff, N. E., LeNoue, S. R., Novins, D. K., & Myers, K. (2015). Telemental health for children and adolescents. *International Review of Psychiatry, 27*(6), 513-524. http://dx.doi.org/10.3109/09540261.2015.1086322

Glueck, D. (2013). Establishing therapeutic rapport in telemental health. In K. Myers & C. L. Turvey (Eds.), *Telemental health: Clinical, technical, and administrative foundations for evidence-based practice* (pp. 29-46). Elsevier.

Glueckauf, R. L., Maheu, M. M., Drude, K. P., Wells, B. A., Wang, Y., Gustafson, D. J., & Nelson, E. (2018). Survey of psychologists' telebehavioral health practices: Technology use, ethical issues, and training needs. *Professional Psychology: Research and Practice, 49*(3), 205-219. https://doi.org/10.1037/pro0000188

Goldstein, F., & Glueck, D. (2016). Developing rapport and therapeutic alliance during telemental health sessions with children and adolescents. *Journal of Child and Adolescent Psychopharmacology, 26*(3), 204-211. https://doi.org/0.1089/cap.2015.0022

Golberstein, E., Wen, H., & Miller, B. F. (2020). Coronavirus disease 2019 (COVID-19) and mental health for children and adolescents. *JAMA Pediatrics, 174*(9), 819-820. https://doi.org/10.1001/jamapediatrics.2020.1456

Griffiths, L., Blignault, I., & Yellowlees, P. (2006). Telemedicine as a means of delivering cognitive-behavioural therapy to rural and remote mental health clinics. *Journal of Telemedicine and Telecare, 12*(3), 136-140. https://doi.org/10.1258/135763306776738567

Griner, D., & Smith, T. B. (2006). Culturally adapted mental health interventions: A meta-analytic review. *Psychotherapy, 43*(4), 531-548. https://doi.org/10.1037/0033-3204.43.4.531

Guerrero, A. P. S., Balon, R., Beresin, E. V., Louie, A. K, Coverdale, J. H., Brenner, A., & Roberts, L. W. (2019). Rural mental health training: An emerging imperative to address health disparities. *Academic Psychiatry, 43*(1), 1-5. https://doi.org/10.1007/s40596-018-1012-5

Hames, J. L., Bell, D. J., Perez-Lima, L. M., Holm-Denoma, J. M., Rooney, T., Charles, N. E., Thompson, S. M., Mehlenbeck, R. S., Tawfik, S. H., Fondacaro, K. M., Simmons, K. T., & Hoersting, R. C. (2020). Navigating uncharted waters: Considerations for training clinics in the rapid transition to telepsychology and telesupervision during COVID-19. *Journal of Psychotherapy Integration, 30*(2), 348-365. http://dx.doi.org/10.1037/int0000224

Hasson-Ohayon, I., & Lysaker, P. H. (2020). Special challenges in psychotherapy continuation and adaption for persons with schizophrenia in the age of coronavirus (COVID-19). *Counselling Psychology Quarterly*. https://doi.og/10.1080/09515070.2020.1781595

Heitzman-Powell, L. S., Buzhardt, J., Rusinko, L. C., Miller, T. (2014). Formative evaluation of an ABA outreach training program for parents of children with autism in remote areas. *Focus on Autism and Other Developmental Disabilities, 29*(1), 23-28. https://doi.org/10.1177/1088357613504992

Hepburn, S. L., Blakeley-Smith, A., Wolff, B., & Reaven, J. A. (2016). Telehealth delivery of cognitive-behavioral intervention to youth with autism spectrum disorder and anxiety: A pilot study. *Autism, 20*(2), 207-218. https://doi.org/10.1177/1362361315575164

Hilty, D. M., Shoemaker, E. Z., Myers, K., Snowdy, C. E., Yellowlees, P. M., &Yager, J. (2016). Need for and steps toward a clinical guideline for the telemental healthcare of children and adolescents. *Journal of Child Adolescent Psychopharmacology, 26*(3), 283-295. https://doi.org/10.1089/cap.2015.0129

Himle, M. B., Freitag, M., Walther, M., Franklin, S. A., Ely, L., & Woods, D. W. (2012). A randomized pilot trial comparing videoconference versus face-to-face delivery of behavior therapy for childhood tic disorders. *Behaviour Research and Therapy, 50*(9), 565-570. https://doi.org/10.1016/j.brat.2012.05.009

Hirsch, J. K., & Cukrowicz, K. C. (2014). Suicide in rural areas: An updated review of the literature. *Journal of Rural Mental Health, 38*(2), 65-78. https://doi.org/10.1037/rmh0000018

Horvath, A. O., & Symonds, B. D. (1991). Relation between working alliance and outcome in psychotherapy: A meta-analysis. *Journal of Counseling Psychology, 38*(2), 139–149. https://doi.org/10.1037/0022-0167.38.2.139

Huey, S. J., Jr., & Tilley, J. L. (2018). Effects of mental health interventions with Asian Americans: A review and meta-analysis. *Journal of Consulting and Clinical Psychology, 86*(11), 915–930. https://doi.org/10.1037/ccp0000346

Hufford, B. J., Glueckauf, R. L., & Webb, P. M. (1999). Home-based, interactive videoconferencing for adolescents with epilepsy and their families. *Rehabilitation Psychology, 44*(2), 176–193. https://doi.org/10.1037/0090-5550.44.2.176

Jones, A. M., Shealy, K. M., Reid-Quiñones, K., Moreland, A. D., Davidson, T. M., López, C. M., Barr, S. C., & de Arellan, M. A. (2014). Guidelines for establishing a telemental health program to provide evidence-based therapy for trauma-exposed children and families. *Psychological Services, 11*(4), 398-409. https://doi.org/10.1037/a0034963398

Krueger, J. (2020). Legal strategies for promoting mental health and wellbeing in the COVID-19 pandemic. https://www.publichealthlawwatch.org/s/Chp18_COVIDPolicyPlaybook-Aug2020-2kct.pdf

Kruse C. S., Karem, P., Shifflett, K., Vegi, L., Ravi, K., & Brooks, M. (2018). Evaluating barriers to adopting telemedicine worldwide: A systematic review. *Journal of Telemedicine and Telecare, 24*(1), 4-12. https://doi.org/10.1177/1357633X16674087

Lal, S. (2019). E-mental health: Promising advancements in policy, research, and practice. *Healthcare Management Forum, 32*(2), 56-62. https://doi.org/10.1177/0840470418818583

Lal, S., & Adair, C. E. (2014). E-mental health: A rapid review of the literature. *Psychiatric Services, 65*(1), 24-32. https://doi.org/10.1176/appi.ps.201300009

Lambert, D., Gale, J., Hartley, D., Croll, Z., & Hansen, A. (2016). Understanding the business case for telemental health in rural communities. *The Journal of Behavioral Health Services & Research, 43*(3). https://doi.org/10.1007/s11414-015-9490-7

Langarizadeh, M., Tabatabaei, M. S., Tavakol, K., Naghipour, M., Rostami, A., & Moghbeli, F. (2017). Telemental health care, an effective alternative to conventional mental care: A systematic review. *Acta Informatica Medica, 25*(4). https://doi.org/10.5455/aim.2017.25.240-246

Long, J. (2011). *Fact sheet 3: The evidence base: Service responsiveness for Asian, refugee and migrant populations. Te Pou o Te Whakaaro Nui.* https://www.tepou.co.nz/uploads/files/resource-assets/Service-Responsiveness-to-Asian-Refugee-and-Migrant-Populations-Fact-Sheet-3-The-Evidence-Base.pdf

McCleary, J. S. (2017). Applying a collective resilience framework to refugees' perceptions of recovery from harmful alcohol use. *Traumatology, 23*(1), 82-88. http://dx.doi.org/10.1037/trm0000086

McCleary, J. S., Shannon, P. J., & Cook, T. L. (2016). Connecting refugees to substance use treatment: A qualitative study. *Social Work in Public Health, 31*(1), 1-8. https://doi.org/10.1080/19371918.2015.1087906

McClellan, M. J., Florell, D., Palmer, J., & Kidder, C. (2020). Clinician telehealth attitudes in a rural community mental health center setting. *Journal of Rural Mental Health, 44*(1), 62-73. http://dx.doi.org/10.1037/rmh0000127

McCord, C. E., Saenz, J. J., Armstrong, T. W., & Elliott, T. R. (2015). Training the next generation of counseling psychologists in the practice of telepsychology. *Counselling Psychology Quarterly, 28*(3). 324-344. http://dx.doi.org/10.1080/09515070.2015.1053433

McGrath, P. J., Lingley-Pottie, P., Thurston, C., MacLean, C., Cunningham, C., Waschbusch, D. A., Watters, C., Stewart, S., Bagnell, A., Santor, D., & Chaplin, W. (2011). Telephone-based mental health interventions for child disruptive behavior or anxiety disorders: Randomized trials and overall analysis. *Journal of the American Academy of Child & Adolescent Psychiatry, 50*(11), 1162-1172. https://doi.org/10.1016/j.jaac.2011.07.013

Merry, S. N., Stasiak, K., Shepherd, M., Frampton, C., Fleming, T., & Lucassen, M. F. G. (2012). The effectiveness of SPARX, a computerized self help intervention for adolescents seeking help for depression: Randomised controlled non-inferiority trial. *BMJ, 344:e2598.* https://doi.org/10.1136/bmj.e2598

Minnesota Department of Health. (2020). *Issue brief: Recent temporary changes in coverage/reimbursement of telemedicine for Medicare, MHCP, and insurers subject to MN §62A.671.* https://www.health.state.mn.us/facilities/ehealth/auc/covid19/docs/042920issuebrief.pdf

Minnesota Department of Human Services. (2020). MHCP provider manual: Mental health provider travel time. https://www.dhs.state.mn.us/main/idcplg?IdcService=GET_DYNAMIC_CONVERSION&RevisionSelectionMethod=LatestReleased&dDocName=id_058052

Mitchell, J. E., Crosby, R. D., Wonderlich, S. A., Crow, S., Lancaster, K., Simonich, H., Swan-Kremeier, L., Lysne, C., & Myers, T. C. (2008). A randomized trial comparing the efficacy of cognitive-behavioral therapy for bulimia nervosa delivered via telemedicine versus face-to-face. *Behaviour Research and Therapy, 46*(5), 581–592. https://doi.org/10.1016/j.brat.2008.02.004

Mucic, D. (2009). Transcultural telepsychiatry and its impact on patient satisfaction. *Journal of Telemedicine and Telecare, 16*(5), 237-242. https://doi.org/10.1258/jtt.2009.090811

Mucic D., & Hilty, D. M., (2020). Psychotherapy using electronic media. In M. Schouler-Ocak & M. C. Kastrup (Eds.), *Intercultural psychotherapy for immigrants, refugees, asylum seekers, and ethnic minority patients* (pp. 205-230). Springer.

Myers, C. R. (2019). Using telehealth to remediate rural mental health and healthcare disparities. *Issues in Mental Health Nursing, 40*(3), 233-239. https://doi.org/10.1080/01612840.2018.1499157

Myers, K. M., & Comer, J. S. (2016). The case for telemental health for improving the accessibility and quality of children's mental health services. *Journal of Child and Adolescent Psychopharmacology, 26*(3), 186-191. https://doi.org/10.1089/cap.2015.0055

Myers, K., Vander Stoep, A., Zhou, C., McCarty, C. A., & Katon, W. (2015). Effectiveness of a telehealth service delivery model for treating attention-deficit/hyperactivity disorder: A community-based randomized controlled trial. *Journal of the American Academy of Child and Adolescent Psychiatry, 54*(4), 263-274. https://doi.org/10.1016/j.jaac.2015.01.009

National Association of Social Workers. (2017). *National Association of Social Workers, Association of Social Work Boards, Council on Social Work Education, & Clinical Social Work Association standards for technology in social work practice.* https://www.socialworkers.org/includes/newIncludes/homepage/PRA-BRO-33617.TechStandards_FINAL_POSTING.pdf

Nelson, E. L., & Bui, T. N. (2010). Rural telepsychology services for children and adolescents. *Journal of Clinical Psychology, 66*(5), 490-501. https://doi.org/10.1002/jclp.20682

Nelson, E. L., Barnard, M., & Cain, S. (2006). Feasibility of telemedicine intervention for childhood depression. *Counselling and Psychotherapy Research, 6*(3), 191-195. https://doi.org/10.1080/14733140600862303

Nelson, E. L., Bui, T. N., & Vasquez, S. E. (2011). Telepsychology: Research and practice overview. *Child and Adolescent Psychiatric Clinics of North America, 20*(1), 67-79. https://doi.org/10.1016/j.chc.2010.08.005

Nelson, E. L., Cain, S., & Sharp, S. (2017). Considerations for conducting telemental health with children and adolescents. *Child and Adolescent Psychiatric Clinics of North America, 26*(2), 77-91. https://doi.org/10.1016/j.chc.2016.07.008

Nelson E. L., & Sharp, S. (2016). A review of pediatric telemental health. *Pediatric Clinics of North America, 63*(5), 913-931. https://doi.org/10.1016/j.pcl.2016.06.011

Orlowski, S., Lawn, S., Matthews, B., Venning, A., Wyld, K., Jones, G., Winsall, M., Antezana, G., Schrader, G., & Bidargaddi, N. (2016). The promise and the reality: A mental health workforce perspective on technology-enhanced youth mental health service delivery. *BMC Health Services Research, 16*(562). https://doi.org/10.1186/s12913-016-1790-y

Osenbach, J. E., O'Brien, K. M., Mishkind, M., & Smolenski, D. (2013). Synchronous telehealth technologies in psychotherapy for depression: A meta-analysis. *Anxiety and Depression, 30*(11), 1058-1067. https://doi.org/10.1002/da.22165

Perle, J. G. (2020). Introduction to telehealth for clinical psychologists: A novel course designed to improve general knowledge and hands-on expertise with technology-based modalities. *Journal of Technology in Behavioral Science.* Advance online publication. https://doi.org/10.1007/s41347-020-00147-6

Perry, K., Gold, S., & Shearer, E. M. (2019). Identifying and addressing mental health provider's perceived barriers to clinical video telehealth utilization. *Telepsychology: Research, Training, Practice, and Policy, 76*(6), 1125-1134. https://doi.org/10.1002/jclp.22770

Petersen, D., Salazar, B., & Kertz, S. J. (2020). Therapist and treatment-seeking students' perceptions of telemental health. *Journal of Technology in Behavioral Science, 5*(2), 113-120. https://doi.org/10.1007/s41347-019-00116-8

Pradhan, T., Six-Workman, A., & Law, K. B. (2018). An innovative approach to care: Integrating mental health services through telemedicine rural school-based health centers. *Psychiatric Services, 70*(3), 239-242. http://doi.org/10.1176/appi.ps.201800252

Racine, N., Hartwick, C., Collin-Vézina, & Madigan, S. (2020). Telemental health for child trauma treatment during and post-COVID-19: Limitations and considerations. *Child Abuse & Neglect*. Advance online publication. https://doi.org/10.1016/j.chiabu.2020.104698

Reese, R. M., Braun, M. J., Hoffmeier, S., Stickle, L., Rinner, L., Smith, C., Ellerbeck, K., Jamison, R., Wendland, M., Jarrett, L., & Hadorn, M. (2015). Preliminary evidence for the integrated systems using telemedicine. *Telemedicine Journal and E-health, 21*(7), 581-587. https://doi.org/10.1089/tmj.2014.0124

Richardson, L. K., Frueh, B. C., Grubaugh, A. L., Egede, L., & Elhai, J. D. (2009). Current directions in videoconferencing tele-mental health research. *Clinical Psychology, 16*(3), 323–338. https://doi.org/10.1111/j.1468-2850.2009.01170.x

Rost, K., Smith, G. R., & Taylor, J. L. (1993). Rural-urban differences in stigma and the use of care for depressive disorders. *Journal of Rural Health, 9*(1), 57-62. https://doi.org/10.1111/j.1748-0361.1993.tb00495.x

RTI International. (2017). *Using telehealth to identify and manage mental health and substance use disorders in rural areas.* https://aspe.hhs.gov/system/files/pdf/260286/RuralTele.pdf

SAMHSA. (2015). *Using technology-based therapeutic tools in behavioral health services.* https://store.samhsa.gov/product/TIP-60-Using-Technology-Based-Therapeutic-Tools-in-Behavioral-Health-Services/SMA15-4924

SAMHSA. (2016). *Rural behavioral health: Telehealth challenges and opportunities*. https://store.samhsa.gov/sites/default/files/d7/priv/sma16-4989.pdf

Seager van Dyk, I., Kroll, J., Martinez, R., Emerson, N., & Bursch, B. (2020). COVID-19 tips: Building rapport with youth via telehealth. https://www.researchgate.net/publication/340066049_COVID-19_Tips_Building_Rapport_with_Youth_via_Telehealth

Shore, J. H. (2013). Telepsychiatry: Videoconferencing in the delivery of psychiatric care. *American Journal of Psychiatry, 170*(3):256-262. https://doi.org/10.1176/appi.ajp.2012.12081064

Sproch, L. E., & Anderson, K. P. (2019). Clinician-delivered teletherapy for eating disorders. *Psychiatric Clinics of North America, 42*(2), 243-252. https://doi.org/10.1016/j.psc.2019.01.008

Stein, B. D., Kofner. A., Vogt, W. B., & Yu, H. A. (2019). National examination of child psychiatric telephone consultation programs' impact on children's mental health care utilization. *Journal of the American Academy of Child and Adolescent Psychiatry, 58*(10), 1016-1019. https://doi.org/10.1016/j.jaac.2019.04.026

Stewart, R. W., Orengo-Aguayo, R. E., Gilmore, A. K., & de Arellano, M. (2017). Addressing barriers to care among Hispanic youth: Telehealth delivery of trauma-focused cognitive behavior therapy. *The Behavior Therapist, 40*(3), 112-118.

Stewart, R. W., Orengo-Aguayo, R., Wallace, M., Metzger, I. W., & Rheingold, A. A. (2019). Leveraging technology and cultural adaptations to increase access and engagement among trauma-exposed African American youth: Exploratory study of school-based telehealth delivery of trauma-focused cognitive behavioral therapy. *Journal of Interpersonal Violence*. https://doi.org/10.1177/0886260519831380

Stewart, R. W., Orengo-Aguayo, R., Young, J., Wallace, M. M., Cohen, J. A., Mannarino, A. P., & de Arellan, M. A. (2020). Feasibility and effectiveness of a telehealth service delivery model for treating childhood posttraumatic stress: A community-based, open pilot trial of trauma-focused cognitive–behavioral therapy. *Journal of Psychotherapy Integration, 30*(2), 274-289. http://dx.doi.org/10.1037/int0000225

Storch, E. A., Caporino, N. E., Morgan, J. R., Lewin, A. B., Rojas, A., Brauer, L., Larson, M. J., & Murphy, T. K. (2011). Preliminary investigation of web-camera delivered cognitive-behavioral therapy for youth with obsessive-compulsive disorder. *Psychiatry Research, 189*(3), 407-412. https://doi.org/10.1016/j.psychres.2011.05.047

Summers-Gabr, N. M. (2020). Rural–urban mental health disparities in the United States during COVID-19. *Psychological Trauma: Theory, Research, Practice, and Policy, 12*(S1), S222-S224. http://dx.doi.org/10.1037/tra0000871

Toombs, E., Kowatch, K. R., Dalicandro, L., McConkey, S., Hopkins, C., & Mushquash, C. J. (2020). A systematic review of electronic mental health interventions for Indigenous youth: Results and recommendations. *Journal of Telemedicine and Telecare.* Advance online publication. https://doi.org/10.1177/1357633X19899231

Traube, D. E., Cederbaum, J. A., Taylor, A., Naish, L., & Rau, A. (2020). Telehealth training and provider experience of delivering behavioral health services. *Journal of Behavioral Health Services & Research.* Advance online publication. https://doi.org/10.1007/s11414-020-09718-0

Tse, Y. J., McCarty, C. A., Stoep, A. V., & Myers, K. M. (2015). Teletherapy delivery of caregiver behavior training for children with attention-deficit hyperactivity disorder. *Telemedicine Journal and E-health, 21*(6), 451-458. https://doi.org/10.1089/tmj.2014.0132

Uscher-Pines, L., Bouskill, K. E., Sousa, J., Shen, M, & Fischer, S. H. (2020). Experiences of Medicaid programs and health centers in implementing telehealth. *Rand Health Quarterly, 8*(4), RR-2564-ASPE.

Wade, V. A., Eliott, J. A., & Hiller, J. E. (2014). Clinician acceptance is the key factor for sustainable telehealth services. *Qualitative Health Research, 24*(5), 682-694. https://doi.org/10.1177/1049732314528809

Whaibeh, E., Mahmoud, H., & Vogt, E. L. (2020a). Reducing the treatment gap for LGBT mental health needs: The potential of telepsychiatry. *The Journal of Behavioral Health Services & Research., 47*(3), 424-431. https://doi.org/10.1007/s11414-019-09677-1

Whaibeh, E., Mahmoud, H., & Naal, H. (2020b). Telemental health in the context of a pandemic: the COVID-19 experience. *Current Treatment Options in Psychiatry*, 1–5. Advance online publication. https://doi.org/10.1007/s40501-020-00210-2

Witmans, M. B., Dick, B., Good, J., Schoepp, G., Dosman, C., Hawkins, M. E., Young, R., & Witol, A. (2008). Delivery of pediatric sleep services via telehealth: The Alberta experience and lessons learned. *Behavioral Sleep Medicine, 6*(4), 207-218. https://doi.org/10.1080/15402000802371312

Wood, J. A. V., Miller, T. W., & Hargrove, D. S. (2005). Clinical supervision in rural settings: A telehealth model. *Professional Psychology: Research and Practice, 36*(2), 173-179. https://doi.org/10.1037/0735-7028.36.2.173

Yellowlees, P., Marks, S., Hilty, D., & Shore, J. H. (2008). Using e-health to enable culturally appropriate mental healthcare in rural areas. *Telemedicine journal and e-health, 14*(5), 486–492. https://doi.org/10.1089/tmj.2007.0070

Young, K. S. (2005). An empirical examination of client attitudes towards online counseling. *Cyberpsychology & Behavior, 8*(2), 172-177. https://doi.org/10.1089/cpb.2005.8.172

Ziguras, S., Klimidis, S., Lewis, J., & Stuart, G. (2003). Ethnic matching of clients and clinicians and use of mental health services by ethnic minority clients. *Psychiatric Services, 54*(4), 535-541. https://doi.org/10.1176/appi.ps.54.4.535

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