

Title: Telehealth Satisfaction Among Caregivers of Pediatric Psychiatry and Psychology Patients in the Wake of COVID-19

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Introduction: Telehealth, appointments completed remotely through the use of electronic communication technology such as phone calls or video chatting software, has become more important due to the COVID-19 pandemic. Previous studies utilizing telehealth for mental healthcare and behavioral therapy have shown it to be effective and have high rates of patient and caregiver satisfaction (AACAP Committee on Telepsychiatry & AACAP Committee on Quality Issues, 2017; Boisvert & Hall, 2014; Dent et al., 2018). Despite these promising results, telehealth has not been widely implemented, and few studies have examined satisfaction among pediatric and young adult populations with developmental disabilities and/or other psychiatric conditions. The lack of implementation of telehealth is not unique to psychiatry or developmental pediatrics and can be attributed to a myriad of factors such as HIPAA restrictions, differences in insurance coverage and payments, license restrictions when seeing patients out of state, and lack of necessary technical structures or support. Due to the recent COVID-19 pandemic, use of telehealth across all fields has rapidly expanded. On site restrictions at healthcare facilities, coupled with temporary policy changes by the government such as increasing telehealth coverage for Medicare patients, and eliminating the requirement for approved HIPAA secure software have led to an marked increase in implementation of telehealth across the medical system (Makhni et al., 2020). The new widespread use of telehealth can be utilized to further examine patient satisfaction in larger samples. The current study examines caregiver satisfaction with telehealth appointments completed after the onset of COVID-19 at Cincinnati Children's Hospital Medical Center (CCHMC) in the neurobehavioral psychiatry and psychology departments. For the purpose of this study, telehealth will refer to appointments completed remotely using video interfacing technology.

Method: Participants were identified using CCHMC's electronic medical record system. All patients who had telehealth appointments using video conferencing software with neurobehavioral psychologists, clinical counselors, clinical social workers, psychiatrists, or advanced practice nurses starting May 13, 2020 were considered eligible for participation. Each business day, surveys invitations are sent out via email by designated staff to all patients who were seen in eligible visit types the previous business day. The email contains a code, and a link to an otherwise anonymous survey on redcap. No names or identifying information are linked to the codes. The initial survey contained 9 questions pertaining to reason for appointment, frequency of telehealth use, privacy, and satisfaction as well as a field for comments. A later version of the survey added 3 demographic questions including patient's age, diagnosis, and gender as well as a tenth question regarding future preference for telehealth vs in person visits. Survey responses for each question were only evaluated in the subset of surveys that contained responses for that question. This controlled for partially complete surveys and questions not presented due to changes in survey version.

Results: At the time of writing (Oct 2020), 399 responses have been received with 255 from psychiatry, 132 from psychology, and 12 that were not specified. Appointment type was specified in 379 surveys as follows: Psychology Evaluation (n=52), Behavior Therapy Appointment (n=120), Group Therapy (n=9), Medication Management (n=162), Other (n=36). For the subset who answered regarding age (n=124), the average age was 12.9 years and ranged from 2 to 39 years. Of the 104 surveys that included patient's diagnosis the most common diagnosis was Autism Spectrum Disorder (n=63), followed by Attention Deficit/Hyperactivity Disorder (n=24). Other diagnoses listed included but were not limited to Anxiety, Fragile X Syndrome, Down Syndrome, Bipolar disorder, CHARGE syndrome, and Intermittent Explosive Disorder. It should be noted that several responses included multiple diagnoses, and were included in the categories for all diagnoses listed. Of 397 respondents, 93% indicated on a Likert scale that they agreed or strongly agreed with the statement "Overall, I am satisfied with my telehealth appointment". Of 398 respondents, 97% indicated on a Likert scale that they agreed or strongly agreed with the statement "I felt that things were kept in private". Of 397 respondents, 87% indicated on a Likert scale that they agreed or strongly agreed with the statement "I would use telehealth to have my child's provider see us again". Of 392 responses, 93% indicated on a Likert scale that their telehealth appointment was the same, better, or much better in response to the question "How did today's telehealth appointment compare to previous in person appointments?". Of the 123 survey respondents who answered the question "If you

had to choose between telehealth and in person visits, what would you choose?”, 36% chose “Telehealth”, 16% chose “In person”, and 48% chose “Mix of the Two”.

Discussion: Overall, caregivers showed high rates of satisfaction with a large majority agreeing that they were satisfied with their appointments and stating they would use telehealth again. When comparing telehealth appointments to in person appointments, the majority of respondents indicated that their appointment was the same or better compared to previous in person appointments and a majority of respondents indicated they would like to use either telehealth or a mixture of telehealth and in person visits in the future. Results show not only that a majority caregivers are satisfied with the care received, but also that they would like to continue using telehealth as an option in the future. These findings highlight the impact of telehealth in pediatric psychiatry and psychology and make a strong argument for more widespread use outside the scope of the COVID-19 pandemic.

References:

American Academy of Child and Adolescent Psychiatry (AACAP) Committee on Telepsychiatry & AACAP Committee on Quality Issues (2017). Clinical update: telepsychiatry with children and adolescents. *J Am Acad Child Adolesc Psychiatry*, 56(10), 875-893.

Boisvert, M., & Hall, N. (2014). The use of telehealth in early autism training for parents: a scoping review. *Smart Homecare Technology and Telehealth*, 2, 19-27.

Dent, L., Peters, A., Kerr, P. L., Mochari-Greenberger, H., & Pande, R. L. (2018). Using telehealth to implement cognitive-behavioral therapy. *Psychiatric services*, 69(4), 370-373.

Makhni, M. C., Riew, G. J., & Sumathipala, M. G. (2020). Telemedicine in orthopaedic surgery: challenges and opportunities. *JBJS*, 102(13), 1109-1115.

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