

Bridging the Gaps Between Screens:  
Can telehealth bring mental healthcare to those who need it?

By

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#### ABSTRACT

Amid the United States' growing rates of anxiety and depression, an opioid epidemic, and most recently, the COVID-19 pandemic, the need for accessible mental healthcare continues to rise. While virtual care may seem like a simple solution to this access problem, resource, regulatory, and financial barriers can prevent those who most need care from connecting with mental health professionals. Via interviews with mental healthcare providers, public health experts, and patients, this project looks into the potential and limitations of telemental health when it comes to solving the United States' mental healthcare crisis.

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## **Bridging the Gaps Between Screens** **Can telehealth bring mental healthcare to those who need it?**

For Darla Earl, a US Air Force veteran, video appointments with her therapist replaced weekly office visits while Earl was a mechanical engineering student at the Massachusetts Institute of Technology (MIT)<sup>1</sup>. An undergraduate in her 30s, Earl was taking as many courses as she could to enter the workforce as soon as possible.

While dealing with PTSD, hearing loss, and chronic knee pain on top of a rigorous curriculum, Earl struggled to find a therapist she could open up to at her school's medical center<sup>2</sup>. She wanted to find a compatible therapist she could meet with regularly, but laws around the Veterans Readiness and Employment Program, which funded her tuition and medical care, changed in 2019. Suddenly, she wasn't eligible for healthcare at her school. If she wanted to see a therapist, she would have to go to a Veterans Affairs facility.

An in-person therapy appointment at the closest VA meant an 80-minute bike ride through Boston traffic. She braved the trek for her first session, but soon realized it was unsustainable given her physical health. "It really just beat the shit out of me," she says. "I was tired for days afterward, and I can't really have that right now at MIT."

Earl started virtual appointments with a VA therapist. It wasn't how she wanted to do therapy, but it was the only way she could get her medication and she didn't want to risk leaving the system. "It takes forever to get back in," she says. "If you need therapy and it's going to take six months, you're not going to hang around that long. You're going to just say, 'Forget about it.'"

Many Americans do just that. According to the Substance Abuse and Mental Health Services Administration, less than half of adults with mental health conditions got the treatment they needed in 2019<sup>3</sup>. When it comes to younger patients, that number may be even lower — a 2021 report by Mental Health America revealed that nearly 60% of children and teens with major depression do not receive any care<sup>4</sup>.

This situation is getting worse. In the midst of an ongoing opioid epidemic, decades of rising rates of depression and anxiety, and, most recently, the COVID-19 pandemic, the number of people in need of mental healthcare is increasing. A report published by the Kaiser Family Foundation last February found that four in ten adults reported depression or anxiety symptoms during the pandemic — that's about four times the rate reported in 2019<sup>5</sup>.

The search is on for an elegant solution to America's mental health crisis — a silver bullet to shoot cleanly through a clogged healthcare pipeline to save lives and livelihoods. Some

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<sup>1</sup> Earl, interview, March 2, 2020.

<sup>2</sup> Earl, interview, June 17, 2021.

<sup>3</sup> National Institute of Mental Health, "Mental Illness."

<sup>4</sup> "Access to Care Data 2021."

<sup>5</sup> Panchal and Kamal, "The Implications of COVID-19 for Mental Health and Substance Use."

healthcare providers and public health experts believe telemedicine can be that savior, using technology to bring psychiatrists and therapists into patients' homes, and to connect primary care doctors to expert advice so they can better manage their patients' mental health.

Over the last two decades, clinicians have attempted to adopt telemedicine to reach patients, but they often find themselves tangled in regulatory red tape, whether it's medical licenses that aren't valid beyond a single state, insurance providers refusing to cover remote care except in extraordinary circumstances, or laws that prevent doctors from prescribing potentially life-saving medications without seeing patients in person first.

The COVID-19 pandemic transformed the telehealth landscape in the United States. Just like Earl, patients across the country found themselves abruptly shuffled from physical waiting rooms to virtual ones, and a wave of regulatory and policy changes followed. These new laws span the federal, state, and private levels, and are designed to increase access to healthcare. On paper, they appear to cut the red tape that blocks mental healthcare providers from effectively using telehealth, but challenges still exist. Policy changes alone aren't enough to bridge the gap between providers and the patients who need mental healthcare the most.

### **Taking healthcare online**

Telemedicine and telehealth are terms that have historically been used interchangeably, but there is a subtle difference. Telemedicine generally refers to care a clinician delivers, while telehealth can refer to a broader set of activities, such as public health education, provider trainings, or even administrative meetings between healthcare professionals<sup>6</sup>. Telemental health can also include relatively new technologies like smartphone apps and chatbots, but video and audio appointments are typically the most common ways of delivering mental healthcare remotely.

In the modern American healthcare system, there are three widely recognized types of telehealth services: remote monitoring devices that record and transmit a patient's condition in real time, asynchronous technologies like secure email or electronic health records that enable physicians to remotely access images and test results, and synchronous telemedicine, which is what most people think of when remote healthcare is mentioned<sup>7</sup>.

Synchronous telemedicine is a two-way interaction, usually a video call, between the patient and a healthcare professional. The patient describes their concerns, and the clinician can directly respond. Attending a medical appointment through the internet is particularly helpful for those who live in locations that are isolated from medical professionals, and for those who may have limited access medical care otherwise. These kinds of appointments are particularly well-suited to specialties like mental health and

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<sup>6</sup> Office of the National Coordinator for Health Information Technology, "What Is Telehealth? How Is Telehealth Different from Telemedicine?"

<sup>7</sup> Mechanic and Kimball, "Telehealth Systems."

primary care, where appointments are largely conversation-based. In an analysis of telemedicine appointments among privately insured Americans from 2005 to 2017<sup>8</sup>, public health researchers at Harvard Medical School found that most visits fell into these two categories.

Large telemedicine companies like Teladoc and American Well have sprung up in the last few decades in an attempt to extend the reach of America's healthcare system, but the concept of remotely delivered healthcare long predates them.

An 1879 letter in *The Lancet* titled "Practice by Telephone" recounts a doctor advising a worried mother about her child's cough via "telephonic communication,"<sup>9</sup>. After hearing the cough over the phone, he reassures her that the child has nothing serious.

In addition to providing doctors with another way to communicate with their patients, telephone wires were used to transmit electrocardiograms in the 1900s. Some decades later, radio technology enabled ships to communicate remotely with nearby medical centers on shore. Over the radio waves, crew members could consult physicians about health issues that arose during their voyages<sup>10</sup>.

Television allowed for the first medical use of video in the 1950s. In 1959, physicians at the University of Nebraska Medical School used interactive two-way televisions to transmit lectures to visitors and students<sup>11</sup>. While a lecturer was speaking, the video and audio was transmitted to medical students in laboratories across campus using closed-circuit television. At the same time, the speaker received a transmission from the classroom on a second TV. In addition to allowing the students to see and hear the lecture, this setup allowed the lecturer to hear and see students' reactions. In 1964, the University of Nebraska used two-way television technology to link with Norfolk State Hospital to provide seminars and training, as well as psychiatric diagnoses and treatment.

Hospitals and federal agencies alike created an array of formal telemedicine programs in the following decades, some of which incorporated mental health treatment. In 1968, Massachusetts General Hospital (MGH) established a system they called "Telediagnosis" in Boston's Logan Airport's medical station. The program had an examining room with a remote-controlled camera<sup>12</sup>. A two-way television allowed patients to interact with nurses and doctors at MGH. Microwave technology transmitted electrocardiograms, blood pressure readings, and stethoscope sounds to the hospital a few miles away.

Though it began as an emergency treatment center, many patient visits at Telediagnosis during its active years from 1968 to the early 1970s ended up being psychiatric in nature, even though patients and providers were sometimes skeptical about whether quality care

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<sup>8</sup> Barnett et al., "Trends in Telemedicine Use in a Large Commercially Insured Population, 2005-2017."

<sup>9</sup> Aronson, "The Lancet on the Telephone 1876-1975."

<sup>10</sup> Bashshur and Shannon, *History of Telemedicine*.

<sup>11</sup> Wittson and Benschoter, "Two-Way Television."

<sup>12</sup> Murphy and Bird, "Telediagnosis."

could be delivered remotely. Thomas Dwyer, a psychiatrist at MGH during this time, spoke with patients through the two-way television<sup>13</sup>.

“I approached the use of television to interview psychiatric patients with considerable prejudice, believing that personal contact with the patient would be limited and that many skills useful in a psychiatric interview would be diminished or lost,” he later wrote of his experience in the August 1973 issue of *The American Journal of Psychiatry*. “I was surprised to discover that this was not true.”

In the same article, Dwyer wrote about one of his early cases — a tense trucker who arrived at the Telediagnosis station after getting injured while unloading a vehicle. The trucker underwent a psychiatric evaluation. “He talked of his wife, from whom he had been separated, and of their children,” Dwyer wrote. “It was evident he was a depressed man who might have paranoid ideas.”

The second appointment confirmed Dwyer’s suspicions: the trucker expressed a desire to climb to the top of a radar facility and engage the police in a gunfight. Receiving this disclosure via the unfamiliar medium of two-way television made Dwyer feel unsure about his ability to accurately diagnose the trucker<sup>14</sup>. He worried that seeing the patient through a screen may have hindered his powers of observation and led him to the wrong conclusion, so he scheduled the man for a third appointment. By then, Dwyer felt confident in his evaluation, as well as in the technology. After verifying that his initial impressions of the patient were correct, he ended up referring the patient to a psychiatric clinic for further care.

According to Dwyer, psychiatrists at Telediagnosis treated patients from 12-year-olds through adults, and offered services ranging from crisis interventions to group therapy. The hospital went on to connect psychiatrists to incarcerated people, voluntary youth agencies, and junior high students, and was so successful that four years after its inception, MGH expanded the program and implemented a telepsychiatry initiative with a Veterans Administration hospital in Bedford, Massachusetts<sup>15</sup>.

Over the next few years, telemedicine continued to grow — programs popped up throughout the US and its territories, from Maine to Puerto Rico. Even NASA invested in this new healthcare delivery method. In the 1970s, NASA funded a program that used satellite communications technology to increase healthcare access in the Tohono O’odham nation in southern Arizona<sup>16</sup>. Medical staff moved throughout the area in a mobile health unit — a modified RV with medical equipment, including X-ray machines. Healthcare providers in the mobile health unit or a remote clinic were able to consult with physicians in a hospital control center about 30 miles away using microwave video transmissions and telephone signals<sup>17</sup>.

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<sup>13</sup> Dwyer, “Telepsychiatry.”

<sup>14</sup> Dwyer.

<sup>15</sup> Dwyer.

<sup>16</sup> “STARPAHC Systems Report. Volume 1.”

<sup>17</sup> Freiburger, Holcomb, and Piper, “The STARPAHC Collection.”

Despite avid interest in telemedicine, the vast majority of these initiatives faded away by the mid-1980s. In some cases, video was too expensive or programs lost funding. In others, video wasn't required to transmit the information necessary for diagnosis and treatment – images and messages could be sent over telephone or radio waves<sup>18</sup>. With the introduction of user-friendly personal computers to medical centers in the late 1980s, diagnostic images could be digitized. Initially used to transfer images of rare or emergency cases between medical schools and university hospitals, these image transmission systems eventually spread to other healthcare facilities<sup>19</sup>.

Telemedicine's scope has since broadened to include live patient appointments and patient monitoring as well as medical correspondence, and the federal government has further dedicated resources to overseeing and expanding telehealth's reach. In the 1990s, the US government formed the Health Information Application Working Group – later renamed the Joint Working Group on Telehealth – which prepared reports for Congress and served as a resource to the Federal Communications Commission on telehealth<sup>20</sup>. Around that time, the Department of Health and Human Services established the Office for the Advancement of Telehealth, which manages funding for telehealth grants and resource centers, and supports efforts between state licensing boards to align licensing requirements.

After the Affordable Care Act passed in 2010, these groups merged into a cross-agency organization called Federal Telemedicine, the goal of which is to consolidate information on telehealth across various agencies for the federal government<sup>21</sup>. Federal Telemedicine included representatives from several government agencies interested in telehealth, ranging from the Centers for Disease Control and Prevention to the US Department of Agriculture. They couldn't have anticipated the rapid expansion of telemedicine that would come with the COVID-19 pandemic a decade later.

### **From option to necessity**

In the years leading up to the COVID-19 pandemic, telehealth adoption grew as more people considered its potential for making healthcare accessible. In 2017, the American Hospital Association reported that 76% of US hospitals offered telemedicine services<sup>22</sup>. But while the necessary communications technologies existed, telehealth was, and still is, far from a feasible reality for everyone.

One major question lawmakers still struggle to answer is where providers are allowed to practice telemedicine. Regulations prevent providers from offering telehealth services to patients outside their own states without obtaining additional medical licenses. The state boards that license medical professionals each have their own certification requirements and as such, issue opinions on telemedicine or telehealth on an individual basis<sup>23</sup>.

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<sup>18</sup> Institute of Medicine (US) Committee on Evaluating Clinical Applications of Telemedicine, *Evolution and Current Applications of Telemedicine*.

<sup>19</sup> Institute of Medicine (US) Committee on Evaluating Clinical Applications of Telemedicine.

<sup>20</sup> Doarn et al., "Federal Efforts to Define and Advance Telehealth—A Work in Progress."

<sup>21</sup> Doarn et al.

<sup>22</sup> American Hospital Association, "Fact Sheet."

<sup>23</sup> Federation of State Medical Boards, "FSMB | State Specific Requirements for Initial Medical Licensure."

States that are part of the Interstate Medical Licensure Compact, which started in 2017, allow physicians to practice in all member states, provided they meet the requirements to participate, but just over half of all states, plus Washington DC and Guam, have joined the compact as of 2019<sup>24</sup>. A similar organization for psychologists, called the Psychology Interjurisdictional Compact, was created two years earlier in 2015. As of 2016, 26 states had enacted legislation to participate in this compact. In 2021 alone, more than ten states enacted legislation to join<sup>25</sup>.

Questions about interstate licensure for mental healthcare providers were especially difficult to navigate as telemedicine was expanding throughout the 2010s. Psychologists are not physicians and are not licensed by medical boards, so, as telehealth use first began to grow, it was often unclear if laws pertaining to medical doctors about licensing and insurance reimbursements also applied to other mental healthcare providers<sup>26</sup>. In a 2010 review of telehealth law for psychologists, the American Psychological Association (APA) found that only three out of 22 states with telehealth legislation included psychologists in their legal language. (Today, because federal law considers psychologists and other behavioral health professionals like clinical social workers to be healthcare providers, many, but not all, states that have such legislation include these practitioners<sup>27</sup>.)

Even when licensure isn't an issue for telemental healthcare providers, prescribing necessary medications might be. Many drugs used in psychiatric treatment, including those prescribed to help patients who are recovering from substance abuse disorder, are controlled substances. Under the Ryan Haight Online Pharmacy Consumer Protection Act of 2008<sup>28</sup>, patients who require such drugs must be evaluated in person, effectively eliminating telehealth access for those who rely on these medications.

Some of the biggest obstacles hindering telemedicine, then and now, are financial. In the early days of telemedicine, health insurance rarely covered telehealth appointments, and the policies that did frequently restricted coverage to patients who met certain conditions, such as living in a remote location<sup>29</sup>. Policies around healthcare reimbursements also proved just as confusing as laws around licensure, since many insurance providers refused to reimburse for virtual care at the same rate as in-person care.

To encourage telemedicine's development and expansion in the 2010s, many states enacted parity laws that made virtual interactions equivalent to in-person visits from an insurance perspective<sup>30</sup>. These laws require private insurance to reimburse healthcare

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<sup>24</sup> Interstate Medical Licensure Compact, "Physician Licensure"; Interstate Medical Licensure Compact, "General FAQs."

<sup>25</sup> Psychology Interjurisdictional Compact, "History - Psychology Interjurisdictional Compact (PSYPACT)"; Psychology Interjurisdictional Compact, "Map - Psychology Interjurisdictional Compact (PSYPACT)."

<sup>26</sup> American Psychological Association, "Telehealth: Legal Basics for Psychologists."

<sup>27</sup> "29 CFR § 825.125 - Definition of Health Care Provider."; American Psychological Association, "The Changing Landscape of Telepsychology."

<sup>28</sup> Stupak, "Text - H.R.6353 - 110th Congress (2007-2008)."

<sup>29</sup> Yang, "Telehealth Parity Laws."

<sup>30</sup> Yang.



providers for remotely delivered services, or to account for parity in their Medicaid coverage.

Even now, the parity puzzle pieces still don't fit together easily. Medicare, Medicaid, and private insurance each reimburse different kinds of telemedical services. For instance, virtual visits may be covered, but medical imaging or remote monitoring of a patient's vitals may not be<sup>31</sup>. Though the purpose is to equate in-person and virtual visits, parity laws also do not necessarily account for the total cost of an appointment. In other words, patients may have to pay out of pocket for some services offered virtually.

These coverage and reimbursement problems directly affect how patients are treated, says Janet Wozniak<sup>32</sup>, a child and adolescent psychiatrist and the Associate Chief of Quality and Safety at Massachusetts General Hospital Psychiatry. Wozniak began using telepsychiatry to see children and teenagers on the autism spectrum. When MGH first started offering these online sessions in February 2013<sup>33</sup>, insurance companies didn't reimburse doctors for telehealth appointments. Wozniak was lucky — the physicians' organization at her hospital took it upon themselves to reimburse doctors for these visits. More insurance companies honor virtual visits now, but not all. "That still poses a problem," says Wozniak, "because you don't want to have to think about your patients' insurance when you're fashioning your treatment plan."

It took a global health crisis for the US government and major insurers to take scissors to some of the red tape holding providers and patients back. When the COVID-19 pandemic hit the United States in early 2020, virtual appointments were no longer just a possibility for a few patients; they became the only safe way most people would be able to get mental healthcare. As the pandemic made in-person appointments a danger for patients and providers alike, changes to insurance policies and regulations surrounding telehealth followed. While these changes helped some people get the care they needed, the regulation adjustments were not enough to make telehealth accessible for everyone.

In March 2020, the Drug Enforcement Administration temporarily relaxed restrictions on telehealth providers prescribing certain psychiatric medications through the end of the public health emergency, allowing patients to get the drugs they need without coming in for an appointment<sup>34</sup>. While this adjustment to federal regulation makes starting and staying on medications easier for many patients, some states have their own additional restrictions on prescribing controlled substances that providers must keep in mind in addition to federal law.

Several states also instituted new parity laws — 34 states and Washington DC have passed parity laws to date, and similar laws are under consideration in seven more — while others expanded telehealth coverage to include remote patient monitoring and asynchronous services like messaging and medical image sharing<sup>35</sup>. Licensing regulations also eased up

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<sup>31</sup> Lactman, Acosta, and Levine, "50-State Survey of Telehealth Commercial Payer Statutes."

<sup>32</sup> Wozniak, interview, January 29, 2020.

<sup>33</sup> Wozniak, interview, July 13, 2021.

<sup>34</sup> Drug Enforcement Administration, "How to Prescribe Controlled Substances to Patients During the COVID-19 Public Health Emergency."

<sup>35</sup> American Hospital Association, "Fact Sheet"; Reger and Analyst, "Telehealth Reimbursement Parity."

as 17 states allowed physicians to practice out-of-state during the COVID-19 public health emergency, according to the Federation of State Medical Boards<sup>36</sup>. Though these allowances provide more flexibility and extend telehealth's reach, issues around licensing remain thorny to this day as states continue to have differing policies on the matter.

Insurance organizations saw significant changes, too. On the federal level, Medicare patients no longer have to come from rural areas to qualify for telehealth services, and virtual visits are covered for them at the same rates as in-person ones. Medicare providers also have options to reduce or waive copays for their patients<sup>37</sup>. These changes remain in effect until the end of the public health emergency.

Even private insurance, which has historically been less accommodating of telemedicine, changed its tune during the pandemic. A fall 2020 report by the Center for Connected Health Policy<sup>38</sup> on private insurance during the pandemic noted that six of the seven major private insurers — UnitedHealthcare, Anthem, Aetna, CIGNA, Humana, Health Care Services Corporation, and Kaiser Permanente — waived out-of-pocket costs for things like copays for telehealth services, including behavioral health visits.

Haiden Huskamp<sup>39</sup>, a health economist and public health researcher at Harvard Medical School who has studied how telemedicine is used to treat mental illness and substance use disorders, says that the sudden regulatory changes that came in the wake of COVID-19 are steps towards expanding telehealth. "It's sort of amazing what was achieved in such a short time," she says.

But, Huskamp adds, these new policies and regulations alone aren't enough to meet America's mental healthcare needs. Achieving that will require overcoming infrastructure and human resource obstacles as well.

### **Barriers beyond regulation**

For patients whose mental or physical conditions hinder them from getting to in-person appointments, expanding telehealth can make the difference between getting their mental healthcare needs met or not.

Alice is a 25-year-old lawyer who has generalized anxiety disorder, major depressive disorder, and complex PTSD<sup>40</sup>. Due to stigma in her profession around mental health, she asked to be anonymous for this story. Alice made the transition to virtual therapy when she moved from Southern to Northern California for law school in 2017. Having already established a rapport with her current therapist, she didn't want to restart the process of building a relationship with a new one.

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<sup>36</sup> Federation of State Medical Boards, "States Waiving Licensure Requirements For Telehealth In Response to COVID-19."

<sup>37</sup> U.S. Centers for Medicare & Medicaid Services, "Medicare Telemedicine Health Care Provider Fact Sheet."

<sup>38</sup> Center for Connected Health Policy, "Private Payer Telehealth Coverage Report."

<sup>39</sup> Huskamp, interview, July 27, 2021.

<sup>40</sup> Alice (name changed), interview, April 2, 2020.

Alice found the transition to teletherapy fairly simple — video sessions felt largely similar to in-person ones, aside from occasional technical difficulties. The format, she says, helped her keep up with her appointments, especially on bad days when the energy and effort required to leave the house and drive to an appointment might be too much.

“There are days where it can be hard to rouse myself out of bed,” she says. “It makes it plenty easier to go to therapy when where I’m going is to go get my laptop and sit on my couch.”

Janet Wozniak at MGH has also seen the difference telehealth access can make in her work with children and teenagers on the autism spectrum, especially those for whom traveling to in-person sessions is difficult or stressful. Seeing patients over video makes the process of attending appointments easier on families, Wozniak says, and young patients are far more likely to open up.

“The kids were much more talkative and actually able to engage in conversation because they weren’t so exhausted and anxious from the trip to the hospital,” she says. “Parents felt like they didn’t have to disrupt their child’s routine as significantly as they would have.”

Virtual appointments also give Wozniak more insight into her patients’ home lives allowing her to tailor treatment protocols to better fit their schedules and living situations. “Children will sometimes show me their rooms or where they like to do their homework or play,” she says. “It’s like a home visit.”

But telehealth is only accessible if patients and providers have the right digital infrastructure in place. High-speed internet access, compatible devices, ways to make and change virtual appointments, and comfort with the digital medium all play into whether a provider can offer telehealth appointments to a patient. Even with new regulations clearing the path to virtual care, infrastructure obstacles still stand in telehealth’s way when it comes to meeting the country’s mental healthcare needs.

One big hurdle is the digital divide — the differences in resources that prevent some from accessing high speed internet and telehealth-compatible devices. According to a 2018 report by the Federal Communications Commission<sup>41</sup>, over 24 million Americans don’t have the kind of reliable broadband connections necessary to make video calls, and 2021 data from the Pew Research Center shows that one in five of all US adults don’t have any home internet access at all. For those making less than \$30,000 a year, that number doubles to two in five. In rural areas, one out of every four adults are without home internet<sup>42</sup>. Without a reliable internet connection, let alone a compatible digital device, these people, who are already less likely to have healthcare access in the first place, can’t benefit from telehealth services.

Efforts to expand high-speed internet access are underway — last May, the Federal Communications Commission launched the Emergency Broadband Benefit program,

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<sup>41</sup> “2018 Broadband Deployment Report.”

<sup>42</sup> Pew Research Center, “Demographics of Internet and Home Broadband Usage in the United States.”

which provides a discount on broadband internet for low-income families and those on certain Tribal lands<sup>43</sup>. As of July, more than four million households have enrolled in the program<sup>44</sup>.

But being able to get online doesn't mean that patients are able to see healthcare providers, or that providers are equipped to practice virtually. While using the Teladoc telehealth app, which allows patients to schedule and attend virtual appointments, Zina<sup>45</sup>, an aerospace engineer who requested anonymity due to stigma around mental health conditions in her area of work, found making an appointment impossible.

As someone living with obsessive-compulsive disorder, Zina says it's hard to find a therapist who specializes in her condition. After having difficulty finding a therapist that would take her insurance, Zina decided to try using Teladoc. But access to high-speed internet and a telehealth service did not help her find a provider that fit her needs.

Zina filled out the Teladoc provider request forms multiple times, but "it's just come back saying, 'This therapist is not accepting your request,'" she says. "What does that even mean? They just don't like me or they're not taking patients? And if they're not taking patients, why are they in this system?"

She reached out to customer service, where she was told to try filling out the form again. After repeatedly doing so with no success, Zina gave up. She says that she feels particularly frustrated because her insurance offers convenient urgent care or primary care appointments through the application, but that same infrastructure doesn't exist for mental health appointments.

If "you're having flu symptoms or whatever, a doctor will call you back on phone or video chat within 15 minutes," she says. "But if you want a mental health appointment, that's a separate category in the app and you have to request it at least three days in the future."

Some providers worry that telehealth may diminish the relationships they've worked so hard to foster with their patients. Kristen Cowan<sup>46</sup>, a child and adolescent psychiatrist at Essentia Health in Duluth, Minnesota, finds she's still able to meaningfully connect with her young patients, sometimes in unexpected ways. "I've had kids high-five the camera when we're in a certain kind of a fun moment," she says. "I even had one little kid try to kiss the camera."

Training can help healthcare providers become comfortable with virtual appointments, Cowan says, but the vast majority of providers don't receive any education or guidance in seeing patients remotely. During her residency training at the Mayo Clinic, Cowan and her colleagues researched barriers that prevent widespread adoption of telepsychiatry<sup>47</sup>. Reviewing telepsychiatry studies published between 1959 and 2019, they found that patients are generally happy with telepsych treatment, but providers struggle with

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<sup>43</sup> "Emergency Broadband Benefit"; "Emergency Broadband Benefit Program."

<sup>44</sup> "FCC Enrolls 4M+ Households in Emergency Broadband Benefit Program."

<sup>45</sup> Zina (name changed), interview, March 30, 2020.

<sup>46</sup> Cowan, interview.

<sup>47</sup> Cowan et al., "Barriers to Use of Telepsychiatry."

regulatory uncertainties surrounding these services and with how to adjust their practices to incorporate this new method of delivering care.

“It really helps to have experienced it firsthand in training, because that gives you so much more confidence that you know what you’re doing, and that it’s going to work, and it’s going to be okay,” Cowan says. “If we could grow what’s going on for telepsychiatry in residency education, I think we’d have people on the other end who then feel comfortable offering that service once they’re out of training.”

But the biggest factor preventing telemedicine from reaching patients and making a substantial dent in the country’s mental health crisis is that there aren’t enough mental health providers in the first place. As the mental health needs of the United States population continue to grow, the number of healthcare providers who can meet that need isn’t rising at the same rate.

To assess the need for healthcare professionals, the US Department of Health and Human Services evaluates medical centers, towns and counties, and vulnerable demographic groups, such as migrant workers and low-income households, to find “provider deserts” — areas or populations without enough mental health providers to meet community needs<sup>48</sup>. Mental health is in the top three of medical specialties with highest need as of 2021, with more than a third of the American population unable to access a provider.

Provider deserts are scattered across the country, but California, Texas, and Alaska are the three states with the highest levels of need. Only one mental health provider exists for every 30,000 people in a provider desert, meaning that a single clinician serves an amphitheater’s worth of potential patients. According to August 2021 data, more than 6,400 providers would need to be distributed across the deserts for every American to have physical access to a mental healthcare provider<sup>49</sup>.

Telehealth allows psychiatrists and psychologists to reach a greater population of patients, and it helps providers address underserved populations and alleviate professional shortages, but it can’t make up for these shortages entirely, says Haiden Huskamp<sup>50</sup>, a public health researcher at Harvard Medical School.

Telemedicine “can only help with the maldistribution of providers, help move them around,” she says, “but it’s not going to address what is looming as an even bigger problem going forward of availability of providers.”

### **A future still in the making**

Healthcare organizations and providers are considering how to use telehealth to stretch available mental health resources as far as possible. One strategy is by giving primary care doctors tools to help manage their patients’ mental health needs.

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<sup>48</sup> Health Resources & Services Administration, “What Is Shortage Designation?”

<sup>49</sup> Health Resources & Services Administration, “Shortage Areas.”

<sup>50</sup> Huskamp, interview, January 9, 2020.

Colorado Access's Virtual Care and Collaboration Initiative (VCCI), a nonprofit health company based in Aurora, Colorado, aims to help underserved patients access behavioral health professionals<sup>51</sup>. As part of this program, primary care providers across Colorado and Alaska connect with psychiatrists and clinical psychologists over video when considering treatment plans for their patients. When patients require short-term counseling, psychiatrists or psychologists can also meet with them directly.

Amy Donahue<sup>52</sup>, the program's lead clinical psychiatrist, calls the system a "workforce multiplier" that helps primary care physicians feel more confident when managing their patients' mental health conditions, especially when it comes to prescribing psychiatric medications.

But while programs like VCCI might help primary care providers address some of their patients' mental health needs, the organization points out that the model is tough to replicate in other states and can only go so far in easing the country's mental healthcare access problems.

George Roupas<sup>53</sup>, the Senior Manager of Telehealth Programs at VCCI's parent company, says insurance companies won't reimburse mental health providers for their time consulting with primary care providers, leaving it up to companies themselves to fund e-consultant operations out of pocket. "This idea of integrating with primary care, it's really hard to generate enough revenue to be your own independent company without some kind of subsidy from a parent company," he says.

Haiden Huskamp says that programs that provide support for primary care physicians to do behavioral health interventions themselves could be helpful, but ultimately, solving the mental healthcare access problem will involve much more than telemedicine alone. "To really improve access across the board, we need to not just do things like telemedicine," she says, "but we need to think about how to expand the workforce."

Regulatory and policy experts are also thinking about how, and whether, to make the telehealth legislation enacted during the pandemic permanent. In recent months, some states have made moves in that direction. In January, Massachusetts Governor Charlie Baker, for example, signed "An Act promoting a resilient health care system that puts patients first," into law<sup>54</sup>. Among its provisions, the law requires that insurance providers reimburse virtual and in-person behavioral health appointments equally.

In March, South Dakota Governor Kristi Noem signed the even wordier "Act to revise certain provisions regarding the use of telehealth technologies," which expands the state's definition of telehealth to include the use of audio-only telephone, email, text, and fax for telehealth delivery, and allows providers to begin a provider-patient relationship virtually

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<sup>51</sup> "AccessCare"; "Provider Engagement."

<sup>52</sup> Donahue and Roupas, interview, January 30, 2020.

<sup>53</sup> Roupas, interview, July 15, 2021.

<sup>54</sup> The General Court of the Commonwealth of Massachusetts, "Bill S.2984."

if necessary<sup>55</sup>. Four months later, Illinois Governor J.B. Pritzker signed “An Act concerning regulation,” HB3308, into law. The bill requires insurers to reimburse in-person and virtual behavioral health appointments equally, and allows patients to seek telehealth care regardless of rural, urban, or suburban location, and without providing a reason for doing so, among other provisions<sup>56</sup>. These changes in legislation may be a harbinger of things to come in terms of telehealth’s future in the United States.

There is also potential for lasting changes on the federal level. Last April, fifty senators reintroduced the Creating Opportunities Now for Necessary and Effective Care Technologies (CONNECT) for Health Act of 2021, which would make several of the COVID-19-related adjustments to Medicare regulations permanent<sup>57</sup>. In particular, patients would no longer have to meet geographic criteria to be seen virtually, rural health clinics could offer telehealth appointments, and telehealth restrictions could be easily waived during public health emergencies.

Even as some state and federal agencies are pushing to maintain the legislation that made telehealth more accessible at the height of the pandemic, some of the regulatory red tape is returning. For example, prescriptions for controlled psychiatric medications, including medication for ADHD, may soon require in-person appointments again. Janet Wozniak at MGH Psychiatry notes that while restrictions around state licensing were relaxed during the pandemic, some are now back in place, creating questions for providers who have become accustomed to working with patients who aren't in their state of licensure.

Massachusetts, where Wozniak is licensed, ended its state of emergency and terminated license waivers on June 15th, 2021<sup>58</sup>. Wozniak<sup>59</sup> is no longer able to see patients unless they're physically located in the state, creating significant problems for her department, which is used to providing care to the large population of transient college students in the area. “Everyone’s concerned,” she says, about how the regulatory change will disrupt treatments and care. “It’s going to be very inconvenient.”

Wozniak adds that mental healthcare providers aren’t sure of what the future of their virtual practices looks like. According to Haiden Huskamp at Harvard Medical School, those who used telehealth prior to the pandemic for mental illness and substance use disorder treatment typically also had in-person appointments – a combination referred to as hybrid care. When it comes to incorporating telemedicine into the mental healthcare system going forward, hybrid care may be instrumental to improving health outcomes for those in urgent need of support.

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<sup>55</sup> South Dakota Legislature, “Senate Bill 96”; South Dakota Legislative Research Council, “South Dakota Senate Bill 96.”

<sup>56</sup> Illinois General Assembly, “Illinois General Assembly - Bill Status for HB3308.”

<sup>57</sup> Schatz, “Text - S.1512 - 117th Congress (2021-2022).”

<sup>58</sup> Federation of State Medical Boards, “States Waiving Licensure Requirements For Telehealth In Response to COVID-19.”

<sup>59</sup> Wozniak, interview, July 13, 2021.

“You could imagine a scenario where someone gets their psychotherapy or other psychosocial treatments via telemedicine, but goes into a clinic to get medication,” she says. “You could imagine the opposite.”

Research shows that hybrid care can expand mental healthcare access and help alleviate provider shortages, especially for patients living in rural areas. In a 2019 study published in *The Journal of Rural Mental Health*<sup>60</sup>, M. Courtney Hughes, a public health researcher and associate professor at Northern Illinois University, examined whether mental health patients who were leaving a hospital or emergency department would be more likely to do follow-up psychiatry appointments if they could attend some virtually. Patients in rural areas, she says<sup>61</sup>, are less likely to receive the follow-up care they need after being hospitalized, and research in this area is lacking.

Using data from Medicaid patients in rural Missouri who had been hospitalized or gone to the emergency room for substance abuse or behavioral health conditions, Hughes’ team compared patients who attended at least 25% of their follow-up visits through telepsychiatry to those who only did in-person visits. They found that telepsychiatry patients followed up with their care providers, on average, about a week sooner than their in-person counterparts. These patients also had more follow-up visits in total, and were about twice as likely to have a follow-up visit at all, suggesting that hybrid care can help rural patients with serious mental conditions get more timely and frequent care, Hughes says.

The study also highlighted a possible limitation of telepsychiatry, and gestures to how providers can make this treatment format more effective in the future. In evaluating patient outcomes, the researchers also considered medication adherence — how well patients stayed on track with prescribed drugs. Hybrid care patients were not any more likely to stick to their medications than the patients who only saw their psychiatrists in person. This result surprised Hughes: “When there’s more visits and there’s more timely care, you’d think adherence would follow,” she says.

Making telehealth effective means tweaking technologies and treatment protocols to accommodate these types of issues, she says. In the case of medication adherence, for example, providers could ensure that patients receive regular reminders about taking their medications. “Also, with technology, you have analytics, and those can help target the patients who are at risk for non-adherence,” she adds. “They can trigger a message to the prescriber that they need to intervene.”

### **Towards a new normal**

As more people get vaccinated in the United States, medical centers are slowly resuming in-person appointments while maintaining virtual ones. At MGH, Wozniak is working with her colleagues to determine a feasible framework for a hybrid care model in their department. “We all have different practices, and types of patients we see,” she says. “The

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<sup>60</sup> Hughes et al., “Increasing Access to Rural Mental Health Care Using Hybrid Care That Includes Telepsychiatry.”

<sup>61</sup> Hughes, interview.



question of who should be seen in person, and how often, versus who could be seen completely virtually is something that's going to be up in the air for some time.”

The COVID-19 pandemic forced a national experiment in telemental healthcare that experts believe will increase telemedicine access, but the regulatory and infrastructure changes that happened in the pandemic’s wake won’t solve the most deeply rooted problems plaguing the mental healthcare system. It will take more than virtual visits to untangle the web of insurance, regulations, licensing, and provider shortages that prevent the majority of Americans from getting the care they need.

Back in Cambridge, Massachusetts, Darla Earl<sup>62</sup> is grateful to have been able to receive treatment while she was a student. She has now graduated from MIT. After some time as a house manager at Victory Programs, a local nonprofit organization that supports families experiencing homelessness, she took a job as an asset information analyst at the Massachusetts Bay Transportation Authority. She is finishing up her work with her current therapist. “It’s good to have somebody to talk to that’s a professional,” she says.

For Earl, taking the option of telemedicine was an easy decision. For remote care to really take off, it needs to be that way for everyone.

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<sup>62</sup> Earl, interview, June 17, 2021.

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