COVID-19 and telepsychiatry: Early outpatient experiences and implications for the future

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ABSTRACT

The COVID-19 pandemic has dramatically transformed the U.S. healthcare landscape. Within psychiatry, a sudden relaxing of insurance and regulatory barriers during the month of March 2020 enabled clinicians practicing in a wide range of settings to quickly adopt virtual care in order to provide critical ongoing mental health supports to both existing and new patients struggling with the pandemic's impact. In this article, we briefly review the extensive literature supporting the effectiveness of telepsychiatry relative to in-person mental health care, and describe how payment and regulatory challenges were the primary barriers preventing more widespread adoption of this treatment modality prior to COVID-19. We then review key changes that were implemented at the federal, state, professional, and insurance levels over a one-month period that helped usher in an unprecedented transformation in psychiatric care delivery, from mostly in-person to mostly virtual. Early quality improvement data regarding virtual visit volumes and clinical insights from our outpatient psychiatry department located within a large, urban, tertiary care academic medical center reflect both the opportunities and challenges of virtual care for patients and providers. Notable benefits have included robust clinical volumes despite social distancing mandates, reduced logistical barrieres to care for many patients, and decreased no-show rates. Finally, we provide clinical suggestions for optimizing telepsychiatry based on our experience, make a call for advocacy to continue the reduced insurance and regulatory restrictions affecting telepsychiatry even once this public health crisis has passed, and pose research questions that can help guide optimal utilization of telepsychiatry as mainstay or adjunct of outpatient psychiatric treatment now and in the future.

Among other outcomes, the outbreak of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the pathogen that causes coronavirus disease 2019 (COVID-19), has transformed the delivery of all healthcare, including mental healthcare. To heed social distancing mandates and support the work of frontline providers, routine and non-essential services were abruptly canceled state-by-state through March 2020, and many clinicians who could convert their work to telehealth were urged to do so. These sudden changes, accompanied by a relaxing of prior governmental and insurance regulations, have led to a dramatic transformation in mental healthcare delivery with widespread adoption of telepsychiatry seemingly overnight. In this article, we review payment and regulatory changes in telepsychiatry that occurred in March and April 2020, describe quality improvement data regarding virtual visit volumes and early insights from our psychiatry department, and provide suggestions and questions for the future.

1. Telehealth prior to COVID-19

The COVID-19 pandemic precipitated a radical transformation in the provision of all types of ambulatory healthcare in the United States from mostly in-person to mostly virtual. The Centers for Medicare & Medicaid Services (CMS) define telehealth, telemedicine, and related terms as "the exchange of medical information from one site to another through electronic communication to improve a patient's health." [1] Although telehealth has consistently demonstrated positive benefits in diverse clinical settings [2] and patient populations [3], and is generally viewed positively by patients and providers [4,5], it was not uniformly adopted prior to COVID-19. A 2019 industry report found that 38% of US healthcare payers and providers did not include telehealth in their overall strategic plans [6]. The most commonly cited barriers included poor reimbursement and regulatory hassles [7],

which made this modality of treatment impractical for many health systems.

Psychiatry was an early telehealth pioneer, with the earliest documented use of videoconferencing to support psychotherapeutic interventions and training occurring in the 1950s at the University of Nebraska [8]. Psychiatrist Thomas Dwyer first proposed the term telepsychiatry in 1973 to describe virtual consultation services from Massachusetts General Hospital to another clinical site in Boston [9]. With advances in technology, adoption of telepsychiatry slowly increased in the ensuing decades [8]. Between 2010 and 2017, use of telepsychiatry by state agencies increased from 15.2% to 29.2% [10]. A 2012 article reported that telepsychiatry was the second most practiced form of telemedicine in the world after teleradiology [11]. In 2015, the American Psychiatric Association formally convened a Committee on Telepsychiatry [12].

Today, mental health services rendered via electronic means are variably referred to as telepsychiatry, telemental health, virtual care, etc. Some of these terms refer to a range of electronic connection, such as asynchronous electronic visits, electronic consultations, and audio-only visits. In this paper, the term telepsychiatry is used to refer to real-time video and/or audio connection between mental health clinicians and patients, including mental health services delivered by telephone.

Systematic reviews have found that telepsychiatry is as effective as traditional in-person interventions across psychiatric diagnoses and patient populations, and concluded that users report high satisfaction [5,8]. Telepsychiatry is efficacious in psychiatrically underserved minority [13], veteran/military, pediatric, and rural populations [10,14]. However, prior to the state of emergency created by COVID-19, the majority of U.S. mental health providers had not engaged in telehealth services [15–17]. A representative recent study of 164 psychologists found that while 74% of the sample viewed telehealth as a useful means of intervention, only 26% had actually used it [16]. Among psychiatrists, from 2014 to 2016, the percentage who had engaged in telepsychiatry ranged from a low of 0.1% in Massachusetts to a high of 24.2% in North Dakota [18]. Telepsychiatry is utilized at higher rates in areas with more limited access to healthcare providers [10].

Contributors to this heterogenous uptake are numerous, but mostly relate to the confusing patchwork of government regulations and insurance coverage policies that led to significant restrictions on reimbursements for services, as well as ambiguity on the part of providers and patients alike. Medicare began only in 2019 to reimburse limited telehealth visits, including Virtual Check-ins (brief phone calls initiated by the patient) and *E*-visits (communication via a secure patient portal) [1], but required that patients live in a designated rural area and travel to a qualified site to hold a reimbursable video visit [1]. Since CMS sets the standard for many commercial insurance carriers, it followed that only a few of these covered telehealth, and often reimbursed for it at lower rates than in-person visits.

The impact of inconsistent, inadequate reimbursement on preventing the widespread adoption of telepsychiatry cannot be overstated. Bashshur and colleagues commented, "Limited or lack of reimbursement has been identified as telemedicine's 'Gordian knot' and one of the major reasons for the slow diffusion of telemedicine" [19].

Additional CMS-mandated obstacles to telehealth included: 1) requirement for a previously established relationship, i.e., an in-person initial evaluation; 2) requirement that during the telehealth visit, the patient must be physically located in the state in which the provider is licensed; and 3) requirement that the visit must be conducted using HIPAA-compliant software.

1.1. COVID-19 prompts rapid expansion of telehealth

The pandemic's rapid escalation prompted swift, widespread changes throughout healthcare. In our hospital, non-urgent medical and mental health visits were initially canceled or postponed. However, psychiatric services remained important for managing pandemic-

associated exacerbations in pre-existing psychiatric conditions [20], as well as to address new-onset psychological distress related to increased social isolation, financial and employment instability [21], significant anxiety and uncertainty, and grief. Additionally, healthcare providers working in demanding, high-risk situations are susceptible to a wide range of mental health conditions, including Acute Stress Disorder and Posttraumatic Stress Disorder [22]. Telepsychiatry became a critical method to ensure continued access to essential outpatient mental health treatment. These clinical concerns were matched by a strong financial incentive to adopt telehealth. Without it, entire departments and practices would have faced an indefinite cessation of clinical activities and income, as has been seen in procedural and interventional medical specialties, with potentially devastating repercussions for revenue and fiscal viability.

In order to adequately address these challenges, community mental health clinics, individual and group private practices, large healthcare organizations, and academic psychiatry departments have had to rapidly transform into virtual practices. This process has required adopting new telehealth platforms or updating existing platforms to accommodate large volumes; training clinicians, support staff, and patients regarding the use of new technology; and identifying alternative options for clinicians and patients unable to access required technology.

1.2. COVID-19-associated regulatory changes facilitate rapid expansion of telehealth

The month of March 2020 saw numerous payer and regulatory changes that significantly relaxed restrictions on telehealth during the COVID-19 public health emergency, enabling rapid expansion of telepsychiatry services. On March 17, 2020, as part of a bipartisan emergency COVID-19 spending bill passed by Congress, CMS temporarily relaxed several requirements for the provision of and payment for telehealth services to Medicare patients.[1] These changes are summarized in Table 1.

Contemporaneous with the CMS changes, several states issued even broader regulatory changes affecting health insurance companies. For example, Massachusetts [24] and California [25] required that both video and telephone visits be reimbursed at a rate equivalent to an in-person visit, greatly increasing virtual visit availability. The American Psychiatric Association's website provided a state-by-state listing of regulations, as well as links to numerous commercial insurance carriers for specific coverage policies. Most of these policies were largely consistent with CMS.

Additional obstacles to telehealth and telepsychiatry have been relaxed. These include federal regulations governing HIPAA-compliant telehealth platforms, controlled substance prescriptions, and laboratory requirements for certain medications, summarized in Table 2. The rapidity and comprehensiveness of these changes were unprecedented in the field of psychiatry. Major professional societies quickly posted concise and comprehensive updates on their websites to assist clinicians with the transition to telepsychiatry.[2]

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[1] CMS defines three types of virtual visits. A Medicare Telehealth Visit via live interactive video is reimbursed at the same rate as an in-person visit. A Virtual Check-In is a short telephone conversation, while an *E*-Visit is an asynchronous online patient portal communication. Medicare began to reimburse for Virtual Check-Ins and *E*-Visits in 2019.

[2] Examples include American Psychiatric Association APA Resources on Telepsychiatry and COVID-19, American Psychological Association https://www.apa.org/topics/covid-19, National Association of Social Workers (https://www.socialworkers.org/Practice/Infectious-Diseases/Coronavirus), Massachusetts Psychiatric Association https://www.psychiatry-mps.org/) SAMHSA (Substance Abuse and Mental Health Services Administration) created a resource page https://www.samhsa.gov/coronavirus with specific guidance for treating substance abuse via telehealth, and on disclosures under the medical necessity exception COVID-19 Public Health Emergency Response and

Table 1

Changes in CMS telehealth regulations from March 6, 2020 until end of public health emergency.

Pre-outbreak	Changes post-outbreak
• Patient must live in designated rural area in order to have telehealth covered by Medicare	• All Medicare patients eligible for telehealth, regardless of location of residence [1]
• Patient must travel to designated "originating site" (clinic, hospital, or other medical facility) to conduct telehealth visit with provider at a separate location	• Medicare can reimburse for telehealth visits conducted in all settings, including the patient's home [1]
• Medicare covered telehealth at the same rate as an in-person visit for a limited number of patients who met certain requirements	• Medicare will cover telehealth at the same rate as in-person visits for all patients, using the same CPT billing codes as for in-person visits [23]
• Initial in-person evaluation required to establish relationship	• Initial in-person evaluation requirement will not be enforced [1]
• Patient paid coinsurance or deductible (cost-sharing) for telehealth	• Providers have flexibility to reduce/waive cost-sharing [1]

Table 2

Federal regulatory changes in response to the COVID-19 pandemic, effective until end of public health crisis.

Pre-outbreak	Changes post-outbreak
• Clinicians must use HIPAA-compliant live interactive audio and video software	• Penalties for using some non-HIPAA compliant software waived "in connection with the good faith provision of telehealth" [26] ○ Health care professionals may use popular technologies including Apple FaceTime, Facebook Messenger video chat, Google Hangouts video, Zoom, or Skype (though public-facing applications such as Facebook Live, Twitch, and TikTok should not be used) [26]
• Per Ryan Haight Act (2008), in-person initial and follow-up visits required for prescriptions of controlled substances	• Ryan Haight Act relaxed; in-person initial and follow-up visits not required to prescribe controlled substance [27]
• DEA regulations allow a practitioner (who is registered to dispense) to distribute controlled substances to a limited extent to another registered practitioner, such as a hospital, pharmacy, or physician during a calendar year, but the amount cannot exceed 5% of the total number of dosage units of all controlled substances that the practitioner dispenses and distributes during that year [28]	• A DEA-registered practitioner may now distribute controlled substances beyond 5% of the total number of dosage units of controlled substances distributed and dispensed during the same calendar year without being required to register as a distributor [28]
• Clozapine REMS required by FDA to manage known or potential risks to ensure that the benefits of the drug outweigh the risk of severe neutropenia.	• Clozapine REMS requirement relaxed; FDA recommends weighing risks and benefits of having patient presenting in person for laboratory testing [29]

With widespread adoption of telepsychiatry, once-bustling outpatient operations transformed into skeleton clinics or shut their doors entirely to in-person care. The Cleveland Clinic's use of telehealth increased by 1700% in one month [30]. Stanford Children's Health recorded 500 telehealth visits in one day in March 2020, approximately 15 times the prior record of 35 visits [30]. By March 14, the majority of hospitals (approximately 60.8% across the US and 87.2% in Massachusetts) had capacity to engage in telehealth [31]. The U.S. population's interest in telehealth has also significantly increased, as reflected in web search data [31].

2. Clinical observations regarding telepsychiatry during COVID-19

The Massachusetts General Hospital psychiatry department is part of a large, urban, tertiary care academic medical center. The outpatient psychiatry division is made up of over 300 praticing clinicians (mostly part-time), including psychiatrists, psychologists, social workers, and nurse practitioners, and comprises both generalist and specialty practices providing services to adults and children. Data presented in this section were obtained as part of a quality improvement initiative in the MGH Department of Psychiatry, and as such, was not formally supervised by the Institutional Review Board per their policies.

The week of March 16, 2020 marked the beginning of the rapid transition to telepsychiatry for the MGH outpatient psychiatry division. Department leadership decided to convert all outpatient visits to virtual platforms (i.e., telephone or video) by week's end. In-person visits thereafter were permitted only for unavoidable reasons, such as when patients could not access telepsychiatry or an in-person evaluation was deemed clinically necessary. Visits were restricted to a newly created in-person psychiatric urgent care outpatient clinic that was outfitted

with appropriate Personal Protective Equipment (PPE). This clinic was instrumental for minimizing on-site clinicians, administrative staffing, and office space utilization, while continuing to provide essential services such as long-acting injectable medications. The rest of the outpatient psychiatry division faced the daunting challenge of rapidly transforming care delivery to virtual platforms amid the stress and uncertainty of the COVID-19 pandemic. What follows is a summary of our observations regarding this transition.

2.1. Adapting to new technology

Prior to COVID-19, the MGH Department of Psychiatry was an early adopter of telehealth within our hospital. Before these visits were uniformly reimbursed by insurance, the Massachusetts General Physicians Organization supported a hospital-initiated pilot program beginning in 2015 to expand and scale virtual visits. Psychiatry took a lead role in adoption of telemedicine. In March 2019, one year before COVID-19, our department performed a total of 457 virtual visits via the electronic medical record (EPIC)-integrated platform, accounting for the highest number of all virtual visits hospital-wide (46%), followed by oncology and pediatrics.

Drastically increased demand for telehealth in the context of COVID-19 quickly exposed the technological limitations of the existing platform, including failed and dropped connections, inconsistent video quality, and an unpredictable audio system. To meet patients' needs, clinicians shifted variably to telephone calls or commercial platforms such as doxy.me, Zoom, and Doximity.

Departmental quality improvement data suggest that these efforts led to a near-complete reversal of rates of in-person and virtual care. The outpatient psychiatry division switched from under 5% virtual visits in March 2019 to over 97% in March 2020. Additionally, productivity was maintained at about 95% of previous levels, with 9206 virtual visits performed in the month of March 2020. The general hospital-based outpatient psychiatry practices actually saw a 22% increase in productivity, with approximately 6100 billed visits in April

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2020 compared with the prior average of approximately 5000/month during the preceding five-month period. Telepsychiatry has been successfully adapted for both individual and group-based mental health treatment, though certain services (e.g., neuropsychological testing) were unable to be adapted to a virtual format.

Beyond the technological challenges associated with the telepsychiatry platforms themselves, other logistical issues arose with the shift to remote work, including managing releases of information (ROI); faxing orders for involuntary psychiatric evaluation; and placing phone calls to patients from personal phone numbers. Workarounds included documenting verbal consent for ROI; collaborating with in-hospital colleagues and administrative staff to fax paperwork; and use of online platforms such as Doximity and Jabber for secure dialing/fax.

These changes have largely benefited both patients and clinicians, but have also presented significant additional demands on the time and energy of clinical and administrative staff. Providing robust instrumental and emotional support through these changes was important for maintaining morale and focus, with daily email updates from leadership delineating the constantly evolving guidelines, increased frequency of virtual meetings of outpatient clinical leaders to answer questions, and electronic distribution of tip sheets and technical support services.

The swift implementation of telepsychiatry also presented unique logistical challenges for clinicians, many of whom had to quickly identify and optimize home workspaces to be professional and private. These challenges were exacerbated by the presence of additional family members at home due to school and workplace closures. Clinicians had to judiciously balance their precious time and mental energy between multiple priorities: the need to learn and troubleshoot virtual care systems; adapting to the new clinician-patient dynamic challenged by difficulties detecting non-verbal cues (i.e., tone, pitch, facial expressions, body language) exacerbated by transmission delays [32]; and considering revenue and productivity concerns; all of which contributed to additional fatigue. Additionally, the transition to telepsychiatry occurred amid clinicians' own COVID-19-related concerns for themselves and their loved ones, as well as anxieties about actual or potential redeployment to more acute clinical services. As with other shared community traumas, clinicians are in the challenging position of managing their own stressors while simultaneously caring for others.

Social distancing measures further depleted an already overburdened, fragmented mental health system. Regionally, almost all partial hospitalization programs, intensive outpatient programs, and many other community-based mental health supports temporarily suspended services, though most have themselves now adopted virtual care and resumed operations. Risk-benefit analyses suddenly shifted in light of the public health imperative to reduce exposure by keeping patients out of emergency departments and inpatient units. This resulted in a strong preference for telepsychiatry to continue to provide much-needed care, even for higher-risk patients who otherwise would not have been considered for this treatment modality [33]. In our experience, many clinicians have reported a higher average acuity on their outpatient caseloads to compensate for limitations in community resources. The impact of these changes on clinicians, including potential liability concerns, will be important to monitor and address.

2.2. Observations: advantages of telepsychiatry

The undeniable advantage of telepsychiatry during the COVID-19 pandemic is limiting viral transmission. Virtual care is particularly impactful for patients and providers who are immunocompromised or have other underlying health vulnerabilities. In addition to infection control, telepsychiatry has demonstrated a number of clinical benefits, described in Table 3. For example, early quality improvement data from our department suggest that no-show rates have decreased by 20% between the immediate pre-COVID period (January and February 2020) and the COVID period (April and May 2020), likely due to decreased logistical barriers to access.

Our clinicians have anecdotally observed that telepsychiatry may be beneficial for specific conditions. Patients with psychiatric pathologies that interfere with their ability to leave home—e.g., immobilizing depression, anxiety, agoraphobia, and/or time-consuming obsessive-compulsive rituals—are able to access care more consistently. Some clinicians caring for patients at risk for violence and behavioral dysregulation report a greater sense of personal safety with virtual care. Telepsychiatry also facilitates new and beneficial treatment frames, for example permitting meeting at more frequent time intervals and for briefer visits to manage patients in crisis or undergoing medication titration. Eliminating the need to travel to a psychiatry clinic can increase privacy and therefore decrease stigma-related barriers to treatment, potentially bringing care to many more patients in need. It will be important to attempt to corroborate these early clinical observations through more systematic research in the future.

2.3. Observations: limitations of telepsychiatry

Telepsychiatry also has disadvantages, summarized in Table 3. More frequent disruptions, difficulty reading nonverbal communications, and increased effort required to establish rapport have all been previously reported [5,8] and are anecdotally confirmed by our clinicians.

Establishing rapport has been particularly challenging [5], with many clinicians reporting that technology does not yet fully capture the richness of an in-person interaction. For many clinicians and patients, the sense of intimacy provided by a closed-door office space is not reproducible on virtual platforms. Treatments relying heavily upon non-verbal communications (e.g., insight-oriented/relational individual and group psychotherapy) require unique adaptation and adjustment.

Clinicians have also reported disadvantages presented by telepsychiatry for patients with specific medical and mental health conditions, including auditory and/or visual impairments and migraine headaches, which may limit engagement with technology. Patients with paranoia or other psychotic symptoms may also be uniquely challenged. Conditions requiring physical examination cannot be assessed virtually. Finally, certain mental status markers such as hygiene/odor, gait, eye contact, and linguistic nuances are poorly assessed virtually.

Another significant limitation relates to disparities and structural inequity. To participate in telehealth, patients need access to 1) a smartphone, tablet, or computer; 2) adequate internet connection; and 3) a private and comfortable space in which to conduct a clinical visit. While technology use among seniors is increasing, 27% of Americans over the age of 65 still did not have access to the internet in 2017 [34]. Lack of access to information technology among the socially and economically disadvantaged represents an important new dimension of health disparities [35,36]. During the month of March 30 – April 24, 2020, 30% of the virtual visits completed in our department were conducted via phone. While this proportion is likely to decrease as providers and patients gain greater facility with video-based telehealth platforms, the strikingly high figure suggests that many patients may not have access to appropriate technology. Already-vulnerable patients such as the poor, the elderly, and those located in rural areas will face further health service disparities due to the "digital divide" [37]. Additionally, it remains to be demonstrated whether and for whom audio/video-based telehealth treatment is superior to audio-only telehealth treatment (Table 4).

3. Future directions

For the past five years, researchers have predicted an imminent "tipping point" for telehealth, such that any acceleration in use would result in this modality becoming widespread [37,39]. The COVID-19 pandemic may well represent this tipping point. Over the past month, both clinicians and patients have gained skill and experience with telehealth out of necessity. There is no clear end to this arrangement in

Table 3
Advantages and limitations of telepsychiatry as reported by Massachusetts General Hospital Department of Psychiatry clinicians.

Advantages	Limitations
• Limits viral transmission • Protects patients and providers with underlying health conditions or who are immunocompromised • Minimizes productivity loss due to commuting • Enhances ease of scheduling • Increases privacy by eliminating the need to physically travel to a mental health clinic, thereby reducing exposure to stigmatizing attitudes and beliefs from others • Increases understanding of family and home dynamic • Decreases rate of no-shows • Increases access to care for patients suffering from conditions that interfere with their ability to leave home • Increases sense of personal safety for patients at risk for violence and behavioral dysregulation	• Can increase disruptions during sessions due to home-life issues and technological glitches—freezing, delays, needing to reconnect • Can increase difficulty reading nonverbal communications (e.g., subtle changes in tone of voice, inflection, affect, and gaze) • Can increase effort required to establish rapport • Presents greater challenges for patients with auditory and visual impairments and migraines • Prevents physical examination for certain conditions (i.e., movement disorders, medication-induced extrapyramidal symptoms or tremors, neurocognitive disorders) and mental status examination markers • Prevents cardiac and metabolic monitoring for patients on certain antipsychotic medications, and autonomic monitoring for patients at risk for withdrawal or on stimulant medications. • Loss of sense of intimacy provided by closed-door office space • Difficulty using silence as an intervention • Loss of privacy and risk of self-disclosure by provider due to visibility of home environment • Exacerbates already present disparities and structural inequities for those unable to utilize technology

sight. After any subsequent waves of COVID-19 subside, we are likely to remain in a "new normal," in which telehealth remains a prominent vehicle for mainstream psychiatric treatment delivery. However, questions remain about how this will be operationalized.

3.1. Sustainability of changes to regulation of telehealth after COVID-19

The ability of healthcare systems to continue to provide telehealth depends on the stakeholders that collectively relaxed regulations and supported reimbursements for telehealth over the past 1–2 months. Third-party payers had previously reimbursed for telehealth services at lower rates than in-person, and some did not cover them at all. Many clinicians, clinics, and patients are eager to support expansion of telepsychiatry, but are wary that permissions for COVID-19 may be revoked. During this crisis, certain protective regulations have been recognized as barriers to treatment, including clozapine monitoring requirements and restrictions on the prescription of controlled substances. Easing these rules gives patients and prescribers more flexibility and arguably has improved quality and safety of care.

It is unclear what rationale regulatory bodies and insurers will employ to decide which prior limitations, if any, should be reinstated. Pressure to maintain changes which have facilitated the safety and quality of patient care must come from clinicians and patients who recognize the benefits of this new model of care. Given the robust evidence supporting real-world safety and effectiveness of telehealth, and potential for significant benefits to patient care, we encourage diverse stakeholders to join together to advocate for continued adequate reimbursement, relaxed restrictions, and widespread utilization of telehealth in the post-COVID period.

3.2. Future research

When routine in-person care again becomes feasible post-COVID, new questions will emerge regarding the appropriate place of virtual care in the mental health system. In a minority of clinical situations, reliance on telehealth visits may prevent positive or needed treatment changes—e.g., when in-person sessions may be beneficial for a person who struggles with behavioral activation or overcoming anxious avoidance. In these cases, telepsychiatry could introduce a subtle means for avoiding positive engagement and exposure. Further studies are needed to compare specific outcomes for in-person versus remote care, especially as related to specific conditions, including posttraumatic illnesses, personality disorders, psychotic disorders, and substance use disorders, which may be more challenging to manage well through

virtual care, but could also benefit from the greater flexibility of this modality.

The ability to connect with psychiatric services from anywhere may impact patient engagement and commitment to the process (e.g., a patient conducting a session lying in bed, while running errands, or playing with his or her children). How patients and clinicians negotiate personal boundaries within their homes can be a creative and dynamic process. Future studies should evaluate the extent to which these issues impact patients' ability to seek care, as well as clinicians' ability to deliver care [40] and shape telehealth practice guidelines. New regulatory and risk management guidelines will need to be developed regarding the decision between in-person vs. virtual care and phone vs. video visits.

Other questions have also emerged that bear further research. What types of patients respond particularly well to virtual rather than in-person visits? Are there differences by gender, race, and other individual factors outside of psychiatric conditions? Is video-based telehealth necessarily superior to audio-only (i.e., telephone appointments)? What are the financial implications of widespread adoption of telehealth, taking into account potential benefits including increases in mental health service utilization, concomitant decreases in morbidity and mortality from psychiatric illness, decreases in lost productivity related to not needing to take time off work to commute to a provider's office, and decreases in no-show rates?

3.3. Recommendations for clinical practice

The current transformation in the psychiatric care landscape poses significant implications not just for patients, but also for providers. Early survey results in our department suggest that even as states and healthcare organizations enter into successive phases of reopening, our hospital-based outpatient clinicians have expressed a clear preference to continue to provide the majority of their care remotely (i.e., virtually from off campus.) Reasons cited include personal health concerns limiting exposure to public transportation and the hospital environment, decreased commute times, and flexibility of scheduling around personal obligations, including childcare. The research questions described above will be key for helping to guide personal and administrative decision-making and best practices regarding the optimal balance of virtual vs. in-person care, tailored to specific patient and provider characteristics.

Assuming telehealth continues to be reimbursed comparably to in-person care, the question of whether a given appointment should be conducted virtually, or even via video versus telephone-only, will likely

Table 4

Tips for optimizing telepsychiatry based on early clinical experience from our department.

Physical setup: optimize physical space for comfort and privacy
● Choose a quiet location away from other people and street noise [38].
● Invest in a comfortable chair and desk and/or equipment that allows for good posture for extended periods.
● Make sure your background is neutral (e.g., not facing into a busy part of your house) [38].
● Eliminate intrusion from pets and other household members.
● Consider using headphones to increase privacy of the conversation.
● Be mindful of the time and set up clocks in your telepsychiatry practice space that will be visible to you during visits.

Technology setup:
● Minimize electronic distractions when performing clinical care. Maximize your
● telehealth platform's window to hide other applications (e.g., email, web browsers). Ensure that pop-up notifications from other applications, particularly text and email, are turned off.
● Set up your screen to lead your eyes close to your camera as naturally as possible. Looking at the camera will appear to the patient that you are looking at them, while looking at the screen is likely to appear that you are looking down or away from the patient.
● If you are going to type during the session, try to arrange your various windows in such a manner that the video screen can remain on top (some telehealth apps have an option that forces the video screen to the front.) This way you can continue to see your patient even while typing in a different window.

Patient communication:
● Acknowledge the shift in treatment frame and potential awkwardness of virtual care,
● while also remaining open and curious to potential benefits. This can help model the types of adaptability and flexibility that we also wish to see in our patients [38].
● Develop your own systems and procedures for providing telehealth (e.g. consistent platform, URL for patient to access, etc.), and communicate these as soon as possible to patients. In the midst of so many changes, a sense of clarity and routine can be reassuring for patients and clinicians alike.
● Acknowledge when care is disrupted by technology issues and establish a back-up plan if the video connection is lost, such as resorting to phone contact.
● Determine your desired response to patients' inquiries about your own reactions to the pandemic in advance. If the conversation strays too far into the clinician's personal life, the clinician can gently redirect the discussion back to the patient's presenting concerns (e.g., "You are right, it is a really unsettling time for everyone. I am doing all right overall and appreciate your concern. Tell me how it's been affecting you.")
● Determine expectations with patients as early as possible. Consider matters such as:
○ How to communicate if late in the virtual system
○ Expectations that a patient be seated for the session, rather than laying on a bed or walking/driving [38]
○ Expectations of the patient's space to offer a level of privacy/minimal distraction, if feasible

Clinician self-management:
● Seek regular peer supervision to normalize challenges and share best practices.
● Seek consultation particularly around matters related to risk.
● Stay abreast of recommendations from professional organizations.
● Be extra attentive to self-care, even when typical activities are limited by COVID-19.

Logistics:
● Schedule your day intentionally, leaving space for breaks, lunch, etc. Recognize that patients may show up for appointments more consistently, and plan breaks accordingly [38].
● Take visual breaks and look away from the computer screen for intervals recommended by eye care specialists.

become a routine component of treatment planning. As with other parts of mental health treatment, a thoughtful, individualized decision-making process will be necessary. Consideration should be given to patient diagnosis, level of functioning, commitment to care, and other factors. In addition, providers' individual preferences related to medical conditions, family considerations, and the potential fatiguing impacts of increased screen time and decreased no-show rates, are all important to consider in assessing the long-term sustainability and efficacy of telepsychiatry.

4. Conclusions

The COVID-19 pandemic has provoked unprecedented changes in healthcare delivery. Among other changes, this crisis has resulted in widespread and nearly wholesale adoption of telepsychiatry, made possible by payment parity and reduced regulations. Early analyses suggest that these changes have enabled mental health clinicians to continue to provide vital care at a challenging time. Although payer and regulatory changes may have initially been intended to be temporary, their effects are likely to be felt for the longer-term, especially if reimbursements can be maintained. This would accord with the robust literature supporting telepsychiatry's effectiveness and superiority to traditional in-person care in some cases.

While some hospitals, clinics, and clinicians were better prepared than others, we are now all becoming experts in this model of care and learning the versatility and limits of our trade. We are privileged to provide a crucial service during a crisis when so many resources are unavailable to those in need. With telepsychiatry, we have a small glimpse into details of patients' personal lives that were previously only available to practitioners performing home visits. While boundaries remain vital, there is an inherent benefit to simply being in connection with others.

Our academic medical center psychiatry outpatient group has found that adapting to the challenges of telepsychiatry does not require entirely new approaches, but rather, greater creativity in the application of tried and true principles. The tools of our craft are the same as always. Supporting clinicians to do what they do best in patient care includes diversifying methods of self-care, maintaining regular and honest inventories of personal needs, and ensuring ongoing, if not increased, access to high-quality supervision and consultation. Validation, support, and clear communication from leadership regarding the unique difficulties of adapting to telepsychiatry in the context of the COVID-19 crisis are critical for supporting clinicians in competent clinical decision-making and managing work-life challenges. Future research exploring the impact of telepsychiatry on the treatment relationship, both on an individual level and in a collaborative group setting, will be necessary to guide ongoing, thoughtful consideration of how this new treatment frame impacts our uniquely intimate work.

Author statement

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