Evidence-Base Review of Telepsychiatry

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Telepsychiatry is a superior way to provide efficient, high-quality and logistically sustainable psychiatric services to students attending Maui County public schools.

1 Numerous short and long-term studies have demonstrated that telepsychiatry is equivalent or superior to traditional, face-to-face psychiatric care. These studies evaluated the treatment of adults, children, and adolescents for a variety of psychiatric conditions. 10, 21, 22, 29, 50, 69, 79, 98

a. Outpatient psychiatric evaluations, consultations, and follow-up care delivered by telepsychiatry produce clinical outcomes that are equivalent to those achieved when the services are provided in person. 1, 2, 3, 4, 5, 6, 61, 130

b. Research has shown that diagnoses and treatment outcomes do not differ in depression, 31, 32, 89, 90, 91, 134 cognitive impairment, 33 behavior disorders, 91 cognitive decline, 87 obsessive-compulsive disorder, 34 anxiety disorders, 35, 87, 91 PTSD, 36,45, 46-49 phobias and panic disorders, 37, 38, 39 autism, 107, 79 schizophrenia, 40 epilepsy, 41-44 Tourette's syndrome, 82 psychosis, 87 bulimia nervosa, 80, 51 opioid dependence, 52 alcohol abuse, 53, 54 abuse victims, 70-75 ADHD, 8, 21, 83, 136 and dementia. 103-106

c. Can improve relapse prevention in Schizophrenia patients 145

d. Compared to other medical disciplines, results of diagnostic agreement for mental health problems are on par or better. Only 1 to 2 percent of the patients received a wrong diagnosis when using telepsychiatry. 142

e. Agreement for mental health diagnoses can be good to excellent (74-84%) even when just online procedure for collecting information and no direct interview is done. 143

f. Telepsychiatry is a feasible mode of health care delivery in forensic adult and adolescent cases. 57-68, 76-78, 124 Telemedicine appears to be on the forefront of healthcare in corrections, with telepsychiatry leading the way. Use of telepsychiatry in several correctional facilities across the United States has led to decreased spending and greater access to psychiatric services for inmates.141

g. Patients living in both rural and urban areas are receptive to telepsychiatry services. 47, 116 Telemedicine has improved access to care, referrals, contact between providers, and has also reduced unnecessary referrals in these settings. 77, 78

h. In VA system implementation of telepsychiatry programs has resulted in a decrease in patient hospitalization rates of 25%. 140

2 Studies with culturally diverse child, adolescent and adult populations have shown that patient satisfaction equals or exceeds standard care. 1, 8, 9, 14, 12, 14, 16-20, 23, 24, 25, 28, 27, 28, 31, 53, 84, 87, 91, 125, 132

a. Patients feel that they have more choices and control over their care. 30, 54

b. They often prefer telepsychiatry to traditional visits. 11, 41, 62, 80, 88, 113
c. Researchers have reported better results when treating three populations via telepsychiatry.
   i. Children and adolescents with ADHD. 79, 133
   ii. Children and adolescents with autism spectrum disorders. 79, 137
   iii. It is especially helpful in treatment of abuse victims where the clear physical separation can actually facilitate the formation of a therapeutic alliance. 115, 123

a. Students are more likely to disclose clinical information via video than in conventional sessions. 139

b. The new model has provided patients who were previously unable to be treated a sense of freedom, confidence, and understanding of their psychiatric illness 141

c. Physicians, parents and caregivers report a high degree of satisfaction with telepsychiatry. 11, 12, 13, 14, 15, 12, 41, 82, 84, 86, 91, 92, 113, 114, 139

3 Telepsychiatry is more cost-effective and logistically more flexible and adaptable than the old model of care.
   a. Psychiatrist scheduling and transportation
      i. It reduces the time needed to bring the psychiatrist to one or more clinical sites, reducing travel time, which can exceed five hours a day when inter-island flights are required. 30
      ii. It improves scheduling flexibility and increases access to high-quality specialists who usually do not live in rural or medically underserved areas of Hawaii or other states. 131
      iii. It allows the psychiatrist to treat students and consult to school counselors and administrators at more than one school each day. 65, 66, 68, 88, 95, 96, 97, 99, 100, 101
      iv. It reduces the need for both students and providers to travel to appointments. The reduced travel and lodging cost improve the economic feasibility and sustainability of delivering these specialized services. 41, 50, 56, 84, 113, 116, 126
      v. Providers are happy to spend more time providing clinical services and less time traveling to the clinical sites.
      vi. Improves access to specialty and family focused care to populations that have limited access to these through conventional care model such as Autisms. 138
      vii. Scarcity of specialists in rural areas is associated with an increase in the overall cost of specialists’ services. 132 Services rendered via telepsychiatry are cost-effective. 136, 141 It have been shown to reduce overall cost of care by 10% per patient in addition to increasing their access to this specialized care. 1

b. Improved access to psychiatrists gives them the opportunity to provide a broader range of clinical services to the students, counselors and administrators including: consultation-liaison, neuropsychological and competency assessments, diagnostic assessments, IEP participation, Treatment Team meetings, CSP development, and crisis interventions. 55, 85, 86

c. Student scheduling and transportation
   i. It improves appointment attendance. 25, 53, 54, 84
ii. It reduces waiting time for appointments.  

iv. Technology has become more affordable in society today versus even a decade ago, the majority of patients are able to connect to their physician by using their own equipment at home. 141

d. Collaboration with schools
   i. It improves collaboration between psychiatrists, school-based mental health professionals, and teachers. 12, 65, 93, 94, 95, 102, 123, 127, 128
   ii. Communication is easier to maintain between the psychiatrist and the student’s teachers, counselors, and school administrators. 117

c. Parent or guardian involvement and satisfaction
   i. Parents often prefer telepsychiatry because they do not have to arrange time away from work, they do not have to inform their employer about their child’s treatment, and they do not have to spend as much time traveling to the appointments. 11, 116 These factors reduce the resistance to treatment that is often exacerbated by stigma and logistical complications. 113
   ii. Parents often find their inclusion in the treatment sessions to be educational, consultative and therapeutic. 118, 133
   iii. Telehealth improves parent access to training resources for early intervention 117
   iv. Parent satisfaction with Telepsychiatry consultation model is high. 136

f. Economics and the efficient provision of care
   i. Rapid access to psychiatric consultations reduces the need to transfer the student to higher levels of care for crisis evaluation and emergency treatment. This decreases the utilization of emergency department visits, hospital admissions and transfers to acute and residential psychiatric hospital units by up to 50%. 30, 68, 116, 118, 122
   ii. The psychiatrists do not have to be transported to the schools. This increases the time available for clinical services. It also saves the expenses of airline, car rental and hotel costs which are barriers to providing consistent high-quality care. 1, 68, 116

g. Telepsychiatry decreases the stigma often associated with psychiatric care. It improves the confidentiality of patient care, which is especially important to patients living in smaller, rural communities. 55, 109, 111

4 Telepsychiatry is a well-established and accepted method of practicing psychiatry. Clinical studies have demonstrated its efficacy for 60 years. Local and national organizations have embraced telepsychiatry and are publishing practice parameters and documenting its feasibility.
   a. The American Academy of Child and Adolescent Psychiatry established Telepsychiatry Practice Parameters in 2008 after an extensive literature review and expert consensus determined that it was equal or superior to the old model. 129
   b. Ongoing studies at the University of Hawaii, Hawaii Veterans Administration Hospital, and the Tripler Army Medical Center have demonstrated that
telepsychiatry is an effective method to delivering health care to adults, adolescents and children in Hawaii and across the Pacific Rim. 

Reduces suicide rates among suicide attempters. 144

Screening for student athlete concussion remotely 146


10. Starling, J., & Foley, S. From pilot to permanent service: Ten years of pediatric telepsychiatry. 2006; 12, S80–S82.


134. Mohr DC; Ho J; Duffecy J; Reifler D; Sokol L; Burns MN; Jin I; Siddique J: Effect of telephone-administered vs face-to-face cognitive behavioral therapy on adherence to therapy and depression outcomes among primary care patients: a randomized trial. JAMA 2012; 307:2278-2285.
143. Brondbo H, Mathiassen B, Martinussen M, Heiervang E, Ensenken M, Kvernmo S: Agreement on Web-based Diagnoses and Severity of Mental Health Problems in Norwegian Child and Adolescent Mental Health Services