



The University of Texas at Austin

Value Institute for Health and Care

Dell Medical School & McCombs School of Business

Insights on Telehealth Implementation and Value: Perspectives from Federally Qualified Health Centers

White Paper

Value Institute for Health and Care
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Executive Summary

The COVID-19 pandemic catalyzed rapid implementation of telehealth services in health care facilities across the country. Rather than presume that the proliferation of telehealth will naturally lead to better care for patients, this project seeks to understand *when* and *how* telehealth improves outcomes and thus increases value, with particular attention to improving equity. From May 2021 – July 2021, the Value Institute for Health and Care reviewed literature and interviewed leadership and staff members at two Federally Qualified Health Centers (FQHCs)—Community Health Centers of South Central Texas (CHCSCT) and Lone Star Circle of Care (LSCC)—to learn about their experiences using telehealth and identify opportunities to improve care. The interviewees expressed the importance and urgency of efforts to sustain and expand telehealth in Texas. We identify opportunities for future research, capacity-building, innovation, and outcome measurement to support high-value telehealth implementation and growth.

Telehealth is a powerful tool that should be considered within a clinician’s strategy to develop care solutions that fit the specific needs and circumstances of the patients they are serving. It is important to understand how and when telehealth can be used to increase value for patients—to achieve better health outcomes while reducing cost burden. In particular, telehealth may be used to improve outcomes in three dimensions of health: capability, comfort, and calm. Capability is a patient’s functional outcomes; comfort is relief from physical and emotional suffering; and calm is the ability to live normally while getting care, minimizing chaos and disruptions from seeking or receiving care.¹

Key findings and opportunities are summarized below.

Benefits of Telehealth

- The biggest opportunities for value creation with telehealth seem to be in the areas of chronic disease management, particularly if paired with remote monitoring, and mental health care.
- Telehealth has expanded access for many patients by making it easier, less time-intensive, and/or more comfortable for them to receive health care.
- Clinicians see telehealth as a useful mechanism for delivering health care and want it to remain an option for their patients going forward. Some clinicians and staff also highly valued the flexibility to work remotely full- or part-time enabled by telehealth.
- Several clinicians reported that telephone and video visits meant *more* time with patients and wished they had as much facetime with them in clinic.
- In many cases, we heard that telehealth has strengthened relationships, supported outcome improvement, and yielded new insights about how to make care work better with patients’ circumstances and environment.
- Telehealth opened the door to doing more remote triage with patients, leading to (a) diversion of patients from the ER and (b) more opportunities for at-home symptom management where appropriate.

Challenges of Telehealth

- Disparities in wi-fi access and smartphone ownership present major challenges to ensuring that telehealth services contribute to reducing health disparities.

- Given disparate internet and device access, telephone visits are the only way in which many patients can participate effectively in telehealth. Several clinicians reported successful telephone interactions with patients, particularly at CHCSCT, where a majority of telehealth takes place by telephone.
- Reimbursement for telephone visits—which are an effective option and, in many cases, the only option for patients—is much lower than reimbursement for video visits.

Opportunities

- Continue identifying the circumstances in which patients benefit most from telehealth use given their medical condition(s), environment, life circumstances, and health outcome goals.
- Optimize scheduling of telehealth and in-person visits to support care team members' professionalism and success.
- Improve integration of interpretation services with telehealth offerings to improve care for patients who are best served in languages other than English.

Introduction

This white paper presents insights about telehealth implementation, ongoing use, impact, and potential to support high-value health care delivery from a literature review and the perspectives of employees at two Central Texas Federally Qualified Health Centers (FQHCs): Community Health Centers of South Central Texas (CHCSCT) and Lone Star Circle of Care (LSCC). We identify opportunities for future research, capacity-building, innovation, and outcome measurement to support high-value telehealth implementation and growth. The findings presented in this white paper are the culmination of the first part of a two-part project funded by St. David's Foundation. The second part of the project will explore patient perspectives, specifically focusing on patients with type II diabetes or depression.

In health care, **value** is created when health care improves a person's health. Value increases when better health reduces costs and when better outcomes are achieved less expensively.

Telehealth—the provision of health care remotely by means of telecommunications technology—is one of many tools that can be used in health care to improve health results, provided its adoption aims at bettering health outcomes rather than simply enabling more health care visits.² There is substantial and swiftly-growing evidence of telehealth's contributions to health outcome improvement.^{3–10} Prior to and during the COVID-19 pandemic, telehealth has been used successfully to improve the health of patients who were otherwise not receiving care, as well as patients who could access in-person services but were better or just as well served by telehealth or a hybrid approach (telehealth plus in-person care). The adoption of telehealth has been more common in some chronic conditions and in behavioral health conditions where patients need regular, ongoing visits.⁵

The COVID-19 pandemic precipitated widespread adoption of telehealth throughout the United States (US), where previous regulatory and reimbursement practices had discouraged or prevented telehealth integration in health care systems. This was mainly due to telehealth's ability to allow patients to still receive care while limiting the possibility of exposure to the COVID-19 virus. While many clinics offered both telephone and video visits during the pandemic, studies showed that telephone visits are more frequently used than video visits in many FQHCs. For example, a study of a large FQHC network in California found that during the pandemic, 48.1% of primary care visits occurred in person, 48.5% via telephone, and 3.4% via video.¹¹ A majority of behavioral health visits took place by telephone (63.3%), followed by in-person (22.8%) and video (13.9%). Telephone visits peaked in April 2020, comprising 65.4% of primary care visits and 71.6% of behavioral health visits.

While the COVID-19 pandemic has slowed and telehealth use declined nationally in 2021,¹² telehealth use continues across the country, and a large proportion of both clinicians and patients hope it will continue to be an option going forward.^{13–15} A survey administered to physicians by the American Medical Association in late 2021 found that 85% of the 2,232 respondents were currently using telehealth, and 70% of respondents reported that their organization is motivated to continue using telehealth.¹⁵ In late 2021, mental health conditions were the most common reason for telehealth visits in the US.¹⁶

Project Approach

Throughout this project and white paper, we use the term “telehealth” to refer to a broad variety of technologies and tactics to deliver medical, health, and education services at a distance (i.e., remotely). In this sense, telehealth is not a specific service but a collection of methods and tools for providing care and education to patients. Under the umbrella of telehealth, “telemedicine” refers specifically to remote *clinical* services—usually synchronous (live) telephone- or video-based appointments with clinicians. Despite the lack of consensus about telehealth terminology, most people in health care seem to agree on this definition of telemedicine and recognize it as one manifestation of telehealth. Other forms of telehealth include but are not limited to asynchronous transmission of recorded health information, such as radiographs or photos; remote patient monitoring; and mobile health, which refers to health care and public health outreach and education via mobile telephones, tablets, and other mobile communication devices.

We conducted a background literature search on telehealth implementation in FQHCs, with a focus on barriers to and facilitators of effective implementation and use, as well as examples of telehealth’s impact on health and health care disparities.

We then facilitated one-on-one and group interviews with executive leadership, other staff members, and clinicians at Community Health Centers of South Central Texas (CHCSCT) and Lone Star Circle of Care (LSCC), two of St. David’s Foundation’s grantee partners. Most interviews took place over video between May and September 2021. We spoke with a total of 38 employees: 16 employees from CHCSCT and 22 employees from LSCC. Participants represented a variety of clinical and administrative roles:

- 19 clinicians (e.g., physicians, nurse practitioners, nurses)
- 10 administrative or clinical support staff (e.g., medical assistants, site coordinators, IT professionals, billing team members)
- 9 senior leaders (e.g., chief executives, medical directors)

Both CHCSCT and LSCC had conducted small telehealth pilots in behavioral health in early 2020, with plans to expand to more patients and service lines over the coming months. They rapidly accelerated those plans when the pandemic came to Texas and began offering telephone and video visits to patients in a matter of days. Of the clinicians we interviewed, only one had experience with conducting telehealth appointments with patients prior to the pandemic.

How-to resources for conducting effective telehealth were relatively scarce in early 2020. Most clinicians in this study started providing care via telephone and video with no formal training, learning as they went, from their own experience and those of their colleagues.

Table 1 provides demographic data for the patient populations CHCSCT and LSCC serve. A majority of CHCSCT’s patients and clinic sites are located in rural areas. LSCC also serves patients who reside in and/or receive care in rural areas, although only 10% of visits are at rural sites. Regardless of where they live, many CHCSCT and LSCC patients lack reliable access to transportation. By CHCSCT’s estimation, most of its patients do not have access to public transit. A majority of patients at both FQHCs experience constraints in terms of one or several of the following: access to digital devices, access to the internet (due to limited infrastructure where they live and/or the cost of obtaining access to internet for themselves), and digital literacy.

Table 1: Snapshot of Patients Served in 2021 at CHCSCT and LSCC

	CHCSCT	LSCC
Catchment Area	5 counties; 500,000 pop.	6 counties; 2.5 million pop.
Number of Unique Patients Served Annually	25,000	99,000
Patients with Preferred Language Other Than English (% of total patients)	18%	25%
Patients in Rural Areas*	>50% live in rural areas	10% of visits are at rural sites
Children Served (% of total patients who are under the age of 18)	22%	50%
Patients Living At/Below 200% of the FPL	>45%	63%
How Patients Pay for Care (% total patients)		
No Insurance	56%	31%
Privately Insured	17%	20%
Medicaid or CHIP Medicaid	19%	45%
Medicare	8%	5%

* Whereas CHCSCT tracks the approximate percentage of its patients who live in rural areas, LSCC tracks the percentage of patient visits that take place at its rural clinic sites.

Note: FPL is the acronym for federal poverty level.

Background on Telehealth Implementation and Use at FQHCs

At the onset of the COVID-19 pandemic in early 2020, thousands of FQHCs across the US rapidly transitioned to offering telehealth services to their patients. For many clinics the change took place overnight, with employees being sent home and appointments cancelled on a Friday and telephone and/or video appointments in certain service lines being offered and conducted the following Monday. Prior to the pandemic, telehealth services were the exception in the US; in particular, most providers did not offer telemedicine—or, if they did, it was rare. Nevertheless, there is a strong evidence base for the effectiveness of telehealth for a number of patient groups and conditions. Both peer-reviewed and grey literature on this topic provide important insights about the value of virtual care delivery for a variety of medical circumstances—from depression and type 2 diabetes to obstetric outcomes and heart failure—as well as examples of the limitations or failures of telehealth offerings. For this project, we focused on academic and grey literature concerning telehealth use at FQHCs in the US. The following summarizes key themes and insights we identified in our review regarding effective telehealth use with individuals receiving care from FQHCs.

The Importance of Remaining Open

Telehealth needs to support relationships. One study focused on health equity found that continuing to offer in-person visits alongside telehealth services was key to building and maintaining trust with patients.¹⁷ The leaders we interviewed at CHCSCT and LSCC echoed this idea, explaining that they never closed their clinics to in-person visits during the pandemic and believed this was an important signal to patients that they could continue to count on the FQHCs.

Facilitators of Telehealth Implementation & Use

Studies found that the following activities supported telehealth implementation and use at FQHCs:

- Reassigning staff to different roles as needed, particularly at the beginning of the pandemic¹⁸
- Communicating with patients in advance to assess their technology access and needs, and to train them on how to participate in a telehealth appointment^{17,19}
- Using SMS text messages to convey reminders and telehealth visit information (e.g., how to join) to patients before their appointments¹⁹
- Grant funding, the presence of a clinic champion, collaboration with payers, and adopting promising practices to improve telehealth-related workflow challenges²⁰

A number of studies identify steps clinicians can take to strengthen communication with patients during telehealth visits. Some tips include asking clear, open-ended questions, asking questions to check understanding, and developing a “video presence” with non-verbal communication by exaggerating facial expressions and being mindful of eye contact.^{21,22} See Appendix 1 for more examples.

Barriers to Telehealth Implementation & Use

The lack or inadequacy of reimbursement for telehealth is an oft-cited barrier to its implementation and continued use in FQHCs. In addition to reimbursement, a study of Medicaid-funded programs and health centers cites the following obstacles:²⁰

- Insufficient broadband and other infrastructure gaps
- The costs of technology
- Telehealth as a cost center, a segment within an organization to which they can collect and report costs
- Billing challenges
- Lack of buy-in among FQHC providers
- Challenges specific to particular groups of patients (e.g., patients who are unhoused, patients who are older)
- Complexities in adjusting clinic workflow
- Inadequate supply of specialists to provide telehealth services to FQHC patients
- Complex and time-consuming logistics related to credentialing and licensing for receiving authorization to act as a distant site in their region/health care network
- Challenges in working with remote providers, or those contracted to provide certain health care services not offered at the FQHC

This study also heard from participants that they believed they could overcome these barriers if reimbursement for telehealth services improved and the risk of losing revenue in providing telehealth services was mitigated.²⁰

The American Medical Association’s 2021 survey of physicians found that lack of insurance coverage and either low or no payer reimbursement were the most commonly identified barriers to implementing and continuing telehealth services.¹⁵ From respondents’ perspectives, the top three barriers facing their patients were technology, digital literacy, and broadband internet access. Respondents included

physicians who practice in FQHCs and those who do not, so the findings represent perspectives within and beyond FQHCs.

Barriers, of course, are not the same for everyone. A study of barriers to telemedicine equity in primary care, analyzed barriers at three levels: patients, clinicians or practices, and health systems (see Table 2 below). They explain, “Though most conversations on telehealth equity focus on patient-level barriers, there are disparities in preparedness for and capability of transitioning to telemedicine at multiple levels of the health care system between underresourced health systems, which disproportionately care for minority and low-income patients, and higher-resources systems. Underresourced health systems have less device, software, and broadband access as well as lower payment rates per care episode, which often results in lower telemedicine payments for practices that disproportionately care for patients with low digital access.”²⁷

Table 2: Barriers to Telemedicine Equity

Level	Barriers to Equity
Health care system	Reimbursement policy
Health practice/clinician	Hardware access, HIPAA-compliant software, high-quality internet connection, mission and workflow alignment, capacity to provide technical support, staff turnover
Patient	Digital device access, high-quality internet connection, digital literacy

Source: Table 1, page 247, Khoong and Lyles (2021).

The Dual Potential of Telehealth to Reduce and Widen Health Disparities

Emerging evidence of telehealth’s impact on health disparities indicates that, similar to other tools and technologies in health care, telehealth can be used in ways that support or impede efforts to advance health equity. On the one hand, telehealth enables greater access for many by removing barriers and costs associated with in-person visits. Multiple studies have demonstrated a link between telehealth and fewer missed appointments (“no-show rates”) at FQHCs for a variety of services, including primary care,²³ dermatology,²⁴ and maternal fetal medicine.²⁵ At least one study looked at this phenomenon in Texas, finding a strong association between telehealth and a lower likelihood of missed appointments across 55 FQHCs.²⁶ By reducing the time required to receive care and the costs associated with it (e.g., child care, gas or other transportation expenses, unpaid time away from work), telehealth can make it more convenient and affordable for patients to receive care. This is one way in which telehealth can be an especially powerful tool for people who are underserved, poorly served, or not served at all by in-person encounters.

At the same time, telehealth is not accessible to everyone, and it is not the best care modality for every patient. If telehealth is implemented wholesale as a one-size-fits-all solution, health care providers risk maintaining or exacerbating disparities in health care and health outcomes.²⁷ For example, the previously mentioned study of a large FQHC network in Texas found racial and ethnic disparities in the use of telemedicine appointments: patients who were African American, Asian, or American Indian/ Alaska Native/Pacific Islander were significantly less likely to use telemedicine than white patients.²⁸ Hispanic patients were less likely to have had a telemedicine visit than patients who were not Hispanic. These findings are consistent with previous studies of racial and ethnic disparities in health information technology use both before and during the COVID-19 pandemic.^{29–34} The study investigators also observed geographic differences, with the likelihood of telemedicine use increasing if the individual lived farther away from the clinic. Telemedicine use varied with age as well—patients younger than 18 and adults aged 65 and older were less likely to have a telemedicine visit than adults ages 18–64.²⁸

Language is another predictor of telehealth use disparities. A large study of telehealth use in California found that patients with limited English proficiency had lower rates of telehealth use than proficient English speakers.³⁴ A smaller qualitative study of two FQHCs in northern California discovered that patients with limited English proficiency—as well as older patients and patients with limited digital literacy—avoided or disliked video appointments, had limited access to digital devices, or had greater difficulty using video technology and required assistance to do so.³⁵ Third-party language interpretation services were difficult to integrate into video visits.

A number of new studies exploring the effects of telehealth on health disparities are underway, including an evaluation of an equity-focused telehealth model for Medicaid-enrolled patients with chronic conditions in Massachusetts. The goal of the study is to “generate an evidence base for providers and policymakers in Massachusetts and across the US as they make decisions about what telehealth might look like post-COVID, and how it can be used to improve quality, equity, and value of care for the most vulnerable.”³⁶

Evidence of Telehealth Contributing to Better Outcomes at FQHCs

Unfortunately, it is not the norm in US health care to measure and track health outcomes,¹ and the widespread adoption of telehealth over the last two years took place in this context. Most respondents to the AMA’s telehealth survey in late 2021 (which, again, was not limited to FQHC practitioners) said their employers were measuring the value of telehealth based on access and patient satisfaction metrics.¹⁵ About one-third of respondents said their practice was not measuring the value of telehealth by any measure. Another third said their practice was measuring the clinical outcomes and clinical quality of telehealth services (which may be very different from the outcomes that matter most to patients).

Further evidence of telehealth improving health outcomes for FQHC patients is needed to bolster arguments for continued policy support and for payer investment in telehealth integration.

Telehealth Advocacy & Advocacy Resources

As part of the literature review, we found a number of professional associations and consortia working on research, capacity-building, and/or policy advocacy to support telehealth effectiveness and sustainability in the U.S., including how to use telehealth to reduce health disparities, and how to reduce disparities in digital care. A partial list of these organizations and the telehealth toolkits they provide for FQHCs and other health care providers is in Appendix 2.

Findings

Through our interviews with clinicians and staff at LSCC and CHCSCT, we identified multiple themes related to their perspectives on and experience with telehealth.

Initial Implementation of Telehealth

Factors that Enabled Initial Telehealth Implementation & Use

Patients and clinicians alike were receptive to transitioning to telehealth; participants did not identify the need to cultivate “buy-in” for this abrupt change. The initial pivot to telehealth services meant dramatically fewer in-person visits, meaning front desk staff and medical assistants—many of whom were asked to work remotely in the initial months of the pandemic—had extra time in their work days. The FQHCs quickly trained and reassigned many of these personnel to help patients set up devices and access virtual appointments. LSCC formed the OTTO Team, named for its telehealth platform, to proactively contact patients prior to visits to make sure they could log on to the platform and use it (e.g., test the patient’s microphone and camera, guide them in installing software updates if needed). Members of the OTTO Team also supported both clinicians and patients during visits, helping troubleshoot connectivity and audio issues as needed. Some OTTO Team members were based at LSCC’s central patient navigation center, while others worked onsite at a clinic or from home.

LSCC studied its “no-show rates” (missed appointments) and found that patients who spoke a language other than English experienced the most difficulty scheduling and participating in telehealth visits. They also found that the OTTO Team’s proactive outreach to patients scheduled for virtual behavioral health appointments made almost no difference (less than one percentage point) in terms of their successful participation in visits because those patients tended not to miss or become disconnected from telehealth visits regardless of OTTO Team support. LSCC hypothesized that this was because behavioral health visits occurred more frequently and on a more regular schedule than other kinds of visits, giving those behavioral health patients more opportunities to practice using telehealth. As a result, LSCC discontinued outreach to those patients and reallocated OTTO Team efforts to patients seeking other services.

Multiple clinicians told us that at the beginning of the telehealth transition they participated in a one-hour CME training on how to conduct an adult exam via video and found it helpful. Otherwise, clinicians started providing care via telephone and video with no formal training, learning from their own experience and their colleagues along the way. According to one clinician, “I was really anxious about doing telemedicine at first because I had never seen it done before [...] Just seeing it done was helpful. It felt like it was more intuitive than I had originally built it up in my head to be, actually.”

Procuring headsets and second monitors for clinicians, and investing in faster internet speed, helped ensure smoother visits and minimize disruption to workflow. Clinical team members started using the chat feature of their FQHC’s communication platform to troubleshoot problems and share solutions across clinic sites. Both FQHCs expanded their hours and offered overnight and weekend telemedicine appointments for certain services (e.g., family practice) to meet demand.

Intake for new patients was paper-based at both FQHCs when the pandemic started. To enable new patients to initiate care remotely and be seen for the first time via telehealth, if appropriate, both FQHCs introduced digital intake forms a few months into the COVID-19 pandemic. Both FQHCs also developed

digital support aids to help patient navigation center staff determine if a visit could be by video or telephone instead of in person. LSCC's tool also included "red-flag protocols" that indicated a patient should receive additional triage support from a clinician if they used certain keywords when describing their reason for contacting the FQHC.

Early Challenges in Telehealth Implementation & Use

Challenges to initial telehealth implementation included:

- There was uncertainty about how to bill for telehealth visits as instructions from insurers changed frequently during the first few months of the pandemic.
- It took many patients time to adjust to accessing and participating in telehealth appointments, which both FQHCs attempted to ease by redeploying non-clinical team members to provide proactive tech support in advance of appointments.
- Interpretation services for patients who are best served in a language other than English were inadequate or unreliable, due in large part to the lack of integration between the FQHCs' telehealth platforms and third-party interpretation services.
- Lack of integration between telehealth and electronic medical record (EMR) platforms meant that clinicians could not view their patient and their patient's EMR simultaneously during a video visit if they had only one screen. The FQHCs initially addressed this by procuring second monitors for clinicians who had only one. They also worked to integrate their EMR and telehealth platforms.
- Scheduling follow-up appointments with patients following a virtual visit was more challenging than scheduling after an in-person visit. Without a "virtual front desk," patients ended their visit with a clinician and then staff had to follow up to schedule their next appointment. Sometimes there was miscommunication between clinicians and staff who scheduled appointments, or staff had difficulty reaching patients to arrange their follow-up visits.
- If a clinician was running behind and was going to be late to join a telehealth visit, it was difficult to communicate the delay to patients. Patients were often confused if they were in the telehealth appointment and the clinician was not there—the patient did not know if the appointment was still happening, or if they were in the wrong place. For in-person appointments, patients are typically in a waiting room prior to their appointment and staff can inform them if their clinician is running late.

Several of these challenges—particularly meeting patients' interpretation needs—remain obstacles to telehealth at both FQHCs and will be discussed in greater depth later in the white paper.

Telehealth Utilization Patterns

A majority of CHCSCT's telehealth visits have been telephone-based because most of its patients do not have sufficient internet and/or device access to participate in video visits. By contrast, most LSCC telehealth visits are by video, driven in part by low payer reimbursement rates for telephone visits.

Young adults and middle-aged patients have been the biggest adopters of telehealth at both FQHCs. Telehealth uptake has been highest for behavioral health and family medicine services; these are also the services for which telehealth has been offered most frequently. Telehealth uptake has been lowest for pediatric care. Several participants heard or perceived from parents that they prefer their children's pediatrician "lay hands on them," especially for well-child visits.

Benefits of Telehealth

Telehealth Protected Patients & Employees from COVID-19

Many patients expressed fear and anxiety to clinicians and staff about coming into the clinic due to potential COVID-19 exposure. A pediatric clinician explained: “Parents appreciated having access to us during lockdown. They were so scared. There were like, ‘Whoa, if this is just diarrhea do I really have to risk going to the hospital?’” Remote triage of patients also reduced potential exposure to COVID-19. Additional benefits of virtual triage will be discussed in a later section.

Participants expressed appreciation for the opportunity to work remotely at the beginning of the pandemic. For those who were exposed to COVID-19, remote work allowed them to continue working while self-isolating at home.

Telehealth Enabled More Time with Patients

Some clinicians reported having more time to spend with patients because they did not have to cede appointment time to tasks that usually take place during in-person visits, such as patients’ completion of administrative forms, vital sign readings, and routine screening. Several noted that this additional time helped them strengthen their relationships with patients and focus more on fitting care to their patients’ life circumstances. In the words of one clinician:

“Instead of having that big portion of my visit taken away, I could just spend truly my 15- or 30-minute visit with them, just with the patient, and it was wonderful. I didn’t have my vitals, but I can tell [...] If they’re blue, that’s bad; if they’re breathing fast, that’s bad; if they’re wheezing, that’s bad. I could just have them sit there with their parents on the sofa, and just by observing them as I talk to the parents, I could triage well enough to know if I can handle it at home or if they need to be somewhere else. [...] But I loved that part of it because then I could spend my time where I needed to be. ‘How are you doing? What has changed?’ Having the parents actually have somebody to talk to, and vice versa, just to say, ‘What’s happening in Kyle?’ ‘What’s happening in Luling or Lockhart?’ Because we were all so isolated from each other.”

Telehealth Expanded Access to Care for Many Patients

Participants emphasized and shared stories of the role telehealth played in making health care more accessible to patients and their caregivers, particularly for people who live and work in relatively remote areas; have limited or no access to personal transportation and have to arrange—and often pay for—other options, such as public transit, rideshare services, ambulance support, and rides from family or friends; work in low-wage hourly jobs and have to take unpaid time off to travel to, wait for, and receive in-person care; care for children and/or others during the day and do not have other reliable options for dependent care; and/or have difficulty accessing care during typical clinic office hours.

“Farmers really like telehealth and hope it doesn’t go away. They can take a break out in the field to take a call. So many people normally delay care because they can’t take time off from work, so we’re bringing care to them.”

“A lot of them do not drive, so coming to a doctor’s visit is an actual event. Their kids have to take a day off from work, or they have to arrange for transportation and then come in. A lot of my patients have found it useful to take appointments from home, in their surroundings.”

“It’s been great for patients who use MetroLift, which you have to schedule 48 hours in advance. Telemedicine allows them to be seen same day if they have an urgent concern. Or for homebound patients, where doctors have to arrange for ambulance transportation—we can now see them more often without having to arrange that.”

“Telehealth alleviated a lot of those problems,” one of the FQHC’s executives said, reflecting on their unsuccessful pre-pandemic efforts to help patients resolve transportation barriers

“It made us wonder about segments of patients pre-pandemic who have jobs and who really can’t get in during our normal business hours and can’t take off—who don’t have sick PTO at their job, and that we’re inaccessible.”

Telehealth Supported Greater Calm for Patients & Families

Telehealth’s promotion of calm, or the ability to live normally while receiving care, was a prevalent theme.¹ Participants observed the ways in which telehealth has been less disruptive to patients’ and families’ daily lives than in-office visits. One behavioral health clinician observed that her adult and youth patients were more consistent in attending virtual appointments, citing the inconvenience to families of taking children out of school for in-office visits, as well as the added drawback of children missing a greater amount of instruction due to travel to and from the clinic. Expanded office hours for telehealth visits gave patients more options to fit care into their schedule, and telehealth visits have shorter wait times (if any) compared to in-office visits. One behavioral health clinician started to see more stay-at-home parents in their practice. “Telehealth allows them to have an appointment without bringing young children to the office, which a lot of them preferred not to do and so weren’t doing therapy.” A few therapists noted instances in which they got to meet their patient’s other caregiver—the adult who did not bring the child to and from in-person appointments. In one case, a therapist met by video for the first time a mother who rarely left home because she was agoraphobic.

Some patients were finally able to fulfill their clinician’s recommendations to increase the frequency of appointments due to the flexibility of telehealth appointments, which were easier to accommodate into their schedules compared to in-person visits. Being able to attend health appointments at the frequency indicated by clinicians would arguably have a positive impact on patient health outcomes.

Some participants noted that adult patients are more relaxed during telehealth visits than they are in the clinic. One clinician observed that some patients have higher blood pressure readings (“White Coat Syndrome”) during in-office visits because they are nervous or anxious about being there.

Pediatric clinicians gave examples of telehealth enabling greater calm for families, including:

“Parents have less stress [using telehealth] because they don’t have to worry about bringing their children to the clinic, filling out paperwork in the waiting area, and making sure they leave on time to go to another activity.”

“Children are more relaxed [in a telehealth visit] because they know they won’t be receiving a shot.”

“[...] and I think especially for the parents, because they weren’t having to dress, pack, load their kids up, car seats, snacks, and whatever. Then the wait time in the clinic, then get one child seen and then have to worry about, oh, I’ve got to get another kid at the school. They were all just at home together. It freed up everybody’s time. [...] They could just focus on what was important.”

Telehealth also expanded triage capabilities to help patients and their caregivers decide if they needed to seek care and, if so, where. In the event that symptoms could not be managed at home and a person needed to be seen by a health care professional, the clinics advised if telehealth was appropriate. If telehealth was not appropriate, they recommended a clinic visit or, if needed, urgent or emergency care. Remote triage thereby reduced the likelihood of unnecessary emergency room visits, where patients could be exposed to COVID-19 and other infectious diseases, and where care is usually costlier. Some clinicians gave patients their personal telephone number and told them to call if symptoms worsened so they could advise on next steps. One clinician reflected that, “Sometimes patients just need a little bit of reassurance. Sometimes you can’t really fix [their concern via telehealth], but you can guide them in the direction in which they can go.”

Telehealth Availability Decreased Missed Appointments

Both FQHC data and participant interviews indicate that missed appointments, referred to as “no-shows”, declined with the introduction of telehealth. One participant added that, in addition to lowering barriers to accessing care for many patients, telehealth visits have the benefit of being more salvageable than in-person visits if a patient forgets or is running late for their appointment. If the clinic is able to get in touch with the patient and determine they are still able to join their scheduled telehealth visit, the patient can join the visit almost instantaneously by telephone (if the clinic permits it) or video. By contrast, if the scheduled visit is in-person it is unlikely the patient can travel to the clinic in time to make their originally scheduled appointment; instead, the clinic would need to reschedule them for another time.

Telehealth Enables Seeing Patients in Their Surroundings

Several clinicians commented on the clinical relevance of seeing their patients’ environment and circumstances outside of the clinical setting, noting that this milieu: (1) created an opening to ask patients about aspects of their surroundings and day-to-day lives that could impact their health, and (2) provided a more natural setting for observing patients perform activities of daily living. For example, one clinician described watching children interact with family members and pets in their home as an opportunity to “observe their speech, their mood, their energy.” Yielding new and potentially actionable insight about patients’ lives is one way in which video-based telehealth encounters may contribute uniquely to outcomes that matter to patients with respect to capability—the ability of patients to do the things that define them as individuals and enable them to be themselves.¹

“Usually the adult is trying to track down the child, so you get a tour of the home. You might see where the child sleeps and that provides a natural opening to talk about the sleep environment. When you’re in the clinic you’re thinking about the sleep environment, too, but you have to ask, ‘Does the sleep environment have this, and this?’ and people can’t always remember. [...] When I’m actually seeing it [...] it’s opening my eyes to what people mean when they describe their environment.”

“Seeing an older couple in their trailer during the winter storm so they could isolate from their son and his family because one of them has COVID... I asked them about the kind of heater they were using to make sure it was safe and not harming them. I would have never thought to ask about something like that [during an office visit].”

“If you say to a patient who is homeless and has diabetes, ‘You need to make sure you’re taking your insulin three times a day,’ and then see that they’re standing in the parking lot of a store, you realize you’ve got to think of something else. [...] That person isn’t going to take insulin three times a day, so the question is, ‘Where do you go for a shower, and when do you go to use the restroom? Where do you go?’ A lot of my patients who are homeless go to Walmart or HEB, and they store insulin in a cooler. So instead of giving them a three-month supply—I used to think if I did that would make them more compliant—I have them call me every month and, depending on which [pharmacy] is closest to them, I send their insulin there.”

“The other thing that was unexpected, kids specifically enjoyed showing off their room, their space, where they live. ‘This is where I live. This is my home. This is my dog.’ That connected me with them in a way that was also different.”

“To be honest, I think [telehealth] has gotten a lot of people through a lot of anxious, depressed moments because of the ability to use virtual care, which didn’t exist before. I think in some ways it was seen as less—that the quality was lower—but in some ways it’s actually enhanced quality because now I have a sense of the personal from their home or what their daily life is like because I saw them in a virtual visit, and so we have that connection point when they do come into my office.”

Several participants also commented on how telehealth changed the perceived power dynamic between the clinician and patient. When visiting a clinic, patients entered the clinicians’ place of work, where the clinicians held the most authority and control over the environment. However, telehealth enabled patients to receive care in their own homes, allowing patients to feel more at ease and in control of the environment. Additionally, when clinicians also conducted appointments from their own homes, patients had the opportunity to view their clinician outside of the clinic without their white coat – making the clinician appear less intimidating.

“In-person visits are a provider-centric approach. The patient is coming to see me in my surroundings. With telemedicine visits, it takes away that edge. The patient is in their surroundings, they have their dog with them, they have their easy chair around them, and I get a picture of what is going on in their life.”

“Then one day my cat jumped behind me on my chair, and the kids were like, ‘Oh, kitty, kitty.’ They got to see my living room, my little environment, and it became much more real. I wasn’t just the person in the coat with a stethoscope who was distant—I was just another person in another room. [...] Throughout that year, there were many families that I would see multiple times—maybe it was Tommy one day, Mary the next week. But I got to know what their living room looked like and they’d ask me about my cat. It felt much more intimate. They really found me more as just a human being.”

Some Patients Seek Care Sooner with Telehealth

Given the opportunity to seek and receive care remotely, clinicians caring for older patients perceived that their patients delayed care less often than they did prior to the pandemic, when in-person care was their only option.

“Sometimes my patients would accumulate questions. For example, they’d say, ‘A month ago I had this nagging, irritating feeling in my neck, and two days ago I had the same feeling.’ But now that [patients] know they have the option to do telemedicine I get to see them more quickly. Sometimes we’ll have a video visit and I’ll tell them, you know what, this is what I think it is but let’s see you face-to-face.”

Telehealth Supports Calm for Clinic Team Members

Telehealth made it possible for staff and clinicians to work remotely full- or part-time during at least the early part of the pandemic. In addition to alleviating some of the stress employees were experiencing about possibly being infected with COVID-19, remote work arrangements gave them flexibility to respond to dependent care needs resulting from the closure of day cares, schools, and other institutions. A few participants shared that they still had that option to work from home occasionally and were grateful for it. One of them talked about the impact on them and their family:

“It should be talked about because there’s a lot of talk about providers getting burnt out and providers having no flexibility, especially in health care. Is this an opportunity to figure this out—like, how do we still provide quality care and still give providers some flexibility, autonomy over their schedule, work from home? I mean, doing laundry during my lunch is huge. If I’m busy and I’m exhausted from the full day, but I can do a couple of loads of laundry and we have clean clothes. It’s been a big deal.”

In addition to implementing telehealth, both FQHCs started using the chat features of their communication platforms to improve coordination between team members. This has created more flexibility for employees, as well as new opportunities for learning and problem-solving across clinic sites. One clinician gave that example of no longer having to make an hour-long drive to the FQHC’s offices for a clinician meeting because he and his colleagues now have the option to participate virtually.

Telehealth Supports Clinicians’ Professionalism

Clinicians emphasized the benefits of telehealth and hoped it would continue to be part of the suite of tools they use to care for patients. Several reported being pleasantly surprised by the ease of using telehealth, their enjoyment of using it, and/or the effectiveness of telehealth visits for diagnosing, treating, and managing multiple conditions.

“I used to think telemedicine wasn’t for me – I’m old. But I think I have enjoyed doing telemedicine.”

“Virtual health care isn’t the stepchild anymore; it’s actually a part of delivery of care. I hope for a hybrid model moving forward.”

“We have to rely a little bit more on observation, a little bit on what the parents are saying, and on clinical history and symptoms [...] But [using telehealth] wasn’t as daunting as it sounded initially.”

“I love doing the visits where parents have questions about their children’s appetite [via telehealth], or the visits about parents’ [attention deficit disorder] concerns. Any of the mental health concerns or referral concerns—those are usually no-touch exams anyways.”

“I think that some of that empathy and being able to sit down and listen to patients and be eye to eye with them—all that can still translate into the telemedicine visit. [...] That was a really nice surprise because I felt, *This is going to be impersonal*. I think the connections with parents have been really great. The connection with kids depends on how much sugar they’ve had and how do they actually feel. I’ve had a lot that are in bed, and they cover their little faces, and they’re still pretty shy, but overall, it’s a lot of fun.”

Telehealth Challenges & Limitations

Coordination with Patients

Follow-up appointments and laboratory testing were more challenging to coordinate with patients following a telehealth visit. This was of particular concern to clinicians caring for patients with multiple chronic conditions who require regular blood and/or urine tests. Administrators at both FQHCs had to create new workflows in their EMR systems to document follow-up visit orders for telehealth.

As experienced during the implementation phase, participants continued facing the challenge of communicating schedule delays to patients with telehealth appointments. In the event that a clinician was running behind, their next patient would be waiting on the telehealth platform and might wonder if the visit was canceled or if they had made a mistake. In the clinic office, by contrast, staff could walk out to the waiting room or a patient’s car (if they were seeking curbside service) to inform them of the delay.

Some clinicians noted challenges interacting with patients who took telehealth appointments while driving, in a store, or in other public places. In these circumstances, clinicians worried for patients’ safety, the quality of patients’ participation in the visit (i.e., their level of distraction), and the possibility of others hearing the conversation.

Bringing Patients Back to the Clinic for In-Person Visits

Some patients developed a preference for telehealth care, clinicians observed, making it more difficult to bring them back to the clinic for physical exams, laboratory testing, and other in-person care. “That may be one thing we fell behind on,” one clinician shared, “which is getting people to get their labs done in a timely manner. Even when we said, ‘You can come back and get those done now,’ they were reluctant.” The cost- and time-savings of virtual visits made virtual care a more feasible and desirable choice for many patients.

Integrating Telehealth into the Clinic Workflow

Clinicians spoke about the difficulty of switching between in-person and virtual visits in a given day due to the differences between the two visit types in terms of the amount of time they took and clinic personnel required (e.g., medical assistants support in-person visits but usually not telehealth visits). They hoped for continued improvement of clinical workflows over time.

Clinical Appropriateness

Clinicians had to adjust to making judgment calls on whether or not to treat patients presumptively in the absence of confirmatory laboratory test results (e.g., starting a patient on antibiotics for a suspected ear infection or urinary tract infection). Diagnosing certain conditions confidently without high-quality video was challenging.

“I think rashes really could work on telemedicine, but we need good video and if I don’t have great video, I need a parent who I know I can ask, “Okay, is it bumpy or is it flat? Is it red?” We need good historians. I think that there’s a little bit of a dynamic of who is the patient or parent describing it, but I think rashes actually most of those are pretty easy. I think that any breathing issues and sometimes throat issues, I’ve managed to see some of those on-camera or have someone reliable describe them to me. But when describing wheezing or sounds, I’m not sure where they’re coming from. It can be a little bit more complicated and those—my threshold’s a little bit lower to having them come back to the clinic.”

Clinicians Have Less Control of the Telehealth Environment

Clinicians have less control over potential distractions to patients.

“I joke that sometimes virtual sessions, especially for me with children, have felt like therapy-light because with adults it hasn’t felt like too much of a difference. Whether you’re in my office or on virtual, I wouldn’t say it has felt like a drastic change or a difference, especially if we have rapport [...] but with children, that to me was the biggest change to how I operated—how I did therapy—just because we’re way less in control. It’s not our office. [...] Did we really work towards anything or is it just me setting boundaries? Setting boundaries is work. I mean that’s [therapeutic] work as well, so for me I think it’s more of re-evaluating my expectations of teletherapy, mostly with children, not really with adults.”

Behavioral health clinicians noted the limitations of telehealth in conveying nonverbal communication between the patient and the clinician.

“It’s hard to do therapeutic work over phone or video. Our training is that you watch the whole person as they come into your room. Body language, reactions to questions, how a person physically reacts to the way a conversation goes. The better we can see and hear a person the better the session.”

For video visits, telehealth also presents a new dimension of risk to clinicians with respect to seeing their patients outside of the clinic. Some clinicians described seeing elements of their patients’ environments and wondered if they should report what they saw, particularly if they were concerned about the safety of children in the household. A few clinicians mentioned seeing patients use substances on camera during a telehealth visit.

Technical Problems

Unreliable internet connectivity was one of the most frequently named barriers to patients’ successful telehealth use. Another was their access to devices, particularly for video visits. One clinician observed

that internet connectivity seemed better in patients' homes—as opposed to in a car or store—and that video quality appeared to be better when patients used a laptop instead of a smartphone.

In late 2020, both FQHCs phased out their on-demand technical support teams for telehealth visits. Call center staff no longer reached out to patients in advance of their first telehealth appointment to make sure they were able to join successfully. A few clinicians noted losing time during appointments trying to help patients troubleshoot technical issues after their FQHC's telehealth tech support services were discontinued and wished on-demand support was still available.

Billing & Reimbursement

Billing and claims professionals spoke the least positively about telehealth overall. The initial uncertainty about how to bill for virtual visits was stressful to staff. Some patients found it difficult to decipher bills for virtual care, and staff had to respond to their complaints and requests for clarification, often when they themselves did not yet have the answers.

The traditional version of Medicare was the most generous with reimbursement for virtual care overall, particularly for telephone visits, which were reimbursed at a much lower rate than video visits by most payers.

One non-clinical staff member shared their perception that in-person appointments produce better outcomes than telehealth visits but did not have data or anecdotes to support their assertion.

Language Access Barriers & Limited Interpretation Support

A large proportion of patients at CHCSCT and LSCC speak Spanish and require interpretation services to receive care. Most of their clinicians do not speak Spanish; however, almost all of their medical assistants do. Medical assistants often play the role of interpreter in both in-person and telehealth visits with Spanish-speaking patients and caregivers. If a medical assistant is not available to support Spanish interpretation during a telehealth visit, or if the patient speaks another language, clinicians use an on-call interpretation service via a tablet device and place the device that is facilitating the telehealth visit (i.e., the telephone or computer) on speaker so that the patient can hear the interpreter speaking on the tablet and vice versa. Participants noted the variable sound quality on such visits and hoped for a more reliable long-term solution.

A CHCSCT site coordinator described the challenges of communicating effectively with Spanish-speaking patients and caregivers, and the cascading effects of suboptimal workarounds:

“A lot of our patients are Spanish-speaking and don't really have access to cell phones, laptops, computers, or iPads—anything like that—to do the video portion of the visit. They all were more for the telephone portion of it. Even doing that, when we would have to send text messages out for consent, and stuff like that, they weren't really too cell phone savvy and didn't really know how to use it. [...] A lot of them that I noticed had their teenage kids help them do it as well. When you would send the link, they would have it sent to a different number versus with the number that was on file because that phone was more compatible than their little flip phone or the house landline phone. But we would just try to talk to them and try to help him get through it. Eventually we ended up turning most of them into phone appointments where the providers would literally call. They would

prefer that over the video portion of it. If they needed to send in pictures, like say it was a rash or something, then they were able to do that through the phone as well.”

CHCSCT’s telehealth platform does not permit multiple providers in different locations to participate in a telehealth appointment simultaneously, which limits the FQHC’s ability to integrate interpretation services and joint visits with specialists in telehealth appointments.

Benefits and Limitations of Telephone-based Telehealth Visits

CHCSCT and LSCC had different experiences with and approaches to integrating telephone visits into their operations. At CHCSCT, a majority of telehealth visits were and are by telephone because most of their patients do not have—or do not have reliable access to—high-speed internet and/or a smartphone or other digital device with a video camera. CHCSCT clinicians spoke about the limitations of telephone visits when visual observation is necessary for diagnosis, or when they sense that a patient is distracted and are having trouble engaging them. Otherwise, they reported delivering care effectively via telephone in many cases and noted that most patients would not be able to use telehealth if telephone appointments were not an option.

At LSCC, most visits were and continue to be video-based because a majority of LSCC patients are able to participate in them, and because LSCC has tried to avoid telephone visits given their much lower reimbursement rate. LSCC clinicians expressed a general preference for video visits. Many said that video visits were more effective than telephone visits, which they found clinically inappropriate for many conditions (e.g., assessing rashes); correlated with greater levels of distraction by patients, whom they perceived as more likely to do or pay attention to other things when on the phone versus on video; and more “sterile,” in one clinician’s words, who elaborated, “I didn’t know who was on the other side—I couldn’t connect to my patient.”

Ideas for Improvement & Innovation

CHCSCT and LSCC team members also shared their ideas for improving telehealth integration and effectiveness. The following were key themes:

- Address internet connectivity gaps for patients in rural communities to reduce dropped calls and strengthen the technical quality of appointments. Address hardware (device) gaps for all patients.
- Improve tools and workflows for incorporating high-quality, timely interpretation services into both telehealth and in-person appointments to better serve patients who do not speak English, and to support the professionalism of the clinic team members caring for them.
- Where appropriate for patients with chronic conditions such as diabetes or hypertension, couple remote monitoring devices (e.g., blood glucose meter, blood pressure cuff) with telehealth visits to enable greater success at managing conditions at home. Explore options for patients who do not have Bluetooth or app-compatible devices typically required to store and transmit remote monitoring data.
- Standardize using a portion of in-person pediatric appointments to coach parents how to conduct certain exams (e.g., feeling a child’s abdomen for constipation) so they can perform them more readily and effectively at home if needed.
- Provide continuing medical education (CME) and other opportunities to clinicians on how to conduct virtual exams and build relationships with patients remotely.

- Explore ways for medical assistants or nurses to accomplish some tasks with patients prior to the start of a virtual visit with a physician or other clinician.
- Address the ongoing need for regular cybersecurity training for staff and clinicians, greater data storage capacity, and improvements in tools to support network analysis.
- Make scheduling of follow-up appointments more seamless. For example, one clinician suggested hiring a “virtual receptionist” who could work remotely and is responsible for handling all virtual appointments
- Consider opportunities to provide more remote work options to employees as part of the organization’s retention strategy.
- Improve technology to enable multi-party consults. This enables team-based care, tech support, scheduling support and specialist participation.
- Consider telemedicine in order to expand possibilities for case management, joint consultations with specialists, referrals, etc. In these visits, the patient would sign on or come to the clinic for their appointment and clinicians who are not on-site could join virtually.

Discussion

At the beginning of the pandemic, CHCSCT and LSCC—along with thousands of health care facilities across the country—rapidly expanded their telehealth capacity at an unprecedented scale. While much discourse surrounding telehealth previously focused on the ability to replicate in-person visits, telehealth demonstrates promising potential to complement in-person care and expand access to patients who may be unable to or face significant barriers to attending in-person visits. Interviews with clinicians, staff members, and leadership at CHCSCT and LSCC gleaned insights and lessons learned about providing effective virtual care, ranging from immediately implementable changes to longer-term aspirations for health care transformation.

Looking forward, reimbursement policies will play a key role in determining how telehealth is used. Fee for service has discouraged telehealth since, as noted before, telephone (non-video) visits are generally reimbursed at lower rates. Value-based payment models could change this. For example, bundled payment or capitated payment gives the choice to the clinical or team of when to use telehealth. These types of value-based payment allow the clinical team to choose the efficient way to achieve great outcomes. As demonstrated at CHCSCT—where a majority of telehealth visits occurred over the phone—offering telephone visits can be crucial for reaching out to patients with limited internet access or digital literacy.

Future research should include robust outcomes measurement to inform decisions on appropriate care modalities (e.g., in-person vs telehealth visits). Different patient segments and socioeconomic circumstances should be carefully factored into decision-making. For example, the current literature suggests that chronic disease management and mental health care are effectively delivered with telehealth. Moreover, accessibility of different care modalities should be compared. For example, the burden of procuring transportation to a clinic may outweigh any potential benefits of having an in-person visit.

Clinicians should also continue to explore how telehealth can uniquely enhance their relationships with patients. As one interview participant explained, virtual appointments change the setting from a more clinician-centric space (the clinic as the clinician’s place of work) to a more patient-centric space (the

patient's home) where the patient may feel more at ease. Telehealth provides many opportunities to deepen rapport and make patients feel less intimidated and more empowered in their care encounters. Specific applications could include addressing White Coat Syndrome, in which patients have higher-than-normal blood pressure readings during a health care visit compared to other settings, such as in their homes.

Conclusion

The COVID-19 pandemic created a moment to fundamentally rethink health care. As a result of its disruptions to health care systems, the pandemic necessitated a rapid, large-scale rollout of telehealth services across the country. It is imperative to continue to build upon the lessons learned from telehealth implementation and usage during the pandemic as well as to continue exploring how to best leverage this technology. Some questions to consider include:

- When and how should telehealth be integrated into health solutions for patients given their health circumstances, needs, and goals? Examples of variables to consider:
 - Patients' preferences, including comfort level with phone and/or video visits
 - Relative importance of video, and good quality video
 - Medical condition(s)
 - Stage of condition (e.g., uncontrolled vs. controlled diabetes)
- Which outcome measures should clinics track to better understand the value of telehealth and make more value-based decisions about when to deploy it?
- How might virtual options for dental care increase value for patients?
 - In June 2021, Texas enacted a law allowing teledentistry to be practiced
- How might bundled payments enable clinicians to select the most appropriate modality of Telehealth (telephone vs video), given a patient's circumstances and medical condition?
- Could there be value in sharing patient stories of the impact telehealth has had for them, as well as outcome data for telehealth care, where available, with clinicians and clinical staff to reorient them to the constraints patients face in accessing the care they need?

This white paper—the first part of a two-part project —summarizes findings from the literature on telehealth use in FQHCs and in other underserved populations, and perspectives from employees at two FQHCs on how telehealth has been used and its potential to improve outcomes and increase value for patients. These findings will complement the second part of the project, where we will focus on patient perspectives. Together, the findings and recommendations from this work can serve as a baseline for clinicians and health care systems to develop telehealth services that are not one size fits all, but address the needs of people who are underserved or unserved today. High value health care recognizes that needs differ for people with different medical conditions and socio-economic circumstances. Telehealth can be part of improving outcomes for each and for all.

Appendix 1 A Selection of Resources for Effective Telehealth Visits

Cooley L. [Fostering Human Connection in the Covid-19 Virtual Health Care Realm](#). NEJM Catalyst. Published online May 20, 2020.

Notes: This article offers tips for enhancing telehealth communication, based on the relationship-centered communication skill sets published by the Academy of Communication in Healthcare. Some of the tips include asking clear, open-ended questions and asking questions to check understanding.

Henry BW, Block DE, Ciesla JR, McGowan BA, Vozenilek JA. [Clinician behaviors in telehealth care delivery: a systematic review](#). *Adv Health Sci Educ*. 2017 Oct 1; 22(4):869-888. doi:10.1007/s10459-016-9717-2

Notes: This review found three main themes in studies that focused on interpersonal behavior in telehealth interactions: verbal communication, non-verbal communication, and relationships. For verbal communication, several studies found that telehealth interactions tended to be less patient-centered; there was less small talk, physicians used less empathy or praise utterances, and visits tended to be shorter than in-person visits. For non-verbal communication, some studies suggested developing a “video presence” by exaggerating facial expressions and being mindful of eye contact. For patient-provider relationships, studies suggested that building and rapport and close relationships were correlated with better patient outcomes, but the article did not explain how this rapport was built or how it was measured.

Hilty DM, Gentry MT, McKean AJ, Cowan KE, Lim RF, Lu FG. [Telehealth for rural diverse populations: telebehavioral and cultural competencies, clinical outcomes and administrative approaches](#). *Mhealth*. 2020; 6:20. Published 2020 Apr 5. doi:10.21037/mhealth.2019.10.04

Notes: This review examined cultural competencies and telebehavioral health competencies for diverse, rural populations. The authors found that while many organizations address cultural competencies in care, these competencies are not yet integrated or tailored to telebehavioral health settings. More research needs to be done to understand best practices in administering telebehavioral health to rural communities with linguistic and racial/ethnic minorities.

Khoong E, Lyles C. Telehealth Equity: Before and After COVID-19. In: *Primary Care in the COVID-19 Pandemic*. ; :245-253. <https://www.carequest.org/system/files/Primary-Care-in-the-COVID-19-Pandemic-Harvard-Report.pdf#page=251>

Notes: This report chapter broadly describes barriers to equity in telehealth and lessons learned from previous digital health implementations. Examples include partnering with community-based organizations who are already working on digital inclusion strategies (e.g., a library that is trying to increase digital access and digital literacy), and providing robust tech support for patients (e.g., weekly training sessions, one-on-one support from clinical teams or volunteers, etc.).

Appendix 2 Telehealth Toolkits & Advocacy Resources

- The National Consortium of Telehealth Resource Centers, which includes resources specifically for: <https://telehealthresourcecenter.org/collections/fqhc-telehealth-resources/>
- The National Association of Community Health Centers: <https://www.nachc.org/focus-areas/policy-matters/telehealth/>
- The FQHC Telehealth Consortium (focus on Massachusetts): <https://fqhctelehealth.org/>
- Center for Care Innovations' [Telemedicine for Health Equity: Considerations for Reaching and Engaging Diverse Patients](#). It is divided into four different sections: understanding patients' digital access and skills, connecting patients with technical support, integrating interpreters into remote/virtual visits for those with limited English proficiency, and engaging patients' caregivers and additional support services and teams.
- In January 2022, the American Telemedicine Association launched a new trade organization, ATA Action, to focus on ensuring individuals have permanent access to telehealth. Members of its Founding Advocacy Council include HCA Healthcare, LifePoint Health, Philips, Best Buy Health, Intermountain Healthcare, Walmart, and Teledoc Health. <https://ataaction.org/>
- The Health Center Advocacy Network (HCAAdvocacy), led by [The National Association of Community Health Centers](#) (NACHC), offers telehealth advocacy resources, including a telehealth op-ed template and a telehealth advocacy toolkit: <https://www.hcadvocacy.org/telehealth-advocacy/>.
- The American Medical Association's Telehealth Implementation Playbook: <https://www.ama-assn.org/practice-management/digital/telehealth-implementation-playbook-overview>

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