

2020 CHILDREN'S
MENTAL HEALTH REPORT

Telehealth in an Increasingly Virtual World



THE CHILD MIND INSTITUTE is an independent, national nonprofit dedicated to transforming the lives of children and families struggling with mental health and learning disorders. Our teams work every day to deliver the highest standards of care, advance the science of the developing brain and empower parents, professionals and policymakers to support children when and where they need it most.

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SPONSORING PARTNER: BLUE SHIELD OF CALIFORNIA

Blue Shield of California and the Child Mind Institute are partnering to provide resources and share the latest research on youth mental health. In addition to this report, the two are collaborating on an upcoming research symposium and the production of digital mental health guides for young people as part of Blue Shield of California's BlueSky youth mental health initiative. youth mental health initiative.

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Telehealth, which uses technology to deliver healthcare, offers an efficient way to support the mental health needs of children, especially those who may not be able to access in-person care.



INTRODUCTION

Telehealth, technology and the coronavirus

Recent technological advances, questions of equity and the spread of the coronavirus have intensified the conversation about how to increase access to healthcare. Children face even more barriers than adults when it comes to obtaining mental health care — especially children in rural, marginalized and low-socioeconomic-status communities.¹

Meanwhile, there is a severe shortage of behavioral health practitioners across the country, including psychiatrists (particularly child and adolescent psychiatrists); clinical, counseling and school psychologists; school counselors; mental health and substance abuse social workers; substance abuse and behavioral disorder counselors; and family therapists.² Partly due to this shortage, children sometimes wait up to a decade between the onset of mental health symptoms and the start of treatment.³

Because of the dearth of behavioral health practitioners, primary care physicians end up providing the bulk of mental health care and psychopharmacological prescriptions — despite their lack of specialist training on evidence-based behavioral treatments. Some research says pediatricians prescribe 85% of all psychotropic medications taken by children, mostly without consulting psychiatrists.⁴

Telehealth, which uses technology to deliver healthcare, offers an efficient way to support the mental health needs of children, especially those who may not be able to access in-person care. Many healthcare providers have advocated for telehealth use for decades, yet insurance companies, practitioners and patients have questioned whether the same quality of care can truly be delivered from a distance.

In 2020, the coronavirus pandemic and resulting stay-at-home orders left children across the country without mental health care at a time when many needed it most. The medical community quickly sprang into action and implemented telehealth broadly across disciplines, challenging many perceived boundaries. In this report, we create a snapshot of the current telehealth landscape for the pediatric mental health care community and present recent research on key questions about telehealth, including:

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- 1.** What are the ABCs of telehealth?

 - 2.** Which child mental health services can be delivered via telehealth?

 - 3.** How effective is telehealth for medication management?

 - 4.** Who benefits from telehealth?

 - 5.** How has the coronavirus pandemic impacted telehealth?

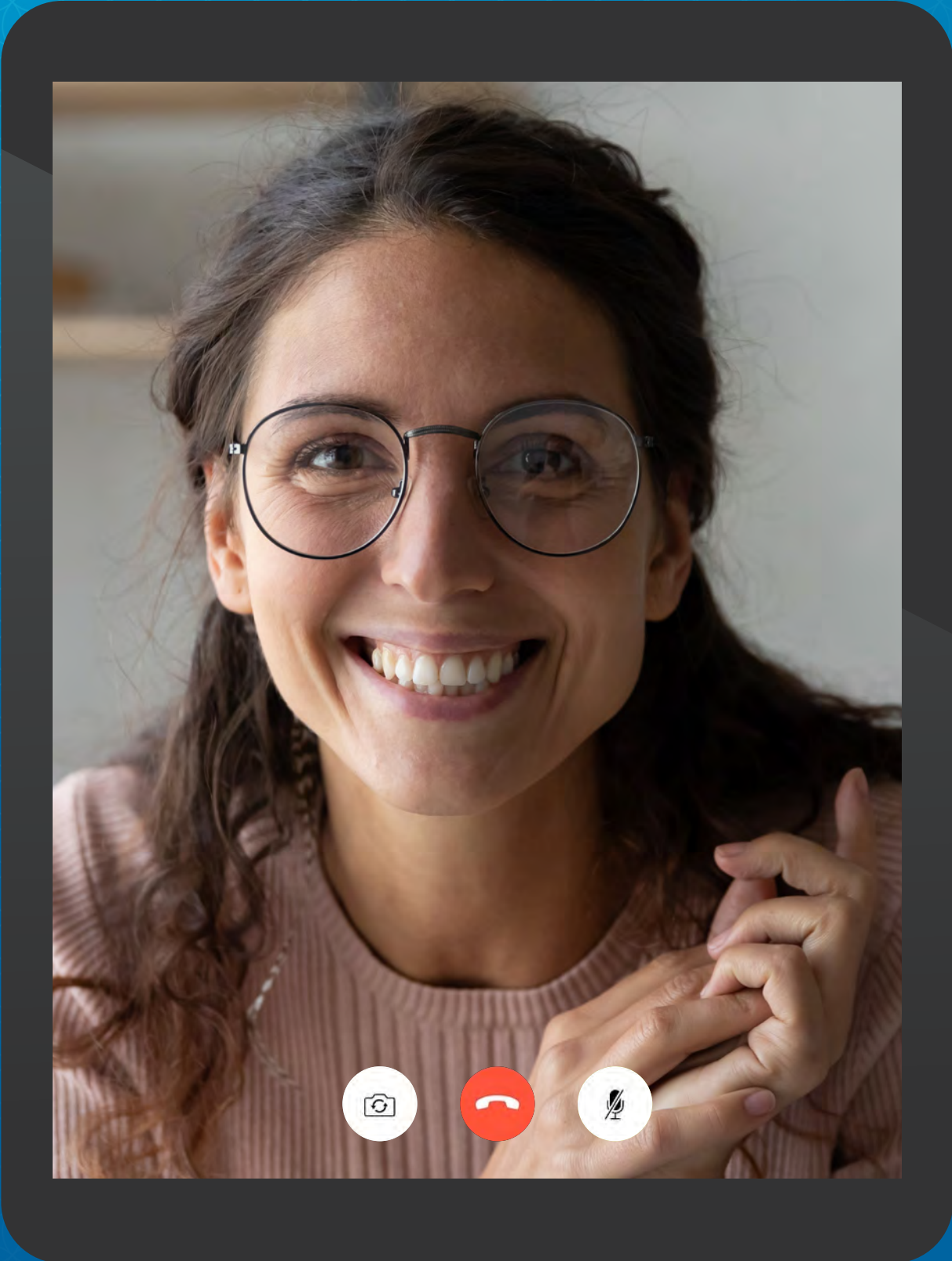
 - 6.** How can practitioners and patients navigate insurance and the law in relation to telehealth?

 - 7.** What are patients' and practitioners' attitudes toward telehealth?

 - 8.** What are the challenges of expanding telehealth access going forward?

We also present the findings of a new Child Mind Institute/Ipsos poll about parents' experiences with and attitudes toward using telehealth for their children. Conducted in September 2020 with a representative sample of 351 American parents who have recently used/sought out mental health treatment for their child, this survey offers unique insights into the rapidly changing landscape of telehealth for children's mental health.

You'll find perspectives from this new survey throughout the report, and you can access the full results at <https://www.ipsos.com/en-us/parents-children-telehealth>.



ONE

The ABCs of telehealth

What is telehealth?

Telehealth⁵ is when a patient and healthcare provider use technology for distanced diagnosis and/or treatment, often because they are unable to meet in person. Telehealth can also work in collaboration with in-person care. The terms telemedicine,⁶ telemental health⁷ and telepsychiatry⁸ are used to refer specifically to remote clinical services (including access to online patient portals). Telehealth is a broader term that encompasses the full range of health-related services including clinical treatment, health education and counseling. It can refer to care for both physical and mental health concerns.

Video calls are the most common medium for telemental health today, but sessions can also happen via phone or even text chat. Just like in-person mental health treatment, telehealth can provide care for individuals, families or groups.

How has telehealth evolved?

Although the coronavirus pandemic has thrust telehealth into hyperdrive, it has been around for decades.

- In 1959, clinicians at the University of Nebraska used two-way interactive television across a short distance for group therapy consultations. By 1964, they created a telemedicine link with the Norfolk State Hospital (112 miles away) to provide services including diagnosis of difficult psychiatric cases.⁹
- The implementation of 911 in 1968 was an early example of using the telephone to access medical care.

- With the rise of the internet in the 1990s, telehealth—especially for mental health—followed suit.¹⁰ Early telehealth technology and related supports were complicated and costly, which limited their use to large hospitals and clinics with ample resources.
- As technology has become more accessible, so too has telehealth, making it feasible for individual practitioners and patients utilizing mobile devices in their homes.¹¹
- Telemedicine visits in the U.S. increased from about 7,000 in 2004 to almost 108,000 in 2013 for rural Medicare users alone — a staggering nearly 1,500% increase.¹²
- In 2018, the World Health Organization (WHO) urged member states to improve and scale up digital health efforts.¹³
- By 2019, 76% of U.S. hospitals reported connecting virtually with patients and consulting practitioners via video and other technology.¹⁴
- The telehealth market is predicted to reach \$266.8 billion by 2026 — up from \$49.8 billion in 2018.

Telehealth has always been conceived as a way to increase access to care, but early on it was primarily used for clinicians to consult with each other. Patients in rural areas with poor access to care could get telehealth appointments with providers at higher-tier hospitals, but they still had to go to their local clinic or hospital (which had to be specifically licensed for secure connectivity) in order to access the remote care. Today, the technology has advanced to the extent that many patients can safely connect with clinicians from the comfort of their own homes.



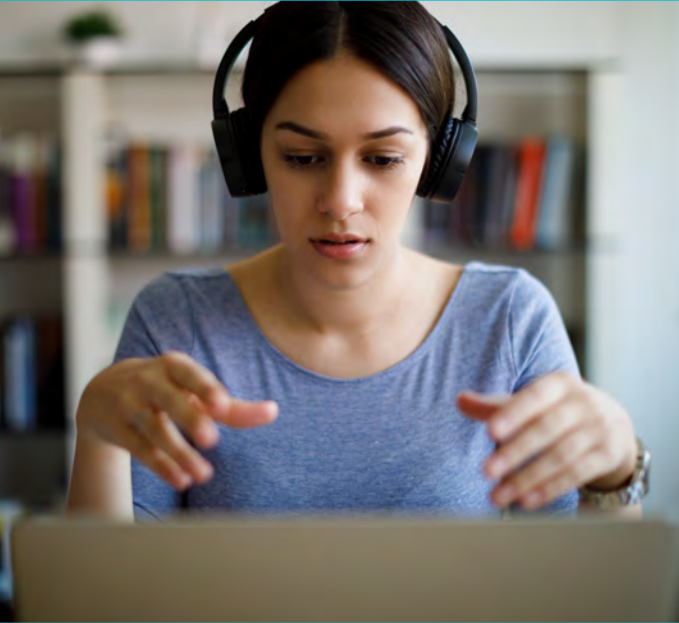
Today, the technology has advanced to the extent that many patients can safely connect with clinicians from the comfort of their own homes.

How does telehealth work?

Telehealth can be provided in many ways. Usually (when we're not in the midst of a pandemic), telehealth complements in-person care. The primary forms that telehealth for children's mental health can take are:

- **Live video:** Synchronous¹⁵ (that is, real-time) audiovisual communication between one or more patients, caregiver(s) or provider(s) via computer or mobile device.
- **Mobile health:** Called mHealth¹⁶ for short, this refers mostly to behavioral intervention technology (BIT)¹⁷ delivered via mobile apps. For mental health this could include apps designed for communication with practitioners' offices and to access health records, as well as commercially available apps that can help with anything from mindfulness to sleep tracking to text-based therapy.
- **Telephone:** Although less common and not always covered by insurance, telehealth via telephone is an option in some cases.
- **e-prescribing:** This allows prescriptions to be filled electronically, rather than through traditional paper or fax methods. Typically, patients must meet in person with the prescribing doctor at least once before e-Prescribing¹⁸ can commence, but in most cases that requirement has been temporarily suspended for the duration of the coronavirus pandemic.¹⁹
- **Store and forward:** An asynchronous mode of telehealth, store and forward allows for data (like videos) and messages to be sent between provider and patient.

Just like in-person care, CBT delivered via telehealth can be used to treat depression, anxiety, stress, eating disorders, post-traumatic stress disorder (PTSD) and more.



TWO

Which child mental health services can be delivered via telehealth?

As telehealth has become mainstream, mental health practitioners have expanded which services they can effectively provide to children and adolescents in a virtual setting. From evaluation and diagnosis to treatment options including cognitive behavioral therapy, telepsychiatry and parent training, young people and their parents have a wide array of treatment options available through telehealth.

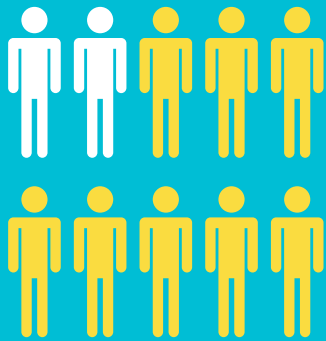
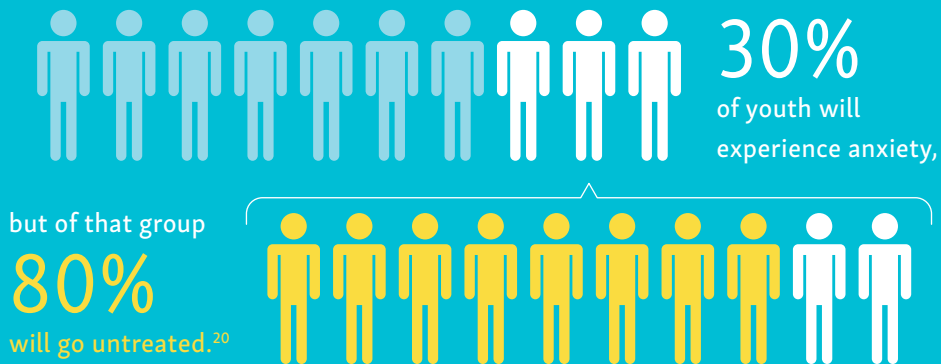
Which mental health disorders can be treated with telehealth?

Some pediatric disorders that research shows can be diagnosed and/or treated via telehealth are:

- Autism spectrum disorder (ASD)
- Anxiety (including selective mutism, separation anxiety, social anxiety and phobias)
- Attention-deficit hyperactivity disorder (ADHD)
- Behavior problems
- Bipolar disorder
- Depression
- Developmental disorders
- Eating disorders
- Obsessive-compulsive disorder (OCD)
- Suicidality and self-harm
- Substance abuse disorders
- Trauma and stress (including post-traumatic stress disorder, or PTSD)

Treatment Gaps and Telehealth

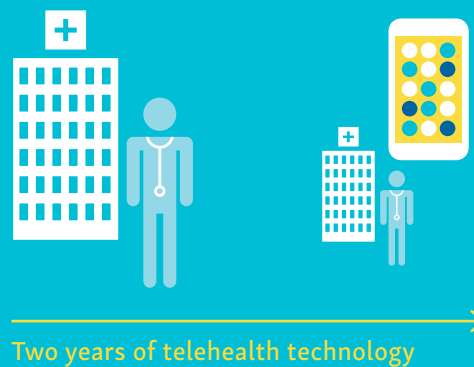
ANXIETY is one of the most prevalent youth mental health issues, yet one of the least treated:



ADHD is one of the most commonly treated disorders through telepsychiatry.²¹ Still, a majority of teens with ADHD do not receive interventions;

in one study 80% of those with childhood ADHD did not receive treatment past age 12.²²

A University of Texas pediatric telepsychiatry clinic was able to **CUT EMERGENCY DEPARTMENT VISITS IN HALF**, based on data from more than 8,000 patients over two years.²³



“The emerging evidence base and clinical experience suggest that teleclinicians can, and do, build rapport and establish a therapeutic alliance during telemental health sessions with youth and families.”

— GOLDSTEIN & GLUECK²⁴

Which mental health services can be delivered via telehealth?

Some of the most common and effective telemental health services for children and adolescents include:

COGNITIVE BEHAVIORAL THERAPY (CBT)

- **User-friendly:** Rates for attendance, treatment completion, and parent and youth satisfaction for a telehealth CBT treatment for youth with autism spectrum disorder and co-occurring anxiety were over 90% in most areas.²⁵
- **Equally effective as in-person:** CBT telehealth treatment for youth has been shown to be as effective — and in some cases even more — as in-person treatment for reducing symptoms of anxiety, depression and OCD.^{26, 27, 28, 29} One 2020 study of trauma-focused CBT (TF-CBT) offered to underserved youth via one-on-one videoconferencing found that 88.6% completed the treatment, and of those, 96.8% no longer met criteria for a trauma-related disorder afterward.³⁰
- **Accessible on the computer or phone:** Computerized CBT (cCBT), also called internet-delivered CBT (ICBT), is cognitive behavioral therapy that is delivered via a series of interactive sessions on a computer or mobile device. cCBT is most often driven by an algorithm that adapts to

the user's responses. cCBT has been shown to have a positive effect on anxiety and depression symptoms in adolescents. There is promise for use of cCBT with younger children as well, particularly with parental assistance.³¹

- **Lasting results:** One randomized controlled trial of cCBT for children ages 8 to 13 with anxiety showed that after treatment, 20% of children in the treatment group no longer met criteria for their primary diagnosis; after three months this number jumped to 50%.³² Another trial of telephone cognitive behavioral therapy (TCBT) for adolescents with OCD compared to standard clinic-based, face-to-face CBT found that the two treatments were equally effective through 12-month follow-up and had similarly high levels of patient satisfaction.³³

MHEALTH

- **The market is flooded:** The mental health apps market is booming — it accounted for \$587.9 million in 2018 and is predicted to increase to \$3.4 billion by 2027.³⁴
- **Results are promising:** Studies of two internet-based chat treatments showed promising results for reducing symptoms of depression in children and adolescents.³⁵
- **But more research is needed:** Though there have been some early positive outcomes, the limited research, lack of oversight and rapid rate of apps being introduced to the market make it difficult to accurately judge the overall efficacy of mHealth for youth.³⁶

PARENT PROGRAMS

- **Treating eating disorders at home:** Teens with anorexia nervosa who received family-based treatment (FBT) via telehealth showed significant improvement on measures of weight, cognition, mood and self-esteem — both at the end of treatment and at six-month follow-up.³⁷
- **Enhancing ADHD treatment:** A preliminary feasibility study of parent-teen therapy for ADHD via synchronous videoconferencing reported high family satisfaction, as well as reduction in symptoms and challenges around organization, time management and planning, as reported by parents and teachers. Therapists said that the telehealth format actually enhanced treatment for 50% of the families.³⁸

- **Screens can help with social skills:** Kids with autism spectrum disorder (ASD) can have a hard time recognizing social cues and engaging in positive social interactions. Kids with ASD who participated in a behavioral intervention program in which they engaged with family members via video chat showed improved social conversation skills in a pilot study.³⁹

SCHOOL-BASED TREATMENT

- **Reaching kids where they are:** School-based health centers (SBHCs) provide on-site care through an interdisciplinary team of health professionals who screen for health conditions as well as depression, anxiety, social skills challenges and ADHD. In 2013–2014, there were an estimated 2,315 SBHCs located across the U.S., 34.6% of which were in rural areas with limited access to mental health care.⁴⁰
- **A big opportunity:** 48% of adolescents get mental health treatment via school counseling, and research indicates that minority adolescents, those enrolled in Medicaid, and those from low-income households are most likely to use school-based services as their primary source of healthcare.⁴¹ Telemedicine has a promising role to play in bringing outside experts to consult with school professionals and students themselves to increase access to care. Currently, approximately 15.8% of rural SBHCs use telemedicine services.⁴²
- **Reducing inequality:** Telepsychiatry programs (including assessment and medication as well as psychotherapy referrals) in Appalachian SBHCs have been shown to reduce overall mental health disparities.⁴³
- **Accessible to everyone:** SBHCs are not only for rural settings. Providers in a 2020 study of telepsychiatry at 25 urban public schools found that telehealth and in-person treatments were equally effective.⁴⁴

SUBSTANCE USE DISORDER PREVENTION, TREATMENT AND RECOVERY

- **Mixed results:** Computerized interventions are one way that clinicians are hoping to use technology to reach teens about substance use. A 2018 meta-analysis of nine studies found that computerized interventions significantly reduced the use of cannabis and other substances for youth.⁴⁵ On the other hand, a brief, web-based program aimed at reducing alcohol use among ninth graders showed modest to no results.⁴⁶
- **Gamification potential:** There are some efforts to turn substance use reduction strategies for teens into games as a supplement to clinical care. One program in 2020, Interactive Narrative System for Patient-Individualized Reflective Exploration (INSPIRE), applies social-cognitive behavior change theory to an engaging and interactive game. Though researchers have yet to report on its effectiveness in reducing alcohol and substance use in adolescents, beta testers from 20 focus groups have found INSPIRE to be believable, enjoyable and relevant.⁴⁷

SUICIDE INTERVENTION

- **The promise of technology:** Although there has been little formal research on the subject as yet, mental health providers who work with suicidal youth and have transitioned to telehealth due to the pandemic have reported that they have been able to provide all of their treatment modalities in a virtual format with positive results.⁴⁸

NEURODEVELOPMENTAL ASSESSMENTS

- **Effective diagnosis:** Research comparing ASD diagnosis using store and forward home video recordings with typical in-person Naturalistic Observation Diagnostic Assessment (NODA) showed they are equally effective diagnostic methods.⁴⁹
- **Earlier interventions:** Telehealth language assessments with elementary school-aged children with autism have shown to be as effective as in-person assessments and can help get them speech-language pathology services faster.⁵⁰

THREE

How effective is telehealth for medication management?

For many families, their pediatrician is the first stop for any physical or mental health-related concerns.⁵¹ Primary care doctors can prescribe psychotropic medications — that is, medications used to treat mental health concerns. In fact, primary care doctors provide more psychotropic medication visits than psychiatrists do in a year.⁵² However, they often feel ill-equipped and overtaxed when it comes to providing mental health treatment.⁵³ Both primary care physicians and their patients can benefit from the input of a psychiatrist, which can be provided via telehealth — either as a one-time consultation or for ongoing care.

Pharmacotherapy is one of the most frequently requested telepsychiatry services. Stimulants and other ADHD medications are the most commonly prescribed psychotropic medications for young people. Other medications for youth include antidepressants for major depressive disorder and anxiety disorders and antipsychotics for bipolar mania and behavioral problems associated with autism.⁵⁴

Considering that only 40% of U.S. counties have even a single psychiatrist (the numbers are even more dire for child psychiatry specifically — there are just 8,300 practicing child and adolescent psychiatrists in the U.S. but more than 17 million kids in need of their care),^{55,56} telepsychiatry has the potential to bridge the gap, giving kids access to expert mental health care and medication management through their PCP.⁵⁷

Telepsychiatry models of consultation

Telepsychiatry applies traditional consultation models to a new medium. There are three major models of consultation now available through telepsychiatry:⁵⁸

- **Direct care:** Psychiatrist is solely responsible for diagnosis and ongoing treatment of patients.
- **Consultation care:** Primary care providers continue to manage care, but the telepsychiatrist can make evaluations and recommendations, including what, if any, drugs should be prescribed.
- **Collaborative care:** A treatment team made up of a local PCP, specialists (local or virtual) and a telepsychiatrist work together to provide holistic care.

COLLABORATIVE CARE: A CASE STUDY

The Michigan Child Collaborative Care Program (MC3)

Through partnerships with the Michigan Department of Health and Human Services, the Michigan Department of Education and local community mental health agencies throughout the state, MC3 provides telephone and video telepsychiatry and behavioral consultations to PCPs and school-based primary care clinics and their patients. The telepsychiatrist doesn't write any prescriptions, but rather recommends medications and dosages, as well as psychotherapy, additional testing, family or school-based interventions or other support services. 97% of enrolled PCPs report being satisfied and/or very satisfied with the program.⁵⁹

Telepsychiatry and psychopharmacology

Medication management via telepsychiatry doesn't just give children and adolescents more access to care. It also grants them access to a higher standard of care, meaning that they are more likely to receive the correct prescriptions with the correct doses in combination with evidence-based psychosocial support. In fact, consultations with psychiatrists via telehealth may reduce medications because of access to better-trained specialists.⁶⁰

Some examples of telepsychiatry and medication management in practice:

- **Decreased medications:** In a telepsychiatry program based in Wyoming (a rural state), an academic center implemented a statewide child telepsychiatry consult service. It successfully led to a 42% decrease in the use of psychotropic medications for children five and under enrolled in Medicaid; the number of children using psychotropic doses of 150% or more above the FDA

maximum decreased by 52%; and 60% of children who were slated to go to psychiatric residential treatment facilities were redirected to alternative community treatment and placements.⁶¹

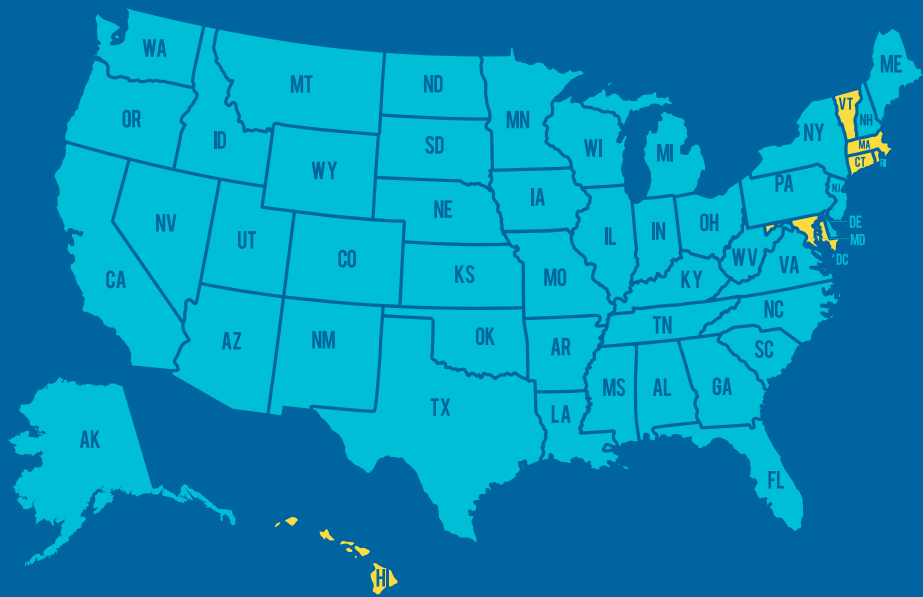
- **Effective for ADHD:** A study of a five-year, community-based, randomized control trial of a rural telepsychiatry consultation program for children with ADHD and ODD that combined video-based psychotherapy, parent training, primary care participation and psychopharmacology found greatly improved symptoms of inattention, hyperactivity-impulsivity and oppositionality.⁶² An examination of that trial concluded that the model had successful outcomes and the telepsychiatrists successfully adhered to guideline-based care and evidence-based protocols, indicating that medication prescription and management via telepsychiatry — in conjunction with behavioral and parental interventions — is effective for children with ADHD.⁶³
- **Helpful for incarcerated youth:** During a 29-month period, 80% of incarcerated youth treated using telepsychiatry visits were successfully prescribed medications.⁶⁴

Prescribing practices and limitations

- **Controlled substances require in-person care:** The Ryan Haight Online Pharmacy Consumer Protection Act of 2008, passed in an attempt to mitigate the opiate epidemic, ruled that in order to prescribe controlled substances over the internet, providers must conduct at least one in-person evaluation first. (This rule covers stimulants like Adderall and Ritalin as well as benzodiazepines like Xanax, but does not include SSRIs like Zoloft and Prozac.) This poses a challenge to telepsychiatry, especially as it pertains to providing medication initiation and management to individuals who already lack access.

Nationwide Shortages of Child and Adolescent Psychiatrists

Research from the American Academy of Child & Adolescent Psychiatry shows that every state in the U.S. is experiencing either a high shortage or a severe shortage of practicing child and adolescent psychiatrists (CAPs).*



■ Mostly Sufficient Supply ■ High Shortage (18–46) ■ Severe Shortage (1–17)

* American Academy of Child & Adolescent Psychiatry. (2019, April). Workforce issues. Retrieved September 30, 2020 from https://www.aacap.org/AACAP/Resources_for_Primary_Care/Workforce_Issues.aspx

- **Telepsychiatrists can make recommendations to PCPs:** Though the Haight Act limits prescribing in a direct care model, many telepsychiatrists participate in a consultation model with PCPs. In these cases, the telepsychiatrist can recommend medication and have the PCP write those prescriptions.⁶⁵
- **Non-controlled medications don't have the same limitations:** Prescribing non-controlled medications via telepsychiatry can be done via e-prescribing, calling prescriptions into the pharmacy or sending hard copies directly to the patient or pharmacy.⁶⁶
- **Psychiatrists are pushing for regulatory changes:** Individual state licensing requirements create barriers for psychiatrists who want to provide telehealth in multiple states. A national licensing standard would change this.⁶⁷



FOUR

Who benefits from telehealth?

There has been a crisis in children's mental health care for decades, since well before the coronavirus pandemic brought stark inequalities around the country into focus. Two-thirds of children in need never get care.⁶⁸ Nearly 60% of U.S. counties don't have a single psychiatrist; within rural communities, only 20% have a psychiatrist.⁶⁹ And there are even fewer child and adolescent psychiatrists — about 8,300, compared with over 17 million kids in need.⁷⁰ In areas with a shortage of mental health professionals more broadly, 61% are rural or partially rural.⁷¹

While a huge number of children never receive the mental health services they need, of those who do there is also a gap in quality of care. For those who eventually do obtain treatment, it is all too frequently not grounded in holistic, evidence-based practices and may be delivered by general practitioners with little specific mental health training.⁷²

Telehealth has the potential to expand access to quality care, benefitting countless kids.

Barriers to traditional mental health care

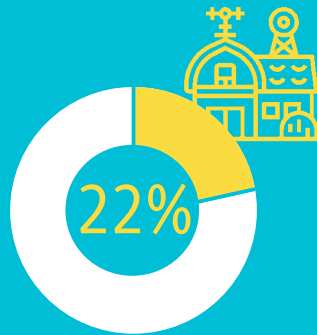
Besides provider shortages, there are many barriers preventing millions of kids from getting the mental health services they need.

Some of the biggest hurdles and limiting factors include:

- **Location:** Children living in rural areas have a harder time accessing mental health care services than their urban counterparts. This can be attributed in part to geographic isolation, provider shortages and higher rates of poverty. Transportation is often cited as one of the greatest limiting factors for accessing care within this population.⁷⁴
- **Time:** In addition to the challenge of physically getting to appointments, the amount of time it takes — including travel to a facility and the time commitment of sessions themselves — can present a challenge for working parents.⁷⁵
- **Stigma:** Seeking and receiving mental health treatment still comes with a great deal of stigma for some racial and ethnic groups, which can discourage families from seeking care for their children.⁷⁶

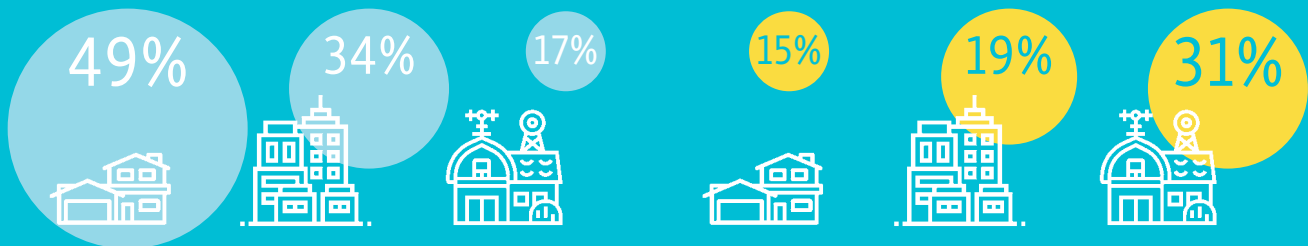
Geographic isolation and higher rates of poverty can be barriers to care for children in rural communities. These challenges affect huge numbers of children in the United States.⁷³

RURAL YOUTH



The majority of U.S. counties are rural. 22% of youth live in rural counties.

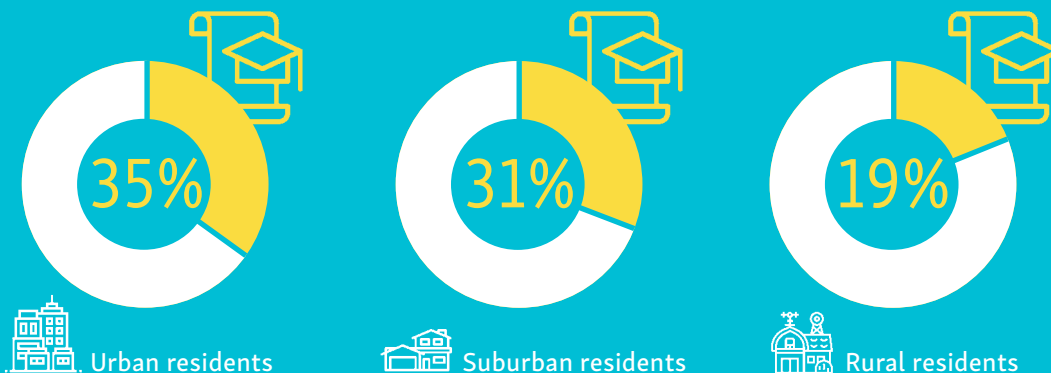
POPULATION OF POVERTY



About half the U.S. poor population (49%) lives in suburban and small metro counties, while 34% live in cities and 17% in rural areas.

But looking at the share of counties where at least a fifth of the population is poor — a measure known as **CONCENTRATED POVERTY** — rural areas are at the top. About three in ten rural counties (31%) have concentrated poverty, compared with 19% of cities and 15% of suburbs.

EDUCATION: ATTAINED BACHELOR'S DEGREE OR HIGHER



- **Long waitlists:** Even in urban areas, families often face long waitlists for mental and behavioral health care, which contributes to delays in diagnosis, intervention and long-term treatment.⁷⁷

How telehealth can help bridge gaps

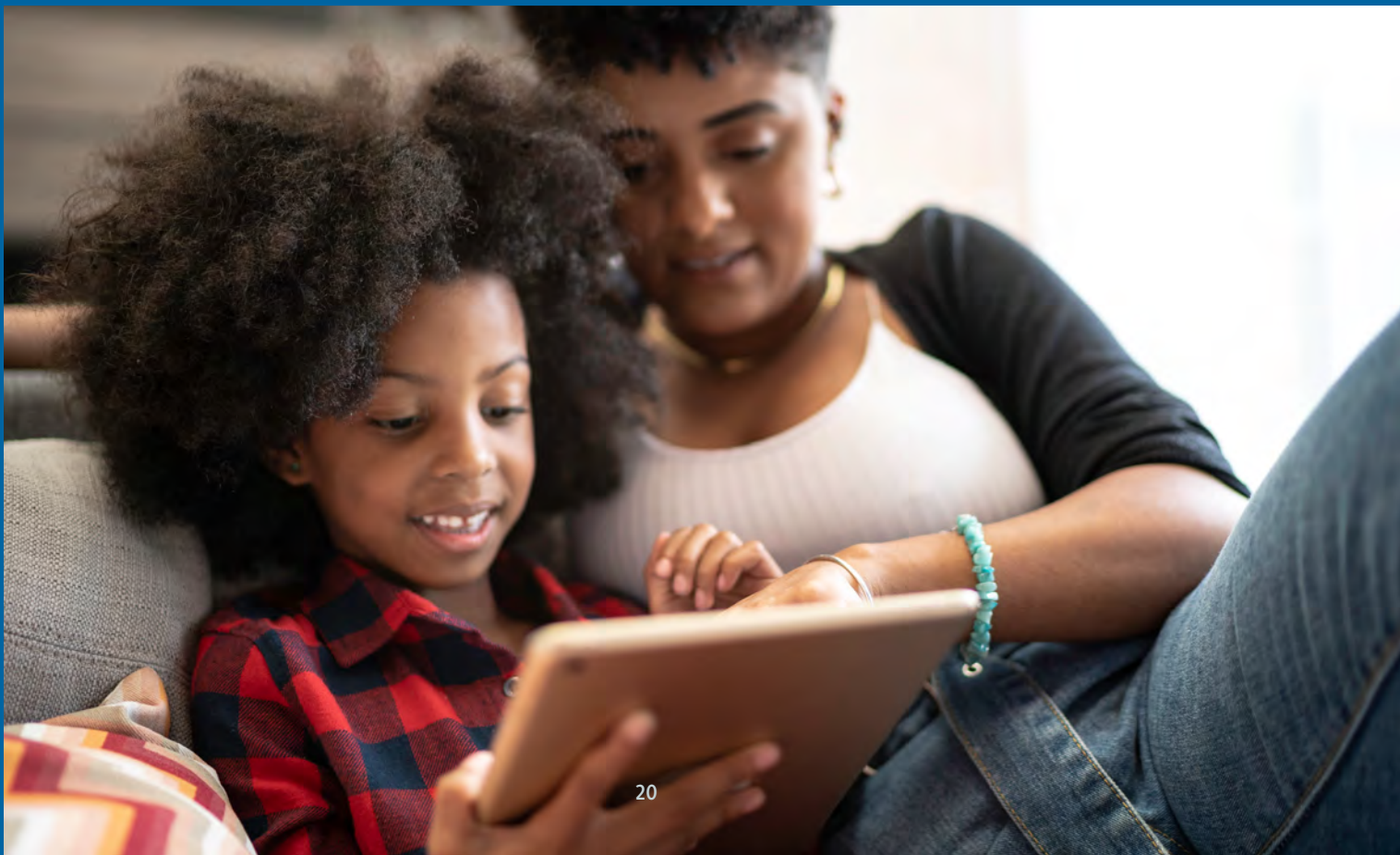
- **Solving problems of transportation and time commitment:** When patients can access telehealth from home, it has been shown to increase regular attendance at individual therapy sessions since it removes all the roadblocks associated with physically getting to appointments.⁷⁸
- **Reducing stigma:** By removing any stigma or perceived stigma of going to a mental health office — such as fear of being seen by someone they know — telehealth can remove at least one barrier to mental health treatment.^{79, 80}
- **Sidestepping waitlists:** Telehealth can help speed up diagnosis and treatment by connecting individuals with available providers in different areas.⁸¹
- **Homeless youth:** Nearly 2 million youth experience homelessness every year in the U.S. They have a higher prevalence of mental health conditions than their peers, including depression, conduct disorders, post-traumatic stress disorder, suicide attempts and ideation, and substance abuse.⁸⁶ A majority of homeless youth today have a mobile device and frequent internet access (which they report using often to search for health-related information), which makes telehealth a promising possibility.⁸⁷
- **Incarcerated youth:** Telehealth and telepsychiatry have been shown to increase treatment time and efficacy for youth in juvenile detention.⁸⁸
- **Shy or anxious youth:** Some researchers have posited that the screen-based format of video telehealth may actually be more successful than in-person mental health care for certain groups. It provides a viable alternative to in-person care for children and adolescents with social anxiety or phobias that make it difficult to leave the house. Some children may be less inhibited or more expressive via telehealth, while youth with chemical dependency issues or trust issues after abuse may be more comfortable and willing to share.⁸⁹

Who can benefit from telehealth?

Telehealth holds particular promise for children in marginalized, rural, low-income or high-risk groups and communities, all of whom have particularly limited access to traditional healthcare:

- **Rural residents:** Because telehealth removes so many practical barriers for rural residents, many initiatives prior to the pandemic focused on this population. And data shows that it is effective: there are high fidelity and satisfaction ratings from rural telehealth users,^{82, 83} and according to the CDC, the number of telemedicine visits increased from just over 7,000 in 2004 to nearly 108,000 in 2013 among rural Medicare recipients alone.⁸⁴
- **Youth of color:** Racial health disparities are well documented regardless of location. For instance, Latinx youth (particularly girls) experience far more trauma than their white peers but have much less access to care. Telehealth has been shown to be effective in removing barriers and providing effective, quality care to marginalized groups that typically have less access to care.⁸⁵

While telehealth *can* have immense benefits for these groups, that doesn't always mean that it does benefit them in practice. As we discuss in section eight, there are a number of structural, systemic and pragmatic challenges — such as racial bias, unreliable internet and insurance issues — that can still prevent telehealth from reaching those who could benefit the most from it.



FIVE

Telehealth and the coronavirus

While research and advocacy for remote healthcare have been slowly gaining momentum over a number of years, the coronavirus pandemic has brought on a watershed moment for telehealth. The ability to connect virtually has allowed physicians and mental health professionals to provide new care and continue pre-existing treatment when traditional, in-person care is less available — during a time when many need it most.

Many providers and patients have adapted quickly, swiftly adopting new technologies and adjusted protocols. The foundation of research demonstrating the efficacy of telehealth coupled with this new widespread use has shifted public perception around whether mental health diagnosis and treatment need to happen in person. Temporary emergency measures adopted by government agencies and insurance companies have reduced barriers to telehealth and demonstrated just how successful widespread telehealth can be with the right frameworks in place.

Since March, there has been an unprecedented increase in the use of telehealth across all specialties:

- Within one month of coronavirus shelter-in-place orders, telehealth utilization at Stanford Children's Health increased by 600% to nearly 17,000 visits.⁹⁰
- Prior to COVID-19, Children's Hospital of Philadelphia (CHOP) had telehealth infrastructure in place but had only 5 to 10 telemedicine visits daily across the entire

hospital, primarily because of lack of insurance reimbursement. When the adolescent medicine specialty clinical program scaled up its telehealth program in response to the pandemic, they found that though they saw hundreds of patients, there were far fewer no-shows for remote care than there had been for in-person care, both during the month previous and the same time frame the previous year.⁹¹

Popular perceptions of telehealth have also shifted since the start of the pandemic:

- In a recent survey, 57% of providers reported viewing telehealth more favorably than before the coronavirus and 64% report that they are now more comfortable using it.⁹²
- Meanwhile, the majority of behavioral and primary care providers (93% and 62%, respectively) predict that they will continue to conduct more telehealth visits after the pandemic.⁹³

As the next chapter details, some of the biggest ways the coronavirus has impacted telehealth have been through changes — both temporary and permanent — to insurance and the law.

Telehealth usage and parent concerns during the coronavirus crisis

Our new Child Mind Institute/Ipsos poll indicates that telehealth is a popular option for parents seeking mental health support for their children during the pandemic.

- **Telehealth over in-person care:** Seven in ten (69%) parents who have a child for whom they sought out mental health treatment in the past 12 months have used telehealth services when addressing their child’s needs in the past. Another 14% tried to access telehealth but did not end up using it, while 17% have never tried nor used this form of treatment for their child’s mental health or learning issues.
- **Especially during the pandemic:** Among those who have used or tried to use telehealth services for their child’s mental health treatment, 75% say that they have used these services for their child since the start of the pandemic. Another 23% tried to use telehealth but did not follow through with treatment.
- **Mostly continuing care:** Most parents who used or sought telehealth treatment for their child since the start of the pandemic say that their child was already working with the same professional in person (84%). Three-quarters of parents (76%) used a referral from a doctor to find a mental health professional to provide telehealth services to their child.
- **Convenient and private:** 83% of parents say that convenience is an important consideration when making decisions about mental health appointments — and another eight in ten agree that telehealth appointments are more convenient than going to in-person appointments. For just as many (79%), the ability to access mental health care in the privacy of their own home is important.

The majority of parents who have recently used/sought out mental health treatment for their child have turned to telehealth services

Convenience is key when making mental health appointments, and 80% agree telehealth services are more convenient than in-person appointments



69%

of parents have used telehealth services for their child’s mental health/learning issues

To what extent do you agree or disagree with the following statements?

Percent strongly/somewhat agree

Convenience is an important consideration for me when making mental health appointments/decisions.

83%

Telehealth appointments (e.g., video conference, phone) are more convenient than going to in-person appointments.

80%

The ability to access mental health care in the privacy of my own home is important to me.

79%

Full survey results available at: <https://www.ipsos.com/en-us/parents-children-telehealth>

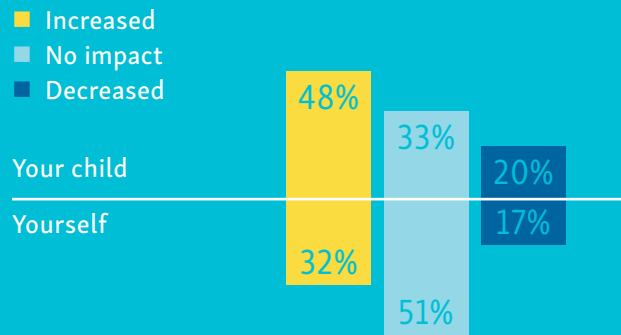
What's more, the survey indicates that, according to their parents, children need mental health treatment now more than ever.

- **Increasing concerns:** Nearly half (48%) of parents surveyed say that the pandemic has increased their desire/need to seek mental health care for their child. The mental health of parents is not as likely to have been negatively impacted, though a third (32%) also say their desire/need to seek mental health care for themselves has increased in light of the pandemic.
- **Significant challenges:** 78% of parents agree that social distancing and less in-person contact have been difficult for their child, and the same percentage report that their child has experienced increased feelings of sadness, anger or worry during the pandemic. In both cases, more than a third of parents strongly agree.
- **Health and well-being at stake:** During the pandemic, more than two-thirds of parents have witnessed a decline in their child's emotional well-being (72%), behavior (68%), and physical health due to decreased activities/exercise (68%).
- **Anxiety and depression are most common:** Anxiety (40%) and depression (37%) are the most common mental health challenges leading parents to seek telehealth services for their child. Seeking help for problem behavior (30%), ADHD (30%) or learning challenges (23%) was also common.
- **A variety of treatments:** Talk therapy (49%) is the most common service parents have accessed or sought out through telehealth for their child, though a third of parents who have used/tried to use telehealth since the start of the pandemic also report accessing/seeking out psychiatric medication consultation (32%) and/or cognitive behavioral therapy (31%).

Desire/need to seek mental health care during pandemic more likely to have increased for children

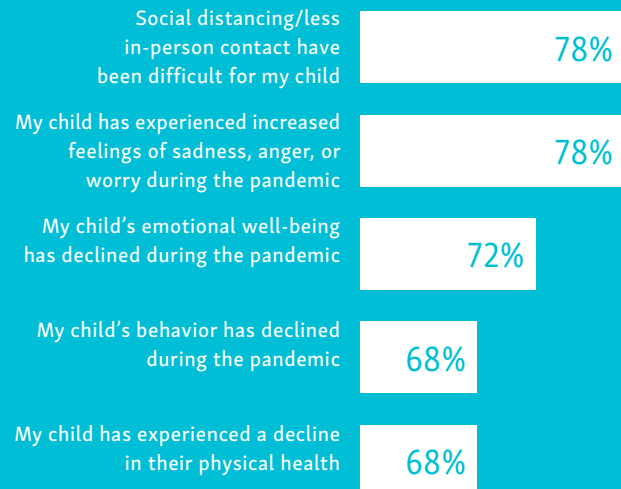
Many report a decline in their child's emotional well-being, behavior and physical health during this time

How has the coronavirus pandemic impacted your desire/need to seek mental health care for your child or yourself, if at all?



Please rate your level of agreement with the following statements about your child's mental health.

Strongly/somewhat agree



Full survey results available at:
<https://www.ipsos.com/en-us/parents-children-telehealth>

SIX

Navigating telehealth, insurance and the law

Insurance and legal issues regarding telehealth are so convoluted and rapidly evolving that it can be difficult for providers and patients alike to figure out what is legally permitted and what is covered by insurance. According to the CDC, “regulation varies considerably because each state defines telemedicine services differently, and these definitions determine the services that qualify for reimbursement under Medicaid and private insurance.”⁹⁴ If care spans state borders, these differences between state regulations make insurance and legality questions even trickier.

As of February 2020, all 50 states reimbursed at least partially for live video sessions and had some form of Medicaid reimbursement (although in many cases new telehealth policies were not yet incorporated into Medicaid coverage). Store and forward was covered in 16 states and telehealth substance use disorder services were just beginning to see expanded coverage and guidelines.⁹⁵ Even when telehealth is covered by insurance, it is not always reimbursed at the same rate as in-person services. This can be a major deterrent to providers who lack a financial incentive to adopt telehealth services and has been a major challenge in sustaining rural telehealth programs in particular.

In March 2020, everything changed.

As the coronavirus pandemic unfolded, the medical and mental health professions adapted at breakneck speed, offering telehealth alternatives for most specialties. Following suit, the U.S. Department of Health and Human Services (HHS) approved the use and insurance reimbursement of telehealth as part of the Coronavirus Preparedness and Response Supplemental Appropriations Act.

New insurance permissions during the pandemic include:

- Most Medicare payment requirements were waived and patients were able to access remote care, regardless of their location.⁹⁶
- Telehealth services were charged and reimbursed at the same rate as in-person services.⁹⁷
- Some HIPAA exceptions were granted for providers when FaceTime or Skype was used to communicate with patients.⁹⁸
- The March coronavirus National Emergency Declaration temporarily waives Medicare and Medicaid requirements that providers be licensed in the state where they are providing services.⁹⁹

Though the United States remains deeply affected by the coronavirus, many emergency measures that were enacted are temporary. Private insurance companies have mostly stopped offering telemental health visits with no copay, while national measures are in place only until the emergency declaration expires. But many are now advocating to make measures that increase access to telemental health permanent; it appears that we are on the precipice of major legislative shifts regarding telehealth.

Legislative pushes to maintain and expand telehealth coverage

- Since May, dozens of telemedicine bills have been brought to the House and Senate floors,¹⁰⁰ such as the coronavirus Telehealth Extension Act¹⁰¹ and Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act of 2019.¹⁰²
- A Taskforce on Telehealth Policy was formed in June by a coalition of public, private and nonprofit providers, consumer advocates and health quality advocates to lobby for more permanent, high-quality, accessible telehealth care and coverage.¹⁰³
- In August 2020, Tennessee passed a law requiring insurers to cover telemedicine at the same rate as in-person care indefinitely.¹⁰⁴

Licensing

Licensing can also present restrictions to the expansion of telehealth, since each state has its own licensure requirements for healthcare professionals (including physicians, psychiatrists, psychologists, social workers, nurses and pharmacists) who practice within their borders. Although telemedicine could theoretically allow specialists to provide care anywhere in the country, licensing considerations make this a challenge in practice.

Some requirements have been eased or suspended during the pandemic, and some states are beginning to adopt broader rules for the long term:

- Eight states accept conditional or telemedicine licenses from out-of-state physicians and specialists.¹⁰⁵
- Three states have created registries that allow qualifying out-of-state physicians to practice with patients who live in those states.¹⁰⁶
- Eighteen states have adopted the Federation of State Medical Boards' compact, which "enforces an expedited license for out-of-state practice" for doctors (including psychiatrists).¹⁰⁷
- Other licensing agreements between states are being developed to encompass other mental health professionals.¹⁰⁸



SEVEN

Attitudes toward telehealth

While insurance and billing complications have been major pragmatic barriers to broad adoption of telehealth, attitude also plays a role. But youth being treated today and young clinicians in the mental health field are digital natives who have a higher baseline of comfort with technology, which holds promise for the future of telemedicine in child and adolescent mental health.

There tends to be a distinct difference in attitude between those who have used telehealth services before and those who have not. A study of rural mental health clinicians found that the more they knew about telehealth and the technology, the more likely they were to have a positive opinion of it. It stands to reason that as technology in the home becomes more advanced and as clinicians and patients alike become more familiar with telehealth, the more they will trust it.¹⁰⁹

Concerns about telehealth:

- On the provider side, clinicians tend to be concerned about practical issues like security, workflow integration, effectiveness and reimbursement.¹¹⁰ Indeed, a recent survey of 100 rural mental health clinicians found that while 89% said they viewed telehealth favorably or at least neutrally, they still had concerns about software and equipment usability, associated costs, privacy and effectiveness compared with in-person treatment and the ability to establish a therapeutic alliance.¹¹¹

- On the patient side, a coronavirus-era McKinsey survey found that while 76% of consumers say they are interested in telehealth, only 46% are actually using it. The biggest reasons for this gap include lack of awareness about telehealth offerings and confusion over insurance.¹¹²

Positive attitudes toward telehealth:

- Youth today are so comfortable with technology that telehealth often isn't a big leap for them, and in fact it can feel more comfortable than face-to-face care. Clinicians at the UC Davis Medical Center Telepsychiatry Program have found that children and adolescents tend to have a positive view of the virtual modality. Some of their patients have said that videoconferencing makes it feel more fun or even like a video game, while others say the physical distance helps them feel less judged. UC Davis clinicians report that video sessions with youth with ASD and ADHD actually go better via video.¹¹³

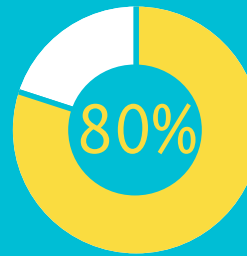
- For mental health providers, being able to catch a glimpse of the patient's home environment can be illuminating and provide authentic context in a way that a clinical office setting cannot.¹¹⁴
- When it comes to practitioner attitudes toward telehealth since the pandemic, those in the fields of behavioral and mental health are the most positive: 76% of behavioral health specialists report that they are satisfied with telehealth. Within that group, 84% of psychiatrists, 74% of clinical psychologists/social workers/therapists, and 70% of alcohol/drug addiction managers report being content with the modality.
- Two years after the University of Texas began developing pediatric telepsychiatry clinics, a vast majority of parents (89%) said telehealth made it easier for their child to receive specialist services, and more than 60% reported significant improvements in their child's behavior or symptoms.¹¹⁵

Patient perspectives on telehealth during the coronavirus crisis

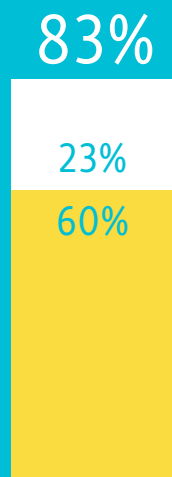
Our new Child Mind Institute/Ipsos poll reflects the growing acceptance of telehealth as a viable option for mental health treatment.

- **Open to telehealth:** Most parents would be open to using telehealth treatment if they could not access in-person mental health treatment for their child (80%), including half who strongly agree. Among those who have used telehealth services since the start of the pandemic, 85% plan to continue telehealth sessions for their child in the near future.
- **Especially during the pandemic:** Most parents say that they would be more likely to use a telehealth provider instead of an in-person provider if they wanted to bring their child to a mental health professional today (57% vs. 11% who would be less likely).
- **And possibly afterward:** Just under half of parents surveyed (48%) say they would be more likely to bring their child to a telehealth provider instead of an in-person provider if they wanted to bring their child to a mental health professional after the effects of the coronavirus pandemic have passed.

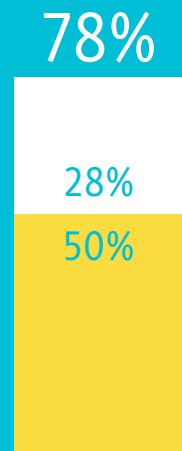
Most parents who have used telehealth services since start of pandemic plan to continue these sessions into the future



of all parents surveyed would be **OPEN TO USING TELEHEALTH** if they could not access in-person mental health treatment for child



83% of parents* would be likely to continue using telehealth services during pandemic, even with option of receiving in-person services for child



78% of parents* likely to continue using telehealth services after the coronavirus pandemic ends

■ Extremely likely ■ Very likely

* Parents of children who have used telehealth services since start of the pandemic

Full survey results available at: <https://www.ipsos.com/en-us/parents-children-telehealth>

- **Telehealth users plan to stick with it:** Among parents who have used telehealth services since the start of the pandemic, 83% say they are likely to continue using these services during the pandemic — and 78% say that they are likely to continue using telehealth services after the coronavirus pandemic ends.

Among those who have used telehealth services since the start of the pandemic, opinions and experiences are overwhelmingly positive.

- **Benefits for kids:** 85% of parents who have used telehealth since the start of the pandemic say that their child has benefitted from these services and 84% say that the experience of participating in telehealth sessions has been positive for their child. More than three-quarters (78%) also report seeing a significant improvement in their child's symptoms since starting telehealth treatment.
- **Recommended by parents:** Nearly nine in ten parents (87%) would recommend using telehealth services for children with mental health or learning challenges.
- **Barriers remain:** Among parents who have not used nor tried to use telehealth since the pandemic, a third (34%) have considered seeking telehealth treatment for their child's mental health since the start of the coronavirus pandemic. Among those who have considered treatment, 44% say that their child's lack of cooperation stopped them from following through. One in four also mentioned concerns about costs (26%) and inability to find appropriate professionals (26%) as reasons for not seeking treatment.

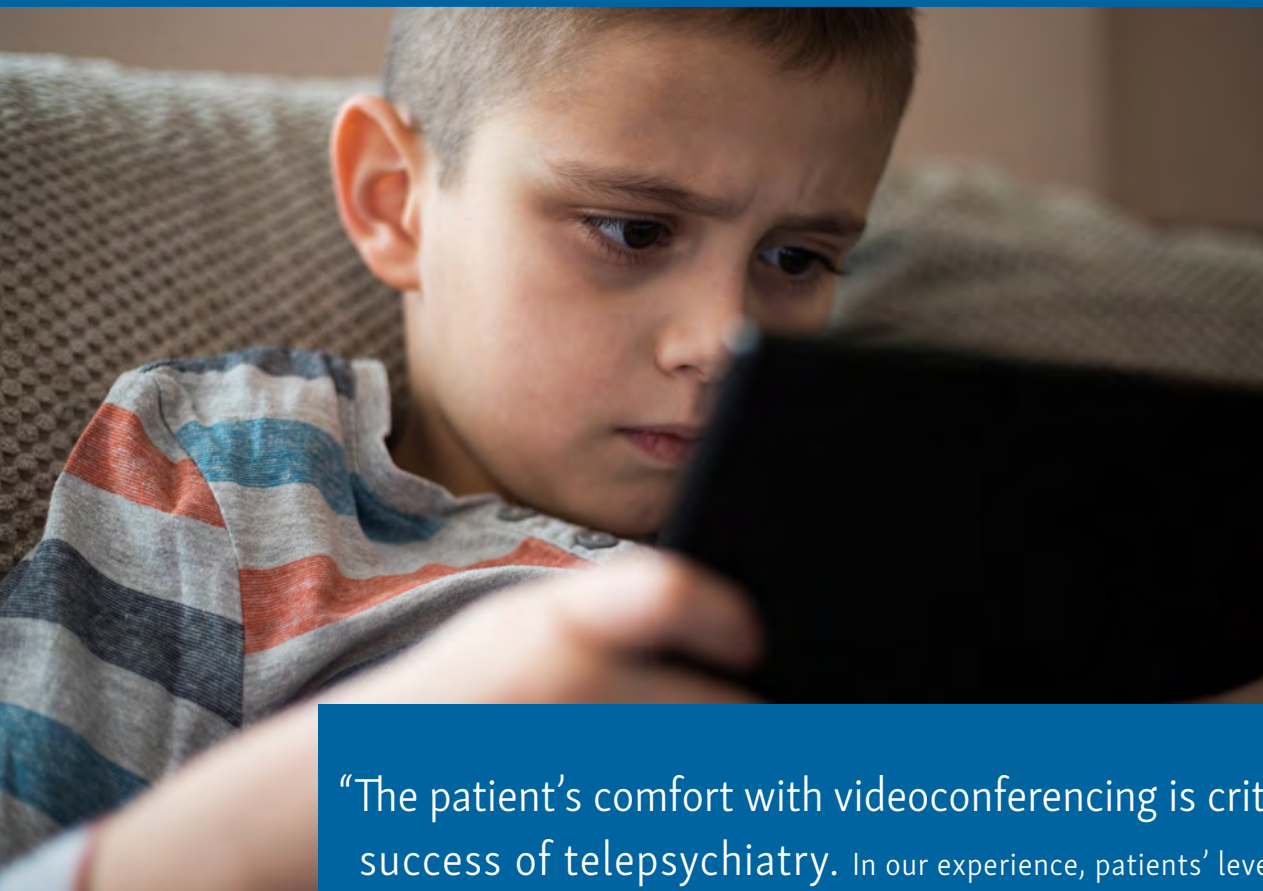
PARENTS WHO HAVE USED TELEHEALTH REPORT POSITIVE EXPERIENCES FOR THEIR CHILDREN...

“My son really enjoys being able to sit in his room and have therapy, not having to get on the bus and then walk to the appointment.”

...AS WELL AS SOME CHALLENGES.

“It's difficult for her to understand what's going on and why, when speaking to the psychologist. Not interacting with her behavioral specialist has decreased her ability to apply learned skills to real life.”

Full survey results available at:
<https://www.ipsos.com/en-us/parents-children-telehealth>



“The patient’s comfort with videoconferencing is critical to the success of telepsychiatry. In our experience, patients’ level of comfort with videoconferencing is related to their past experience with technologies such as videoconferencing, the internet, computers and mobile phones. Exposure to technology seems to be related to age and education: younger patients and those with higher levels of education have had greater exposure to these technologies and are therefore likely to display greater comfort with telepsychiatry.”¹²⁶

EIGHT

Challenges of telehealth

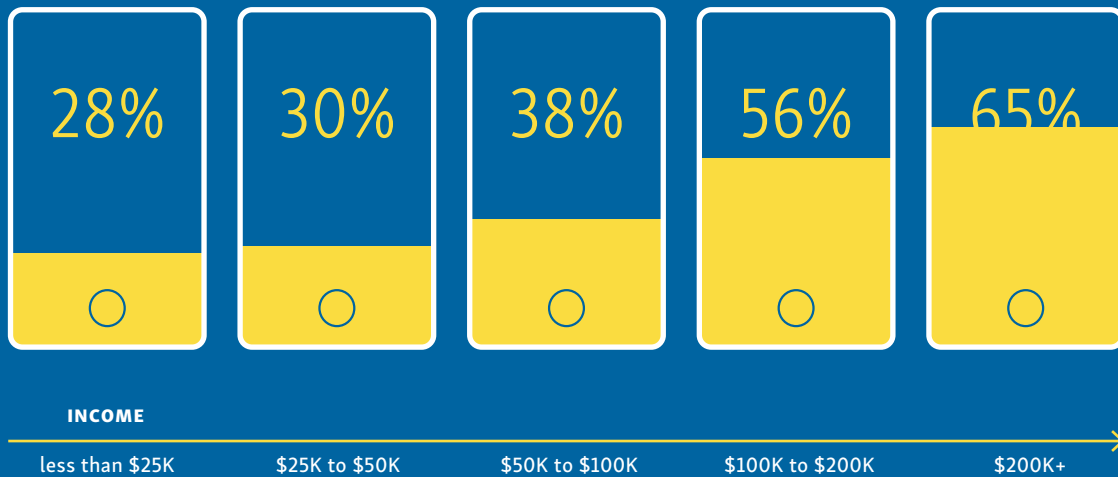
Despite the increasing body of research pointing to the promise and efficacy of telehealth in general and for children and adolescents specifically, many challenges and obstacles remain.

Pragmatic challenges:

- **Insurance:** Insurance is a big piece of the telemedicine puzzle, and confusing or outdated policies can discourage providers from offering it and patients from seeking it. For the 4.3 million children with no health insurance coverage (5.5% of children under the age of 19), barriers to care are even greater.¹¹⁶
- **Internet:** Although telehealth can sometimes be utilized via telephone, most of the time it requires the internet. This presents a challenge for the 19 million Americans who don't have access to broadband¹¹⁷ at even minimum speeds — 14.5 million of whom are without internet of any kind at all.¹¹⁸ Rural and tribal areas in particular have even less access to the internet. Increasingly, advocates are making the case that lack of high-speed internet is a public health issue and that we can't increase access to one without the other.¹¹⁹
- **Privacy:** Telehealth brings with it concerns over privacy, both in terms of HIPAA compliance and data safety.¹²⁰ "Surveillance capitalism" is particularly troubling for youth because consumer data can be digitally collected without clear consent, which runs the risk of patient-provided data assets being unethically monetized.¹²¹
- **Safe space:** Even something as seemingly simple as finding a safe space or private environment in which to access telehealth can present a critical challenge for patients.¹²²
- **Quality control:** So many health-related apps have flooded the market that there is currently a lack of quality control for commercial mHealth services, in part because the technology develops faster than research can keep up.¹²³
- **Costs:** Expanding telehealth services can be a challenge to providers because of the costs of equipment, installation and rental of telecommunications lines; purchasing, maintaining and upgrading equipment; increased salary and administrative expenses for training or hiring dedicated staff; and more.¹²⁴

Income Level and Telehealth Use

According to a recent survey, only 28% of respondents who make less than \$25K, 30% of those earning \$25K to \$50K, and 38% of people who make \$50K to \$100K have used telehealth services. In contrast, 56% of people who earn \$100K to \$200K and 65% of those making \$200K+ have used these services.¹²³



- Special populations:** Telehealth can be particularly challenging with young children, those with severe developmental delays, or youth with severe mental health or behavior challenges. These populations may have a hard time participating effectively in telehealth sessions and interacting with the technology.¹²⁵
- Racial bias:** While telehealth has the potential to bring greater access to care, it does little to address the implicit biases of clinicians. In a study of 2005–2007 Medicaid data from Texas, both Hispanic people and Black people were approximately 30% less likely to receive adequate treatment compared to their white counterparts.^{127, 128}
- Income disparities:** Despite the promise of telehealth to reach underserved communities, those in the highest income brackets are still the ones with the greatest access and highest rates of use.
- Culture clash:** A telehealth provider’s lack of knowledge of local cultural norms can present a challenge when trying to establish rapport and develop an effective treatment plan.¹³⁰

Systemic challenges:

The great promise of telehealth is that it increases access to care, but currently, that promise sometimes goes unfulfilled in crucial ways. These include:

- Comfort levels:** Telemental health relies on a certain comfort level with technology, which not all families have. While children and adolescents are typically more comfortable, their parents — who need to sign off telehealth — may not be.



“Majorities of urban and rural residents alike say that people who don’t live in their type of community have a very or somewhat negative view of those who do (63% in urban and 56% in rural areas). About two-thirds or more in urban and rural areas (65% and 70%, respectively) also say people in other types of communities don’t understand the problems people in their communities face.”¹³¹

CONCLUSION

The future of telehealth for children's mental health care

Will the enthusiasm for and use of telehealth remain after the coronavirus ends? Can pediatric telemental health overcome its hurdles and fulfill its promise of democratizing access to mental health care?

The tide is starting to turn. Dozens of telemedicine bills have been brought to the House and Senate floors.¹³³ The technology and infrastructure are better developed than ever before. Previously resistant practitioners have started to adapt. And there will likely be less resistance to the idea of telehealth among youth, who are all digital natives and far more comfortable with technology than any legislator. It is our youth who will shape the future.

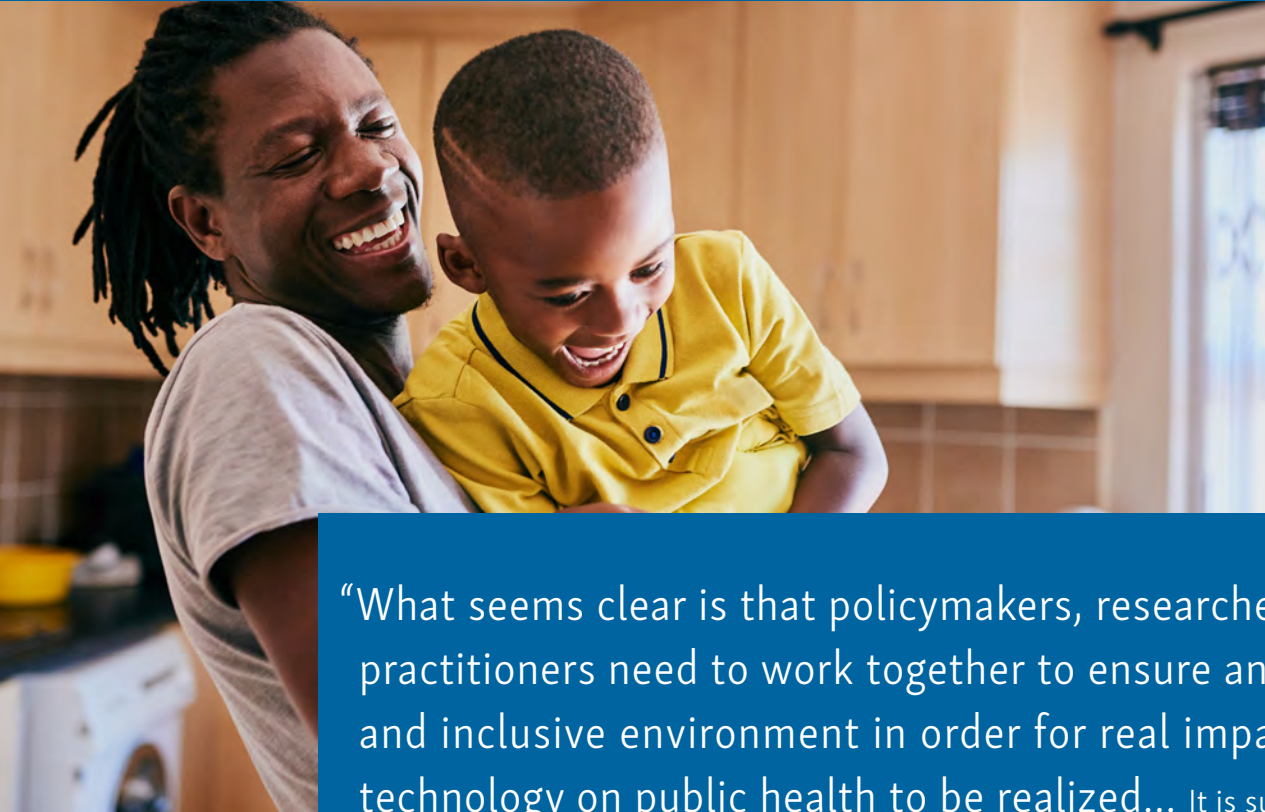
As our new survey results show, parents — especially those who have already tried it — are increasingly open to relying on telehealth for their children's mental health treatment and appreciate its convenience and efficacy. This is especially likely to remain true as the pandemic wears on and in-person treatment remains harder to access.

Still, we need clear laws and insurance regulations that make telehealth a viable choice for patients and practitioners alike. Now is the time to put pressure on legislators to keep telehealth coverage practicable.

While telehealth may be a powerful tool, it's no cure-all.

In order for telemental health to truly remove barriers to access, we as a country need to address underlying issues of equity in our society, including racial bias, income disparities, and access to reliable high-speed internet. We also need more trained mental health professionals, because telehealth can only go so far without enough providers.

Telehealth has been shown to be effective, viable and favorable as a format for various forms of mental health treatment for children and adolescents. It is particularly proven within the realm of cognitive behavioral therapy, and it shows great promise in newer areas like mHealth. So although telehealth is only one piece of the puzzle and there is far to go, it's nonetheless an invaluable way to increase access to mental health care for children and youth.



“What seems clear is that policymakers, researchers and practitioners need to work together to ensure an equitable and inclusive environment in order for real impacts of technology on public health to be realized... It is surprising how rapid this adaptation can be when the community, clinicians, policymakers and researchers are all involved in purposively generating and iteratively adapting the solutions, such as we have seen in response to coronavirus.”¹³²

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