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The coronavirus disease 2019 (COVID-19) pandemic has increased the need for psychological care in the global population and has created new barriers to accessing services. Hospitals, mental health facilities, and other clinics face the challenge of providing continued care to a population that is under severe stress, while minimizing in-person visits that risk spreading the virus. The Veterans Health Administration (VHA) is the largest integrated health care system in the United States, providing care at 1,286 sites. VHA ensured the continuity of mental health services after the COVID-19 outbreak by rapidly expanding its use of telemental health methods in the first weeks after the U.S. pandemic outbreak. VHA provided nearly 1.2 million telephone and video encounters to veterans in April 2020 and reduced in-person visits by approximately 80% when compared with the October 2019 to February 2020 period before the pandemic. By June 2020, VHA had an 11-fold increase in encounters using direct-to-home video and a fivefold increase in telephone contacts relative to before the pandemic. This article discusses research on the effectiveness of telemental health, VHA policies before COVID-19 that facilitated the use of telemental health system-

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wide, and VHA's actions that rapidly scaled use of telemental health during the first months of the outbreak. Key challenges and lessons learned from VHA's experience and implications for providers and health care systems regarding the use of telemental health to meet patients' mental health care needs during the pandemic are also discussed.

Public Significance Statement
The coronavirus disease 2019 (COVID-19) pandemic has increased psychological stress but made it harder for people to safely access mental health treatment. To address this challenge, the Veterans Health Administration (VHA) scaled up delivery of mental health care by video teleconferencing and telephone during the first 4 months of the pandemic. This reduced in-person visits by 80% and enabled over 550,000 veterans to receive virtual mental health treatment without coming into a VHA clinic.

Keywords: telemental health, technology, mental health, COVID-19, veterans

The coronavirus disease 2019 (COVID-19) pandemic will likely produce widespread psychological distress as people all around the world struggle with fear of infection, social isolation, disruption to daily routines, economic hardship, and serious illness or death of friends and family (Gruber et al., 2020). Although most people who initially experience high levels of distress in the wake of disasters eventually return to their usual level functioning (Goldmann & Galea, 2014; Norris et al., 2002), some individuals develop chronic and severe mental disorders, including posttraumatic stress disorder (PTSD), major depressive disorder, generalized anxiety disorder, panic disorder, and substance use disorders (Goldmann & Galea, 2014; Norris et al., 2002; Sayed, Iacoviello, & Charney, 2015). The current pandemic may produce more chronic symptoms than most disasters because of its unpredictability, its unknown duration, the lack of cues for differentiating safety from danger (e.g., it may be difficult to determine if others are infected), the high level of social and economic disruption, and the high number of fatalities (Gruber et al., 2020).

The need to stem the spread of infection has sharply limited mental health providers' ability to provide in-person care, precisely at a time when there is an increased need for proactive prevention and treatment. In accordance with government requests to stay at home and physically distance from others, mental health care providers have shifted to delivering care via clinical video teleconferencing and telephone modalities, often referred to collectively as telemental health. For many decades, the Veterans Health Administration (VHA) has used telemental health to provide a range of services (e.g., therapy, medication management) to veterans enrolled in the VHA system, particularly to rural veterans for whom driving to a facility would be a barrier to care (Adams et al., 2019; Bumgarner et al., 2017). These telemental health methods, once considered secondary to in-person care, have become critical and central to delivering psychological support to veterans during the pandemic.

This article describes how VHA dramatically increased its telemental health services in the opening days of the COVID-19 pandemic by leveraging its existing infrastructure and prior planning. The rapid scale-up of telehealth to provide mental health care in the wake of a public health crisis posed numerous challenges (Kruse et al., 2018). Lessons learned from VHA's effort can inform other organizations' expansion of telemental health in response to the pandemic. The sections that follow summarize clinical research on the effectiveness of telemental health, discuss VHA's expansion of telemental health care immediately after the outbreak, and identify facilitators of and barriers to that expansion. The final section reviews the ongoing challenges that VHA and other mental health care organizations may need to address when expanding telemental health services during and after this pandemic.

Effectiveness of Telemental Health

Telemental Health via Video

A growing body of research, much of it involving veterans, has examined the use of video telemental health to overcome geographic and logistical barriers to care. The first studies focused on office-based video psychotherapy, that is, when a patient travels to a local clinic and connects to a provider at a different clinic to get services that are not available locally. Research then expanded to examine in-home telemental health via video, which reduces travel, logistical, and time barriers to care even more than office-based video.

Rigorous studies have tested whether clinical video teleconferencing is as effective as in-person care. Psychiatric management via office-based video produced outcomes similar to in-person psychiatric treatment in one noninferiority study (O'Reilly et al., 2007) and in two other randomized trials (De Las Cuevas, Arredondo, Cabrera, Sulzenbacher, & Meise, 2006; Ruskin et al., 2004). Video

telepsychotherapy proved to be noninferior to (as effective as) office-based in-person psychotherapy in seven trials involving veterans with PTSD (Acierno et al., 2016, 2017; Morland et al., 2010, 2014, 2015, 2020) and older adults with depression (Egede et al., 2015), but not in an eighth trial with veterans with PTSD (Liu et al., 2019). Other trials and pilot studies have demonstrated the feasibility of using home-based video for treating obsessive–compulsive disorder (e.g., Goetter, Herbert, Forman, Yuen, & Thomas, 2014), panic disorder (Bouchard et al., 2004), and social anxiety disorder (Yuen et al., 2013). This research on home-based video is particularly relevant to mental health care during the COVID-19 pandemic because it indicates that it is feasible to deliver high-quality, evidence-based care to patients who want it without requiring them to leave home.

The success of video telemental health relies on both patients' and providers' acceptance of, and satisfaction with, this modality. Studies of video telemental health treatment for a range of mental health conditions report high rates of patient satisfaction (Fletcher et al., 2018), even among less technologically savvy patients (Campbell, O'Gorman, & Cernovsky, 2015). A recent review of 38 studies on provider attitudes (Connolly, Miller, Lindsay, & Bauer, 2020) found that clinicians thought home telemental health was effective and valued the modality's ability to improve access to care, save time and money, and increase flexibility. Yet, some clinicians reported extra work preparing for video sessions, problems with poor audio or visual quality, or disconnection during treatment sessions. In studies that assessed clinician attitudes before and after using video telemental health, clinicians' interest in and comfort with the modality often improved after they tried it and saw that their patients were receptive to it (Connolly et al., 2020).

Telemental Health via Telephone

Whereas most trials of video telemental health have tested it against in-person specialty mental health care, research has often compared telephone psychotherapy with routine care in settings that lack robust mental health services. A large body of literature has established the effectiveness of telephone smoking cessation counseling relative to no or minimal intervention (Matkin, Ordóñez-Mena, & Hartmann-Boyce, 2019), and three studies have shown that motivational interviewing delivered via telephone can reduce drinking or alcohol-related problems (Jiang, Wu, & Gao, 2017). In a recent meta-analysis, telephone psychotherapy for depression was more effective than control conditions and as effective as (not superior to) active comparator conditions (Castro et al., 2020). Another review (Coughtrey & Pistrang, 2018) found that telephone psychotherapy for depression or anxiety outperformed usual care or wait list in four out of five randomized controlled trials (RCTs), and outperformed an active comparator in one RCT. Three noninferiority trials have directly compared telephone and in-person delivery of the same treatment. Telephone psychotherapy was as effective as in-person treatment for obsessive–compulsive disorder in two studies (Lovell et al., 2006; Turner et al., 2014). In a third treatment trial for depression, telephone psychotherapy was noninferior to in-person psychotherapy at the end of treatment, but in-person therapy was superior at 6-month follow-up (Mohr et al., 2012). A recent review suggests that therapeutic alliance and process factors in telephone therapy tend to be similar to in-person psychotherapy (Irvine et al., 2020).

In summary, video- and telephone-based telemental health services are often as effective as in-person modalities for the treatment of several psychological conditions. Both patients and providers report high levels of satisfaction with telemental health modalities, and exposure to telemental health can increase satisfaction over time. Although providers who have never used telemental health may have concerns about offering these services, the COVID-19 pandemic required clinicians to quickly face these fears and shift to a different health care model.

VHA Response to COVID-19: Scaling up Remote Services to Maintain Continuity of Care

VHA is the nation's largest integrated health care system, annually caring for over 6 million veterans (Harpaz-Rotem & Hoff, 2020) at 1,286 sites (Veterans Health Administration Support Service Center, 2020). Approximately 25% of all veterans live in rural counties that often have few or no mental health providers (Andrilla, Patterson, Garberson, Coulthard, & Larson, 2018; U.S. Department of Veterans Affairs Office of Rural Health, 2020). Since the 1960s, VHA has been a pioneer in using telemental health to overcome geographic barriers to care, especially for rural veterans and veterans with disabilities or health conditions make travel to clinics difficult (Adams et al., 2019; Darkins, 2014).

During the decade before the current pandemic, video telemental health visits in VHA increased eightfold (see Figure 1). This expansion was facilitated by several factors. VHA developed VA Video Connect (VVC), an encrypted, Health Insurance Portability and Accountability Act (HIPAA)-compliant platform that allows veterans to see and talk to their health care team from anywhere within the United States or its territories. VVC can be accessed using the Internet through an appointment link sent to both the clinician's and veteran's e-mail. The VHA Tablet to Home Initiative also provided over 38,000 mobile devices (i.e., tablets and iPads with 4G data plans) to veterans who did not have adequate equipment or infrastructure at home to enable telehealth care (Jacobs et al., 2019).

In 2016, VHA established 11 telemental health "hubs" that served nearly 260 predominantly rural and/or under-

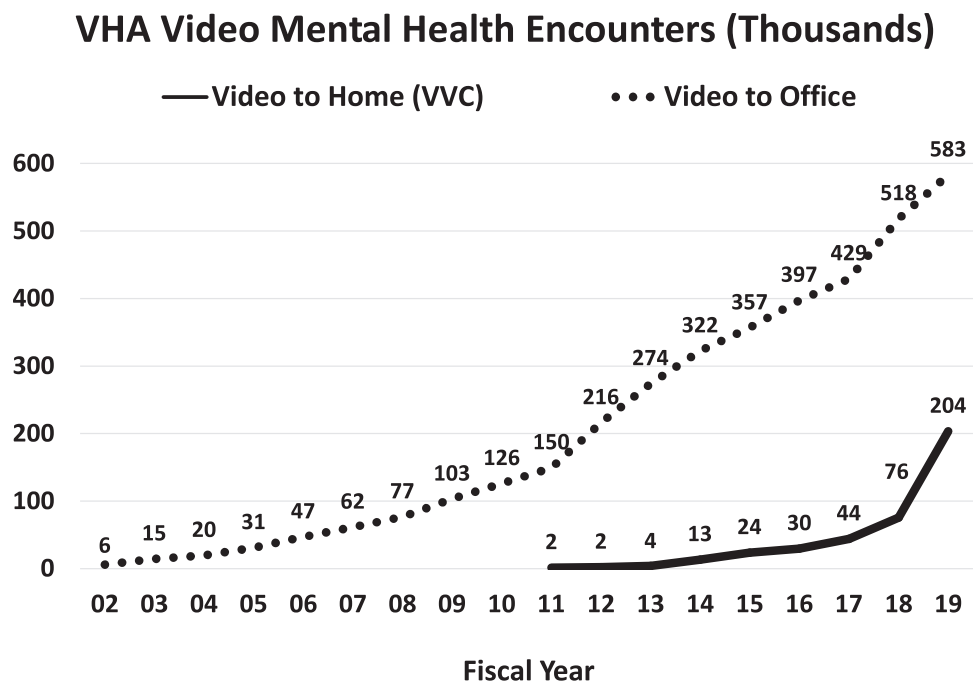

Figure 1. VHA Mental Health Encounters via Clinical Video Teleconferencing, Fiscal Years, 2002 to 2019. VHA = Veterans Health Administration, U. S. Department of Veterans Affairs; VVC = VA Video Connect.

served "spoke" sites through the end of fiscal year 2019 (FY19). This enabled a cadre of hub clinicians who were experienced and comfortable with telemental health to provide care to underserved areas. The VA MISSION Act, H. R. 5674, 115th Cong. (2018) authorized VA providers using telehealth methods to provide care for any veteran who needed services, irrespective of VA provider or veteran location within the United States. Leveraging these advances, VHA set an ambitious performance target: by the end of FY20, 100% of VHA outpatient mental health and primary care providers would be trained and capable of providing services to patients using video telehealth methods. In FY19, VHA providers delivered 786,000 video telemental health encounters (e.g., psychotherapy, case management, medication management, or check-in appointments) to more than 230,000 veterans, with more than a quarter of those visits delivered directly to the patient's home or another location of their choice (see Figure 1).

Following the onset of the COVID-19 pandemic, VHA responded by quickly ramping up telemental health services to ensure the provision of mental health services for veterans with as little disruption as possible. The next sections of this article review VHA's administrative preparations for a shift to virtual care, provider training, clinical actions to maintain continuity of care, and rapid shifts in provision of care during the first weeks of the pandemic.

Administrative Preparations for Expanding Virtual Care

With the onset of the pandemic, telemental health shifted from being a tool preferred by some veterans to a critical means of maintaining continuity of care while limiting in-person visits and reducing risk of contagion (Heyworth, Kirsh, Zulman, Ferguson, & Kizer, 2020). To decrease the need for in-person visits, mental health leaders worked closely with providers and program leads to determine what components of care (e.g., psychotherapy, psychiatric management, and case management) could be delivered virtually, and to determine which essential services (e.g., methadone dosing, transcranial stimulation, and inpatient acute psychiatric care) could only be delivered on-site.

A key concern of VHA during the COVID-19 pandemic was ensuring access to mental health care, especially for patients who were especially vulnerable. Many VHA facilities prepared for a shift to remote care by using the electronic medical record data to update lists of veterans who, based on their clinical status, should be prioritized for outreach and virtual care (e.g., those at high risk for suicide, diagnosed with opiate use disorder, or in special programs such Mental Health Intensive Case Management). Nationally, VHA expanded one of its preexisting dashboards to help identify and enable closer monitoring of veterans at risk of suicide who screen positive for, or have a diagnosis of, COVID-19. These administrative preparations estab-

lished the infrastructure to ensure continuity of care for the most at-risk patients.

Training Clinicians in New Practices

After the outbreak of COVID-19, VHA accelerated its training efforts to prepare its clinical workforce for the delivery of virtual care via video. VHA had previously developed a comprehensive set of nationally required standardized trainings to help clinicians translate their existing skills for use over a video platform. These trainings focused on video telehealth and addressed documentation, legal and policy considerations, quality and safety procedures, techniques for improving the virtual clinical experience, and technology troubleshooting.

The documentation component of VHA training reviewed recording the patient's physical address, phone number, consent for virtual care, and a survey of the patient environment for safety and confidentiality during each visit. Legal and policy telehealth training reviewed relevant licensure issues and remote prescribing regulations for controlled substances. Quality and safety training covered preparations at the beginning of each encounter to facilitate an emergency response if a medical or behavioral problem arose. Clinicians used a standard national telehealth emergency template to collect contact information needed to deploy a local emergency response if needed (911, E911). These preparations enabled VHA to scale up virtual care safely during a time of significant stress among patients and providers.

VHA's telehealth trainings also demonstrated techniques for creating a positive patient-provider therapeutic experience. These include preparing the patient for virtual care and addressing patient concerns, staging (optimal visual and audio set up, attire, and reducing background distractions), and "netiquette" techniques (e.g., establishing eye contact by looking directly into the camera, speaking slowly if there is a brief delay in transmission). Finally, the required VA telehealth training included a review of the video technology platform and tips for troubleshooting technology issues. All clinicians are required to complete these online trainings and carry out at least one virtual visit before providing virtual care on an ongoing basis. Supervisors also have option of having their clinicians do a skills assessment with a video teleconferencing preceptor. The preceptor models the core competencies, has the clinician demonstrate the skills, and provides additional coaching if needed.

In contrast to training requirements for video telemental health, VHA did not have a formal program to train clinicians in delivering care by telephone. Although clinicians follow some of the same safety procedures as for video (e.g., determining the patients' location), clinicians were assumed to not need formal training to adapt their interactions for telephone.

Actions to Ensure Continuity of Care

As communities received guidance about the need for physical distancing to reduce the spread of the virus, VHA national leadership worked with local facilities to maintain continuity of care. From the start of the COVID-19 pandemic, national VHA mental health leadership used daily and weekly emails and conference calls to support mental health providers throughout the VHA system, provide up-to-date information about evolving conditions, and obtain facility-level feedback. Mental health leaders at the local and national level disseminated materials to support their staff, reiterated available resources to enable virtual care, shared promising practices, encouraged self-care, and set expectations that service delivery might need to be adjusted repeatedly throughout surge and recovery periods of the pandemic. Mental health leadership also encouraged providers to be adaptable to address needs of all veterans in their caseload.

VHA issued national guidance encouraging facilities to contact veterans to offer virtual encounters in place of scheduled appointments, and to reserve in-person visits for urgent care (e.g., psychiatric acuity, suicidality). Patients were informed that their pending mental health appointments would not be canceled, but instead were asked if these appointments could be provided by phone or video whenever possible. VHA providers also prioritized contacting patients who had been designated as especially vulnerable even if they did not have a scheduled appointment. After meeting these first two priorities, providers were encouraged to reach out to the remainder of their patients to ensure that all veterans had support during this stressful period.

VHA's preferred platform for video delivery is VVC. However, VHA also encouraged the use of telephone as a primary modality to augment VVC use during the first phase of COVID-19.

VHA's rapid scale-up of telemental health posed technological and regulatory challenges. Clinicians initially provided much of their care by telephone. Phone contact was critical for reaching patients who lacked reliable Internet service or lacked devices to use video telehealth. Although mental health leaders often encouraged clinicians to provide psychotherapy by phone, as needed, during the first few weeks of the pandemic, telephone psychotherapy initially received less reimbursement credit than psychotherapy via video. However, after May 1, 2020 the Centers for Medicare & Medicaid Services relaxed its guidelines to allow use of regular mental health procedure codes (e.g., psychotherapy codes) for care via telephone during the current public health emergency (Veterans Health Administration Health Informatics Management, 2020).

Even with a great deal of care being delivered by phone, the huge increase in use of VVC during the initial phase of

the COVID-19 pandemic strained the bandwidth of the system, and some clinicians were unable to reliably access VVC. Under these extraordinary circumstances, in line with guidance offered by the Department of Health and Human Services (2020), VHA temporarily relaxed some HIPAA compliance requirements and permitted health care providers to communicate with patients via nonpublic facing video chat apps (e.g., Skype, FaceTime) in addition to VVC. VHA clinicians were instructed to enable all encryption and privacy modes when using such apps and to notify patients about all new privacy risks. Although VHA allowed these alternative video platforms to meet immediate demand, VHA also worked to increase its own VVC capacity. Between mid-March and mid-April 2020, VHA more than doubled its number of on-site nodes for VVC, and VHA added additional cloud-based nodes in May, 2020. As VHA's video capacity expanded, clinicians were asked to decrease their use of telephone or non-VA platforms, and resume use of VVC whenever possible. Although there were significant challenges to the scaling up process, VHA was quick to identify and troubleshoot these challenges to ensure continuity of care and reduce barriers to telehealth services.

Shift to Telemental Health Provision of Care

These planning, training, and infrastructure initiatives prepared VHA to shift to a remote health care model. Before COVID-19, VHA delivered 1.5 million to 1.8 million mental health encounters (including case management, psychotherapy, medication management, check-in appointments, and other services) each month, with 85% of encounters in person, 11% by telephone, and 5% by to-office or to-home video (see Figure 2). VHA began to shift to virtual care in mid-March, 2020 when the pandemic was declared, and new directives were issued to reduce in-person contact. Telephone and direct-to-home video contacts more than doubled between February and March, with a corresponding reduction in face-to-face visits (see Figure 2).

In April of 2020, VHA's mental health services shifted predominantly to virtual care. In-person visits accounted for only 20% of the roughly 1.5 million mental health encounters that month, with the remainder of care provided by telephone (65%), direct to home video (14%), and minimal video to office (1%). The number of telephone contacts in April represented a nearly sixfold expansion over the average encounters in the 5 months before COVID-19 (October 2019 through February 2020), while to home video visits increased eightfold. In May and June, fewer than 20% of mental health encounters were provided in-person. As VHA increased its VVC capacity, the number of VVC visits increased from 219,000 in April to 305,000 in June. The number of VVC visits in June was an 11-fold increase relative to the 5 months before the pandemic. Use of telephone encounters correspondingly declined from 65% of encounters in April to 59% in June. Summing across all modalities, the mean dose of care that veterans received during April to June was 2.36 mental health encounters per month. This was only a slight reduction from the mean of 2.55 encounters per month that veterans received before the pandemic, in October 2019 through February 2020.

Although VHA's timely shift to virtual care was broadly successful, this transition was not without difficulties. There was variation in how quickly different facilities (VHA administrative units typically including one or more medical centers and their associated outpatient clinics) scaled up

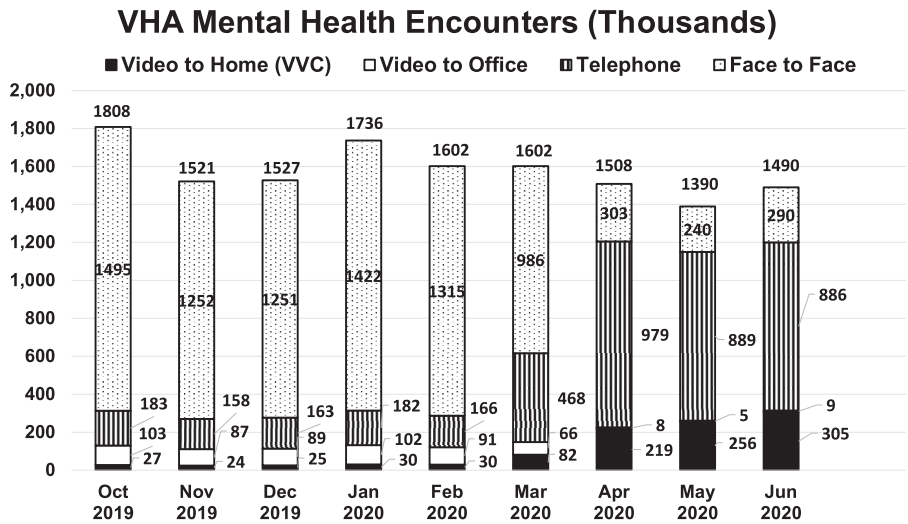

Figure 2. Modality of VHA Mental Health Encounters, October 2019 to May, 2020. VHA = Veterans Health Administration, U. S. Department of Veterans Affairs; VVC = VA Video Connect.

virtual care and reduced in-person visits. Some of this divergence may reflect differences in the prevalence of COVID-19, local health departments' guidance regarding physical distancing, and decisions by leadership of each facility. Facilities also varied in how much virtual care they provided by phone versus video. Across different facilities, the proportion of encounters provided by telephone ranged from 26 to 84% (median = 65%), whereas the proportion of care provided by VVC ranged from 3 to 38% (median = 16%). This variation may partially reflect facilities' prior preparation and comfort in using video to home as well as veterans' capability for video connectivity. Facilities' proportion of VVC encounters during the pandemic was strongly predicted, $r = .38$, $p < .001$, by their proportion of VVC encounters in the October 2019 to February 2020 period before the pandemic.

Even with increasing use of VVC, telephone accounted for the majority of care in June 2020. The nine VHA facilities with the highest use of VVC still completed more of their mental health encounters by telephone (44 to 55%) than by video (37 to 43%). Although many phone encounters were likely case management calls or brief check-ins, which are routinely done by phone, psychotherapy was also being provided via telephone during this time.

Before the pandemic, VHA policies and trainings emphasized video as the recommended telemental health modality, In the first weeks of the pandemic, to ensure that all veterans could be contacted promptly, VHA directives supported clinicians using telephone as a primary modality. In May and June 2020, national guidance shifted to encourage use of VVC as the primary platform. Reasons for clinicians' continued reliance on phone after April may include difficulty reeducating veterans and clinicians who started using phone to now shift to prioritize video; limited administrative support for launching telemental health; difficulties preparing less tech-savvy patients to use VVC; some clinicians having difficulty getting comfortable with video care; and lack of good Internet connection access in some communities.

VHA's rapid and successful shift to telemental health services involved significant challenges. Quickly overhauling a nationwide health care system with over 1,200 sites required significant preparations across administrative, staff, and facility levels; these initiatives ensured continuity of care for thousands of veterans during a stressful and uncertain period. Even still, VHA continues to face ongoing challenges in the shift to telemental health care, including efforts to prioritize the use of video-based services. Examining VHA's experience during the COVID-19 pandemic can provide valuable information to other clinical practices and health care organizations that face similar challenges.

Implications for VHA and Other Organizations in Providing Virtual Care in Response to COVID-19

VHA's pivot to virtual care was enabled by its prior clinical, technical, and organizational investment in telemental health. Yet, even with these resources and experience, VHA had to respond to new challenges that emerged while scaling up its provision of virtual care in response to COVID-19. Other health care organizations are likely to face similar challenges in expanding their use of telemental health during and beyond the current pandemic.

One framework for understanding the issues organizations face in implementing new health technologies is the Nonadoption, Abandonment, Scale-up, Spread, and Sustainability model (NASSS; Greenhalgh et al., 2017). The NASSS framework focuses specifically on adoption of technologies in health care settings and was developed based on a review of 28 prior technology implementation frameworks. The NASSS posits that a health care organization's ability to integrate a new technological innovation into care depends on seven factors. These factors are: (1) the value of the innovation, (2) the availability and complexity of the technology, (3) the clinical complexity of the condition and population being treated, (4) the degree to which adopters need to develop new skills, (5) the organization's capacity for change, (6) the regulatory and financial context, and (7) the organization's ability to adapt and embed the technology into work processes (Greenhalgh et al., 2017). In Table 1, this framework is used to summarize the challenges VHA encountered in expanding use of telemental health before and after the onset of COVID-19, which other organizations may also encounter in scaling up telemental health. Next we describe lessons learned in each of these domains.

Value of Telemental Health

VHA originally valued telemental health as way to reduce travel and other logistical burdens for patients and expand rural patients' access to specialty care. Telemental health took on a new importance when COVID-19 forced a sudden shift to virtual care.

Other mental health providers (both individual clinicians and health care organizations) that previously saw telemental health as desirable but not essential may now view telemental health as a critical tool for responding to the current pandemic. Yet, as these providers gain experience using telemental health during the pandemic, they may discover additional benefits that lead them to sustain their use of virtual care after the pandemic. Telemental health may enable providers to better reach underserved parts of their patient population that might not otherwise come in for treatment, sometimes resulting from stigma (e.g., members of minority groups) or difficulty traveling to clinics (lack of transportation, disabilities that limit mobility,). Telemental

Table 1
Challenges to Adoption and Expansion of Telemental Health

Challenges (NASSS domain)	VHA before COVID-19	VHA immediate COVID-19 response	Implications for ongoing telemental health
Reasons to use telemental health (value proposition)	• Overcome geographic barriers, especially for rural veterans • Video as effective as in-person • Telephone outcomes promising, need more veteran data	• Provide care without risk of contagion	• Provide care without risk of contagion • Longer term, may discover additional benefits
Availability and complexity of telemental health technology (technology)	• Technology becoming simpler and less expensive • Fund telehealth equipment • VA Video Connect (VVC) • Distribute tablets to veterans	• Use of VVC • Allowing other video platforms (FaceTime, Skype) when needed • Expanded use of telephone	• Select HIPAA compliant video platforms • Determine role of telephone
Remotely managing risk (condition)	• Protocols for suicidality • National Veterans Crisis Line	• Triage patients needing monitoring • Protocols for suicidality	• Establish protocols for managing risk
New clinician and patient behaviors (adopter system)	• Telemental health hubs • Clinician training materials • Goal: All providers telemental health capable by end of FY2020	• Clinician training materials and "how to" documents • Sharing practices from sites that were early adopters	• Plan for clinician training and support • Provide technical support for patients
Organizational support for change (organization)	• Organizational commitment to telemental health • Financial support for telehealth	• Mandate to deliver care by necessary means during crisis	• Need to secure organizational and financial support
Regulations and reimbursement (external context)	• Reimbursement (billing codes) for video and telephone care • MISSION Act allows VHA practice across state lines	• HSS eases restrictions on non-HIPAA-compliant video platforms	• HHS eases HIPAA restrictions • DEA relaxes requirement for in-person visit for prescribing • Better reimbursement for telephone care
Integration of telemental health into processes of care (embedding and adaption)	• Shift from office-based to home-based video	• Ongoing communication • Flexibility during crisis • Long-term integration yet to be determined	• Expect the need to be flexible • Long-term integration yet to be determined

Note. COVID-19 = coronavirus disease 2019; VHA = U.S. Veterans Health Administration; NASSS = Nonadoption, Abandonment, Scale-up, Spread, and Sustainability model (Greenhalgh et al., 2017); HHS = U. S. Department of Health and Human Services; HIPAA = Health Insurance Portability and Accountability Act; DEA = U.S. Drug Enforcement Administration.

health may also allow providers to grow their practices and expand their patient bases to a larger geographic area. Providers may find that some patients prefer in-home care because of greater convenience (e.g., childcare, afterhours access), reduced travel burden, or greater perceived privacy (Morland et al., 2019). These additional benefits may encourage mental health providers to keep using telemental health as a core modality of care provision, even after the current public health emergency ends (Rosen, Glassman, & Morland, 2020).

Managing Technological Complexity

VHA's experience indicates the importance of flexibility in choosing and using telemental health technologies. Based on current scientific evidence and prepandemic reimbursement policies, VHA championed video as the primary modality for virtual mental health care. During the pandemic, VHA scaled up its video visits for mental health more quickly than its use of video in primary care or other medical specialties (Heyworth et al., 2020). Technological advances facilitated that shift. Technology for video conferencing has become more widely available and easier to use. Many veterans conducted their VA video visits using their own smart phone rather than a dedicated tablet provide by VA. When its unprecedented scale-up of video telemental health care stressed the VVC system, VHA was able to make use of other commercially available video platforms to ensure continued coverage.

Yet, despite advances in video teleconferencing, telephone remains our most reliable and widely available telemental health technology. When VHA had to rapidly shift to delivering 80% of its care virtually, most of that virtual care needed to be delivered by telephone. This modality required no training or preparations for patients and could reach areas with poor Internet access. This suggests that health care organizations may need to use a mix of platforms to deliver virtual care. Mental health providers will have to decide which functions can be done well via telephone and

which should ideally be done via video (with telephone backup if video equipment fails).

Managing Clinical Complexity

One of the key barriers to adoption of telemental health is providers' concern that a patient will become dysregulated during the session, and that this situation could be dangerous without a clinician physically present (Gershkovich et al., 2016; Gilmore & Ward-Ciesielski, 2019). As discussed previously, advance planning (e.g., having backup phone numbers, identifying an emergency contact, and knowing what local emergency services are available) can help ensure that the clinician is capable of responding to a crisis immediately, even when meeting with a client remotely. VHA had the benefit of established protocols for managing suicidality and for remotely triaging patients before the COVID-19 pandemic. Other organizations can use guidelines from the American Psychiatric Association and American Telemedicine Association (2018) to establish their own protocols for managing risk and determine when patients can be managed virtually or when they require in-person crisis care.

One area of clinical complexity that has not been adequately researched is delivery of virtual care to people with disabilities. Telehealth can improve access to care for people whose physical disabilities limit their mobility and make traveling to clinics difficult. Yet, clinicians and researchers need to consider how to best adapt video and telephone care for people with auditory or visual impairments (Connolly et al., 2020). Section 508 regulations (United States Access Board, 2017) provide guidance on how to make government websites accessible to people with sensory and cognitive disabilities; similar guidance is needed on how to adapt telephone or video care for people living with sensory or cognitive disabilities.

Adopter Preparation and Training

VHA provided training to help clinicians feel more comfortable with virtual care. A variety of training materials are publicly available to help clinicians in other settings develop their telehealth knowledge and skills (American Psychiatric Association, n.d.; American Psychological Association, n.d.). VHA's experience suggests that clinicians who are early adopters of telemental health can provide coaching and support to colleagues who are less experienced in virtual care. It may be useful to train clinicians in mixed approaches (e.g., when to use video and when to use phone). Checklists can be used to orient clinicians to safety procedures (e.g., confirming patients' location) and communication tips when providing care by phone; these could be adopted from existing materials for video telemental health.

Less attention has been given to how to support patients in the transition to video telemental health. VHA encountered difficulty in helping veterans who were less experienced with technology or who had cognitive impairments utilize clinical video teleconferencing. More work is needed to develop tools that guide clinicians through the process of teaching patients and family members how to use video teleconferencing. Another option is developing implementation models that augment clinician contact with direct-to-patient support from technical assistance personnel to prepare clients for virtual care.

Organizational Factors

VHA's size and structure both facilitated and hindered the shift to virtual care. The shift to telemental health was facilitated by VHA's decades of telehealth experience, electronic medical record, and sufficient resources to develop its own video platform and provide tablets to veterans. However, it is also challenging to make rapid changes in a decentralized organization in which over 350,000 employees provide care to over 6 million patients a year (Harpaz-Rotem & Hoff, 2020). Substituting telephone care for in-person appointments in late March, 2020, and then shifting again to increase use of video in April through June, required coordinated efforts from many people. This involved not only patients and their providers, but also supervisors, higher level managers, scheduling clerks, IT staff, and (if providers were shifting to telework from home) human resources. This rapid shift was often challenging and proceeded successfully only because people put in extra effort to troubleshoot organizational challenges. VHA is now initiating a needs assessment to identify barriers and facilitators of telehealth implementation at different sites. This will inform efforts to further expand telemental health, especially video care, systemwide.

Regulatory and Financial Context

VHA's scale-up of virtual care was facilitated by MISSION Act legislation allowing care from VHA clinicians across state lines and by HHS allowing temporary use of non-HIPAA-compliant platforms (Kannarkat, Smith, & McLeod- Bryant, 2020). Other regulatory changes in response to COVID-19 may help other organizations expand their delivery of virtual mental health care. HHS regulations now allow reimbursement of virtual care even if is not follow-up to an office visit (Kannarkat et al., 2020). CMS is allowing use of regular mental health procedure codes for care via telephone (Veterans Health Administration Health Informatics Management, 2020). Drug Enforcement Administration (DEA) made an exception to the Ryan Haight Act, which required an in-person visit before prescribing a controlled substance (allowing a telehealth assessment). Furthermore, the DEA and Substance Abuse and Mental Health Services Administration (SAMSHA) now allow providers to prescribe buprenorphine after a telephone assessment (Bojdani et al., 2020). Regulations may further evolve over time, and it remains to be seen whether

these temporary actions during the current public health emergency will lead to long-term regulatory changes that allow expansion of, and better reimbursement for, remote care.

Adaptation and Embedding Technology Into Care

For technological innovations in health care to be sustained, an organization must adapt and refine its processes, eventually embedding the new technology into the fabric of care (Greenhalgh et al., 2017). The COVID-19 pandemic rapidly accelerated VHA initiatives that were already underway to train all mental health and primary care providers in virtual care. In the early stages of this pandemic, VHA demonstrated great organizational flexibility, maintaining continual two-way communication with mental health leaders and providers during a time of dynamic change, and empowering clinicians to use alternative approaches necessary to ensure that veterans continued to get the right care at the right time. The findings here reflect VHA's use of telemental health in the early phase of response; VHA's activities are now settling into a stabilization phase in which new policies and procedures are becoming more established. However, care practices may need to continue evolving as the pandemic subsides and resurfaces.

Other organizations will face parallel challenges in making a shift to virtual care. After the initial phase of adoption, they will need to refine their strategy to better integrate telemental health into their ongoing processes of care. The shift to virtual care in response to COVID-19 is still in its early phase. It is yet to be seen how clinicians and health care organizations will evolve in their use of telemental health over the course of the pandemic and after it passes.

Conclusion: The Future of Telemental Health in the Wake of COVID19

The current pandemic has forced many mental health care providers and their clients to rapidly shift to virtual care. This has created a crisis, but also opportunity and perhaps a silver lining. One-to-one in-office care is not sufficient to meet the mental health needs of the population; multiple delivery methods are needed (Gruber et al., 2020). The long-term effects of this pandemic on the delivery of virtual care remain unclear, but it seems unlikely that care will revert back to prepandemic norms. Hopefully, the expansion of virtual care during this pandemic will enable VHA and other health care organizations to become more flexible in how they deliver treatment, allowing patients to choose from more options for receiving care in whatever way they determine to be most convenient, appropriate and clinically effective.

This evaluation of VHA's shift to virtual care had several limitations. Data on changes in VHA's video infrastructure (numbers of additional VVC nodes installed) did not readily translate into estimates of how many additional encounters these nodes could support. There were no reliable data on the types of mental health services provided via telephone. Although billing regulations were updated in May to allow coding of specific procedures via telephone, clinicians were still learning to make these coding changes. There was also little information on site-level barriers and facilitators that might explain varying rates of VVC use at different VHA facilities.

Even so, VHA's experience suggests three factors may be especially important in determining the degree to which VHA and other health care systems more fully integrate telemental health into routine clinical care, even after the COVID-19 pandemic has abated. The first factor is whether the temporary regulatory and billing changes enacted on an emergency basis will lead to longer-term revisions of HIPAA regulations, DEA requirements, and billing codes to facilitate and appropriately reimburse use of telemental health care (Shachar, Engel, & Elwyn, 2020). Without changes in financial and regulatory domains, providers may be unlikely to sustain greater use of virtual care.

The second factor is obtaining better empirical data on the relative strengths of video, telephone, and other virtual modalities (e.g., text messaging, apps) in performing different functions in the provision of care. Telephone delivery is a standard for case management, smoking cessation counseling, and crisis hotlines. Video is currently the telehealth standard of care for many other functions, such as psychiatric management and trauma-focused psychotherapy for PTSD. We need more research to help us determine which clinical functions can be delivered effectively by telephone, which are best done via video, and which functions can be done via text messaging or mobile apps. More noninferiority studies are needed comparing telephone and in-person psychotherapy. Comparative effectiveness studies are needed to assess the relative outcomes of telephone and video modalities. The only studies directly comparing video and telephone counseling are for smoking cessation; this work found video was no better than telephone (Tzelepis et al., 2019). More research is also needed on models of care that combine different modalities, such as initially providing online or smartphone self-management tools with telephone support and then stepping up to remote psychotherapy if needed (Mohr et al., 2019).

The final factor that will impact the integration of telemental health into routine clinical care is better understanding of patient preferences. Much of the research on patient satisfaction in video or telephone care is based on patients who opted into telemedicine trials. Because of the pandemic, a large and diverse patient population, including many who might not have initially chosen telehealth, now have experience with virtual care. Some of these patients may find they like receiving care at home; others may be

eager to resume in-person treatment as soon as they can. Feedback from these informed consumers can help health care organizations develop more flexible, patient-centered approaches for collaboratively deciding when to provide care in-person, via video, by telephone, or through a combination of formats.

The COVID-19 pandemic has forced health care organizations, clinicians, and consumers to rapidly shift to increasing their use of telemental health. Lessons learned from this pandemic can help VHA and other health care organizations expand their ability to offer virtual care as part of their portfolio of services. This will move us closer to the goal of providing effective mental health care to those who need it in whatever setting and format that they prefer.

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