A Review of Pediatric Telemental Health

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KEYWORDS

- Telemedicine • Telemental health • Behavioral health

KEY POINTS

- Because of the widening gap between need for child mental health services and availability of child specialists, secure videoconferencing options are more needed than ever.
- Based on a comprehensive review of real-time videoconferencing evidence to date, videoconferencing is an effective approach to improving access to behavioral health interventions for children and adolescents.
- Overall, telemental health is feasible and well accepted by families, and shows promise for disseminating evidence-based treatments to underserved communities.

INTRODUCTION

Because of chronic and worsening specialist shortages across pediatrics specialties as well as limited access to empirically supported interventions, telemedicine is becoming more widely adopted with children and adolescents, with telemental health among the most active pediatric specialties.[1–3] Telemedicine is defined as "the use of medical information exchanged from one site to another via electronic communications to improve patients' health status."[4] Telemental health, also called telebehavioral health, is an umbrella term to refer to all of the names and types of behavioral and mental health services that are provided via synchronous telecommunications technologies.[5,6] About 20% of US children and adolescents aged 9 to 17 years have diagnosable psychiatric disorders.[7] In addition, approximately 31% of children are affected by chronic conditions.[8] Many other youth show subthreshold symptoms and stress and grief reactions that benefit from intervention. Younger children are at risk for developmental and behavioral disorders. However, there are a growing number of evidence-based psychotherapy approaches to support children and their

families in coping with the range of psychiatric presentations,[9–11] as well as pediatric psychology approaches for supporting children with acute and chronic medical conditions and their families.[12]

However, the supply of child behavioral health specialists trained in the latest clinical advances is very small, with demand far outpacing supply across child and adolescent psychiatrists,[13–15] child and adolescent therapists and other specialists,[16–19] and developmental medicine. Thus, most children with behavioral health concerns do not receive any therapy, let alone evidence-based treatments delivered by behavioral health specialists.[20] The rationale for telemental health is to bridge the gap between supply and demand, particularly in rural and other underserved communities that face declining economies, poor access to mental health insurance, and limited transportation options.[21,22] Telemental health helps increase regular attendance by diminishing the financial and temporal barriers of travel and time from work as well as offering access to therapists outside the community via health clinics and schools, which may be less stigmatizing than traditional mental health settings.

Telemental health services build on a long history of moving mental health care for youth from the mental health clinic to the community in order to increase access to care; decrease stigma; increase adherence to treatment planning; and, it is hoped, enhance effectiveness and care coordination in naturalistic settings. These community settings provide advantages in gathering information from multiple informants/supporters about the broad range of contextual factors influencing children's behaviors and mental health needs. In particular, telemental health offers a powerful opportunity for collaboration with pediatricians to help them address the increasing expectations to improve their skills in diagnosing and managing pediatric behavioral conditions.[3,23]

Although telemental health services initially focused on rural settings,[24] they are increasingly offered in diverse settings, including underserved parts of urban communities.[25] Mental health centers and other child-serving facilities may provide infrastructure that facilitates the implementation of telemental health services. Many schools are seeking to understand their students' mental health needs and are willing to use their videoconferencing systems to access telemental health services.[26] Most behavioral health diagnoses across the developmental spectrum have been evaluated through videoconferencing consistent with patients in usual outpatient practice.[5] Telemental health allows youth to be evaluated in their own communities accompanied by family or community members who may provide context and perspective that is not available if services are provided in distant health centers.[27] Primary care practices are often key partners in telemental health services.[3]

This article first summarizes the pediatric research to date across telemental health specialties.[5,28] Underscoring ethical considerations, it then presents a case study emphasizing ethical considerations in best practice.

SUMMARY OF TELEMENTAL HEALTH EVIDENCE WITH CHILDREN AND ADOLESCENTS

Studies were included if they (1) consisted of videoconferencing applications across the pediatric age range; (2) included psychiatry/pharmacotherapy, psychotherapy and/or a pediatric psychology intervention, and/or developmental medicine intervention; and (3) included videoconferencing as the method of intervention across assessment or treatment. Studies were excluded if they (1) were conducted using telephone or mobile interactions without video, (2) used Web-based or e-health interventions as a primary method for service delivery (ie, predominantly asynchronous Web-delivered content), and/or (3) focused solely on education/training or population description. These criteria were established in a previous review.[29] As presented in **Table 1**, the