Patients’ Perspectives on the Shift to Telemedicine in Primary and Behavioral Health Care during the COVID-19 Pandemic

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BACKGROUND: Studies specifically focused on patients’ perspectives on telemedicine visits in primary and behavioral health care are fairly limited and have often focused on highly selected populations or used overall satisfaction surveys.

OBJECTIVE: To examine patient perspectives on the shift to telemedicine, the remote delivery of health care via the use of electronic information and communications technology, in primary and behavioral health care in Federally Qualified Health Centers (FQHCs) during COVID-19.

DESIGN: Semi-structured interviews were conducted using video conference with patients and caregivers between October and December 2020.

PARTICIPANTS: Providers from 6 FQHCs nominated participants. Eighteen patients and caregivers were interviewed: 6 patients with only primary care visits; 5 with only behavioral health visits; 3 with both primary care and behavioral health visits; and 4 caregivers of children with pediatric visits.

APPROACH: Using a protocol-driven, rapid qualitative methodology, we analyzed the interview data and assessed the quality of care, benefits and challenges of telemedicine, and use of telemedicine post-pandemic.

KEY RESULTS: Respondents broadly supported the option of home-based synchronous telemedicine visits in primary and behavioral health care. Nearly all respondents appreciated remote visits, largely because such visits provided a safe option during the pandemic. Patients were generally satisfied with telemedicine and believed the quality of visits to be similar to in-person visits, especially when delivered by a provider with whom they had established rapport. Although most respondents planned to return to mostly in-person visits when considered safe to do so, they remained supportive of the continued option for remote visits as remote care addresses some of the typical barriers faced by low-income patients.

CONCLUSIONS: Addressing digital literacy challenges, enhancing remote visit privacy, and improving practice workflows will help ensure equitable access to all patients as we move to a new post-COVID-19 “normal” marked by increased reliance on telemedicine and technology.

KEY WORDS: telemedicine; COVID-19; primary care; behavioral health; qualitative.

INTRODUCTION

The COVID-19 pandemic changed the landscape of healthcare, including a rapid shift toward telemedicine, the remote delivery of health care via the use of electronic information and communications technology.1 Telemedicine, a subset of telehealth, has existed for decades, but home-based synchronous telemedicine modalities such as videoconferencing and telephone that replace face-to-face visits were at most a niche option in routine primary and behavioral health care. The benefits of telemedicine during a respiratory-spread illness are many—it helps protect patients and providers from unnecessary exposure, and enables continued access to care. Yet, the pandemic highlighted health and social disparities in the USA,2,3 and access to telemedicine technology and internet connectivity more broadly was no exception.4 There has been much discussion about the “digital divide” during COVID-19,5,6 with policymakers emphasizing the need to ensure equitable access to telehealth, particularly for underserved populations.

While telemedicine use tapered off several months into the pandemic, it remained much higher than pre-pandemic levels,7,8 suggesting that telemedicine is a feasible option that will continue to play a key role in the health system milieu. As patients adapt to this new model of care, there is a need to explore their experiences and perspectives on continuing to engage in care delivered through various forms of telemedicine.

Many low-income individuals and families receive health care through Federally Qualified Health Centers (FQHCs) and so-called look-alikes, community-based organizations that meet the FQHC eligibility requirements but do not receive federal grant funding.9 in 2020, such health centers served almost 29 million patients, or one in eleven people in the US,
including one in three people living in poverty, and one in five of the nation’s uninsured. A study that assessed the shift in visit volume from in-person to virtual encounters in 36 FQHCs across 19 states found that virtual visits (telephone, video) with a medical, dental, or behavioral health provider increased 3405% from February 2020 to April 2020.

The aim of this study is to explore patient experiences and perspectives with receiving care in FQHCs during the shift to telemedicine in primary and behavioral health care during COVID-19. Despite robust literature on telemedicine, studies specifically focused on patients’ perspectives on telemedicine visits in primary care and behavioral health care are fairly limited and often focused on highly selected populations (e.g., veterans with access issues). Furthermore, while the literature on patient experiences of telemedicine has grown since the onset of the COVID-19 pandemic, most of the studies assessing patient perspectives have used brief surveys that assessed only overall satisfaction, and none has included perspectives on telemedicine modality (video vs. telephone). Understanding and incorporating patients’ nuanced perspectives is a key aspect of providing patient-centered care, identified by the Institute of Medicine (IOM) as one of six key elements of high-quality care. A few studies have used qualitative methods to understand patient perspectives on telemedicine during the pandemic, but only one assessed the experience of receiving care via telemedicine among patients within a safety-net setting, and it did not compare how patients respond to different modalities of telemedicine (i.e., video vs. telephone).

Our study adds to the growing body of literature on patient perspectives, both prior to and since the onset of the COVID-19 pandemic, by eliciting the views of individuals receiving care in FQHCs and on both video and telephone telemedicine visits. For this qualitative study, we recruited low-income individuals who experienced remote primary care or behavioral health visits, or remote pediatric visits with their children, in FQHCs. FQHCs were located in urban, suburban, and rural areas that serve diverse populations (e.g., migrant/seasonal farmworkers, persons experiencing homelessness, immigrants) in New York State (NYS). The purpose of this study was to explore patients’ experiences using telemedicine since the pandemic, the perceived quality of care delivered via telemedicine, and the advantages and challenges associated with using different modalities (in-person, video, phone).

**METHODS**

All study protocols and procedures were approved by the New York University Grossman School of Medicine Institutional Review Board.

**Settings and Participants**

This analysis of FQHC patient experiences with telemedicine is part of a larger study, conducted in partnership with the Community Health Care Association of New York State (CHCANYS), to assess the implications of proposed variations in telemedicine payment models for access to care among underserved communities. CHCANYS is a membership organization that represents the more than 70 FQHCs and look-alikes of NYS. CHCANYS represents a diverse group of FQHCs, ranging from large metropolitan community health systems in New York City to rural health centers in Upstate New York and Western New York. Each FQHC is unique in its size and geographic reach. Some FQHCs have multiple sites within larger systems that serve different areas of NYS, while others consist of one site.

We used a convenience sampling approach to recruit patients. First, staff from CHCANYS identified 14 FQHC sites in NYS that varied by region, population demographics, size, whether they were urban or rural, and the site’s experience with telemedicine prior to COVID-19. Of the 14, eight participated in the larger study, and six of these sites provided contact information for potential patient interviewees. Among the two sites that declined, one serves a primarily homeless hard-to-reach population and did not believe it was feasible to contact them, and the second site required its own IRB approval and did not want to undertake that review. Table 1 shows the characteristics of these six FQHC sites. Most sites serve populations that experience disparities in health outcomes, including migrant/seasonal farmworkers, persons experiencing homelessness, immigrants, individuals living with HIV, individuals with intellectual and developmental disabilities (I/DD), and individuals who identify as LGBTQ+.

A significant percentage of patients at these sites are insured through Medicaid. The racial and ethnic diversity of patients served at these sites varies widely. Four of the six sites had offered limited telemedicine visits prior to COVID-19.

Second, participating adult primary care (family medicine, internal medicine), behavioral health, and pediatric providers identified and recruited patients or caregivers of pediatric patients who had at least one experience with telemedicine during the COVID-19 pandemic and who were willing to allow the research team to contact them for participation in this study. Twenty-eight patients were recruited by providers; 9 of the 28 patients did not participate in an interview. Two patients declined to participate, three did not respond to the research team’s outreach (phone and email); two were non-English-speaking; and two needed to reschedule their interview but stopped responding to the research team. One patient was interviewed but could not recall any telemedicine visits so was eliminated from the analysis. Adult patients and caregivers of pediatric patients provided verbal consent for participation and audio-recording before the interviews were conducted.

**Data Collection**

Interviews took place between October and December 2020 and were conducted remotely using video conference. The research team developed and piloted semi-structured interview
guides with two patients, and minor revisions were made. The interview questions focused on quality of care, benefits and challenges of telemedicine, and interest in continuing telemedicine visits after the pandemic.

Two interviewers from the research team conducted each interview. The interviews were 30–45 minutes long. Interviews were professionally transcribed. Participants received a $25 gift card for their time and effort.

Data Analysis

The research team analyzed the interview data using a protocol-driven, rapid qualitative methodology. The team developed a summary template to extract data systematically and assigned each interview question a pre-determined domain name in the template. The template outlined the main points related to each domain and captured corresponding illustrative quotes from each interview transcript. Some of the domains included in the template were quality of care, benefits, and challenges of telemedicine, and future use of telemedicine post-pandemic. To test the summary template, two groups of three members of the research team reviewed two interview transcripts and independently completed the summary templates. The team then compared the information extracted from the transcripts, including the amount of data extracted and assignment of data to specific domains, side-by-side. The summary template was modified to ensure ease of use and to enhance comparability among data extractors. Once the template was finalized, the research team split up the remaining transcripts and completed a summary template for each transcript. At the conclusion of this process, the research team created a matrix of findings in order to synthesize data within domains and identify emergent themes.

RESULTS

We completed 18 interviews with patients and caregivers: 6 with patients with only primary care visits; 5 with patients with only behavioral health visits; 3 with both primary care and behavioral health visits; and 4 with caregivers of children with pediatric visits (Table 2). The majority of patients/caregivers were female and all 18 participants noted having at least one video visit with their providers (Table 2).
We organized the results around the three major areas of discussion: (1) quality of care; (2) benefits and challenges; and (3) use of telemedicine post-pandemic. Within each area, we first compare telemedicine to in-person visits and then telephone to video telemedicine visits. We present findings by the type of service(s) the respondent received for descriptive purposes only and not to make comparisons between respondent type.

**Quality of Care**

Patients/caregivers across all three clinical services generally described the quality of telemedicine visits as similar to in-person visits, especially when delivered by a provider with whom they had established rapport. Participants noted they were able to ask their providers the same questions during their telemedicine visits as they would in-person, and telemedicine did not inhibit communication.

*I think it’s all about the relationship you have with your doctor; if your doctor respects – you guys respect each other and understand how you’re feeling, and you respect what they telling you, I think the quality of care remains the same.* (Pediatric caregiver)

However, the quality of telemedicine-delivered care largely depended on the types of services required during the visit, and whether these services had a physical or visual component. For example, patients discussing primary care visits generally agreed that the quality of telemedicine and in-person care is comparable for medication management, discussion of lab results, and follow-up care; however, there was a consensus that physical exams are better suited for in-person visits. In addition, two primary care patients thought the quality of in-person care was better than telemedicine because interactions with their providers felt more personal and less rushed.

Yeah, no it’s nothing like in person. I definitely feel like there isn’t—it’s more of a, ‘Hello. What do you need? Bye.’ . . . I felt she was very rushed. She didn’t have time to talk. And so, I felt rushed. I was kind of forgetting things to say, things I needed to ask and everything. So, I definitely did not like—it’s much different in person than it is on the phone.’ (Primary care patient)

Behavioral health patients found telemedicine visits to be of equal quality to in-person visits. One behavioral health patient was surprised at how well telemedicine mimicked the experience of an in-person visit.

*It was startling to me that I could just—there was no difference. It was as though we were just sitting together. Because I know individuals who are involved in telehealth and I had a general concept of it. But I couldn’t see how it could work, necessarily. And then once I experienced it, now I can’t think of any other way I’d wanna do it unless, you know, you need the doctor in-person visit. So, I’m into it now because it was so effective.* (Behavioral health patient)

Two behavioral health patients preferred in-person visits after experiencing telemedicine, citing that in-person interaction is always superior, but that telemedicine is “the best it could be,” and acceptable during a pandemic.

All of the pediatric caregivers felt that telemedicine visits were similar quality to in-person visits, however, two caregivers pointed out that their children’s vitals could not be taken remotely, and visits such as physical examinations, vaccination visits, or sick visits would require in-person appointments.

### Table 2 Study Participant Characteristics by FQHC Site (*n*=18)

| Site  | Female | Male | Primary care | Behavioral health | Pediatric | Primary care and behavioral health | Any video visit | Any telephone visit | Any in-person visit | Total participants |
|-------|--------|------|--------------|-------------------|-----------|-----------------------------------|----------------|---------------------|---------------------|--------------------|
| 1     | 0      | 1    | 0            | 1                 | 0         | 0                                 | 1              | 0                   | 0                   | 1                  |
| 2     | 2      | 1    | 2            | 0                 | 1         | 0                                 | 3              | 1                   | 2                   | 3                  |
| 3     | 4      | 1    | 2            | 1                 | 2         | 0                                 | 5              | 2                   | 4                   | 5                  |
| 4     | 2      | 0    | 1            | 0                 | 1         | 0                                 | 2              | 0                   | 2                   | 2                  |
| 5     | 3      | 1    | 1            | 3                 | 0         | 0                                 | 4              | 3                   | 2                   | 4                  |
| 6     | 2      | 1    | 0            | 0                 | N/A*      | 3                                 | 3              | 2                   | 2                   | 3                  |
| Total | 13     | 5    | 6            | 5                 | 4         | 3                                 | 18             | 8                   | 12                  | 18                 |

*Site 6 does not serve pediatric patients*
because it is more personal. Would prefer video visits over the telephone if offered a choice during video visits. Some respondents expressed that telephone visits felt less personal, as well as too casual, compared to video visits and should only be used if no other options are available.

I don’t think phone—it doesn’t land the same way. The phone should be a last resort. It should be a backup, if for some reason, this isn’t working. I don’t think you get the same level of care over the phone. (Primary care and behavioral health patient)

None of the pediatric caregivers had experienced a telephone visit and therefore could not compare the different telemedicine modalities. However, one caregiver said they would prefer video visits over the telephone if offered a choice because it is more personal.

Benefits and Challenges of Telemedicine

Participants across all three service areas consistently mentioned the same core benefits to telemedicine including safety, convenience, and comfort. Patients and caregivers were universally appreciative that telemedicine provided continued access to care during the pandemic, allowing them and their children to receive care in the safety of their homes. During the early phase of the pandemic, in-person visits were simply not an option, either because their clinics were not offering them, or patients were afraid to visit clinics, or both; in this sense, there was no comparison to in-person visits during this period.

I’ll just have to say again that the tele-video is brilliant and I really, really appreciate the clinic for getting it running, up and running so fast because it was just such a weird, scary time and to be able to talk to someone on the phone or even by video has made a huge difference to me. (Primary care and behavioral health patient)

Exposure to telemedicine did alert patients and caregivers to benefits beyond safety during a pandemic as compared to in-person visits, however. Most respondents noted the convenience of telemedicine visits, citing more efficient use of their time, no need for taking time off from work, no time or expense needed for transportation, and no need for child care as significant benefits of telemedicine as compared to in-person visits.

Another good aspect of it, I think, is I can be home, and I don’t have to drive anywhere and take extra time away from work. So, all I have to do is simply switch to a portal, stay logged in for work, take my 30 minutes. My 30 minutes is done, I can go right back to working. I don’t have to take that travel time. I don’t have to be out of the office. (Behavioral health patient)

Another benefit mentioned by patients was the comfort of being able to complete their visits in their own homes.

I’m in my home environment. How could you not be less stressed, just relaxed, a glass of water. Yeah, it was a pleasant experience. It was pretty easy. Once we got up and running, we knew how we were working both computers, and so, again, it was very easy, very comfortable. (Primary care and behavioral health patient)

One caregiver also noted an added benefit of telemedicine was that her children could show their provider their home environment during video visits, something that would not occur with in-person visits or telephone visits.

The most common challenges with telemedicine were technical in nature. Many respondents noted that lack of access to broadband and equipment would be barriers for some people, if not for themselves, although nine respondents noted experiencing connectivity issues at times for video visits. Discomfort and/or unfamiliarity with technology were also mentioned, and respondents thought these were barriers particularly for older adults.

But I do think for older folks that aren’t familiar with technology, I think some sort of guide or link for them to click that makes life a little simpler—makes logging in a little simpler or more self-explanatory for them. I think that would be a very large barrier to hindering people from having their visits via video or even phone.

Several respondents noted that early in the pandemic there were issues setting up the technology or accessing the portal for video visits. These technical challenges accrued primarily to video visits, but one primary care patient indicated having to use the landline phone for a visit as a result of poor cell phone coverage at home in a rural area. Because of these technical challenges, many respondents noted that telephone visits are easier and more accessible than video visits for individuals with limited access to or comfort with video technology. Several patients also indicated it is necessary and important to have telephone visits as a backup option for when video or in-person visits are not viable.
Compared to in-person visits, some respondents also reported privacy concerns with telemedicine visits for primary care and behavioral health services, which were particularly heightened for video visits.

The only thing I’m noticing is my own personal privacy because when I go in for a visit, and I’m home, and I’m logged in, there are still people around at my home. And they’re able to—they don’t, but they can listen in and hear what’s going on. (Behavioral health patient)

Because telephones are more portable than computers, respondents found that they could offer greater privacy.

Use of Telemedicine Post-Pandemic

Patients’ and caregivers’ opinions on using telemedicine in a post-pandemic world varied by clinical service, yet the majority of participants, overall, were enthusiastic about the continued availability of telemedicine visits post-pandemic due to their ease of use and convenience. The majority of primary care patients said that in the future they would like telemedicine to remain an option and envision a hybrid model of care.

So, I can see certain medical specialties where you’re gonna have to go in, but you know, if it’s how you doing? What’s your pressure? What’s this, what’s that? And it could all be done verbally, it’s the future of medicine, as far as I’m concerned. And I don’t know if it’s gonna be 30 or 60%, but it’s gonna be some percentage which a year ago was unheard of. (Primary care patient)

Three primary care patients were firm, however, that they would rather have an in-person visit than a telemedicine visit whenever possible and one primary care patient expressed concern about being forced to continue with telemedicine visits even when in-person visits are viable.

But at any rate, no, I would not want it to be an absolute. It would have to be an option. And that’s what—and that’s my major concern because I’m—as I told you somewhere in the beginning of the phone call, I have a thought that they might wanna try to push it in that area. And I will most—no, I wouldn’t like that. (Primary care patient)

All but one behavioral health patient reported that they would like to continue using telemedicine post-pandemic due to the convenience offered by telemedicine visits, and their perceived effectiveness.

Yeah, I can’t see going back to the traditional approach for me. In the right context, this is the only way I want to do it. (Behavioral health patient)

The one behavioral health patient who preferred to return to in-person visits said that they would only use telemedicine in the future if it was necessary, as they perceived in-person therapy to be of higher quality than telemedicine.

Almost all of the pediatric caregivers interviewed expressed interest in using telemedicine in the future and thought it was a valuable option for many types of pediatric care.

So, I think it’s something that we need in this society. I think it’s something that we don’t need just because it’s a year of pandemic or a year-and-a-half of pandemic, or things get back to normal. I think it’s something that should always be considered... I really would like the virtual tele-med to continue. (Pediatric caregiver)

One caregiver explained that her willingness to continue telemedicine for her child would depend on the type of care needed. For example, she believes physical exams can only be an in-person visit.

Several patients and caregivers also suggested ways to improve telemedicine moving forward. A few patients noted the importance of training people with limited technological experience and providing easy-to-use guides, particularly for older adults. Another endorsed better access to home monitoring equipment like home blood monitors. Two respondents also suggested integrating scheduling systems with the telemedicine platform to simplify the process of making an appointment. Respondents also commented on the need to improve scheduling more broadly in an effort to reduce wait times and by allocating more time for visits.

I think there needs to be better scheduling. That is the biggest thing, better scheduling because I think it’s total, excuse my French, BS that I have to sit on the phone 40 minutes when I’ve known about this appointment for three months. (Primary care patient)

DISCUSSION

The aim of this study was to explore how patients served by FQHCs experienced the shift to telemedicine, delivered in primary and behavioral health care settings. Prior surveys have found that patients were generally satisfied with telemedicine. A qualitative study found that while safety-net patients in San Francisco were highly satisfied with their telemedicine visits, they generally preferred in-person visits.18–23,26–28
Consistent with these findings, our qualitative study indicated broad support for having the option of home-based synchronous telemedicine visits in primary and behavioral health care. The most common reason for supporting telemedicine during COVID was concern about safety. Behavioral health patients described telemedicine as an important mechanism for maintaining clinical contact during this stressful period. Although the majority of respondents planned to return to in-person visits when considered safe to do so, they endorsed the need for maintaining the convenient option for remote visits. They emphasized the importance of flexibility in being able to choose that option and how telemedicine is delivered (i.e., telephone vs video). Further, remote care addresses some of the typical barriers faced by low-income patients: the cost and time for transportation, the need to engage child care, and difficulty taking time off of work.

Despite concerns about the “digital divide” and low-income and disadvantaged populations’ limited access to technology and lower digital literacy, our previous work shows that this population of New Yorkers served by FQHCs were able to participate in great numbers in home-based synchronous telemedicine visits during COVID-19, and patients and caregivers we interviewed were able to use telemedicine effectively. It is worth noting, however, that although all of the patients interviewed had participated in at least one video telemedicine visit, the majority of remote visits in these FQHCs during this time period were conducted via phone, and our respondents, consistent with Kyle et al., emphasized that it is critical that phone visits remain an option. This did not preclude patients’ emphasis on the continued need for enhanced broadband services to facilitate greater access to video technology.

The patients in our study were generally satisfied with their telemedicine visit(s) and believed the quality of visits was similar to in-person visits, especially when delivered by a provider with whom they had an established rapport. This finding was consistent with Nguyen et al. and similar to Bell et al.’s study, which found that existing relationships between patients and providers in rural Maine allowed patients from a small private family practice to feel supported and connected during their virtual visits. Furthermore, in a study that examined correlates of patient satisfaction with telemedicine visits among adult internal medicine patients in a Los Angeles academic medical center, Orrange et al. found an association between greater physician trust and greater patient satisfaction with their telemedicine visits. These findings also corroborate those from previous studies examining the provider experience of delivering care via telemedicine, which found that primary care physicians in California experienced challenges establishing personal connections and rapport with new patients via telemedicine and that a patient’s experience of care may depend more on the patient-provider relationship than on the modality of care.

According to the IOM, high-quality care is defined as care that is safe, effective, patient-centered, timely, efficient, and equitable—characteristics that are not restricted by the modality of care. In our study, we found that a number of respondents’ complaints about telemedicine were independent of visit modality such as scheduling problems, long wait times, and poor “website manner.” Furthermore, the patients who perceived the quality of in-person care to be superior to telemedicine felt that in-person visits were more personal and less rushed. Recent data suggest that while telemedicine use has dropped from its peak, it remains well above pre-pandemic levels. As providers strike a new balance between delivering in-person and virtual care, telemedicine implementation should focus on how to improve the patient experience of care, regardless of modality.

Our study had several limitations. First, this sample included only patients and caregivers identified as having had at least one video-enabled telemedicine visit during the pandemic and no patients and caregivers that would need to rely exclusively on phone visits due to digital literacy or access issues; therefore, support for telemedicine may be overestimated and barriers to telemedicine may have been underestimated. Second, the sample size per service was relatively small, potentially limiting the types of benefits and barriers introduced. However, the overall number of interviews is largely consistent with other qualitative studies and was sufficient to reach saturation. Third, our sample was limited to only English speakers and those individuals nominated by providers, possibly introducing additional biases into our study. It is important to note it was not the goal of our study to be able to generalize to all FQHC patients. Lastly, we collected a limited amount of data related to participants’ demographic characteristics and as a result, we are not able to assess how age, race and ethnicity, or prior experience with telemedicine may have impacted perceived quality, benefits and challenges, or desire for ongoing access to care via telemedicine.

Despite these limitations, our study presents useful insights into the experience of telemedicine among an underserved population with potentially limited access to technology. Findings can help inform policymakers as they strive to understand how the dramatic shift to telemedicine affected underserved populations who were disproportionately impacted by both COVID-19 and the digital divide. Patients in our study suggested several recommendations to minimize challenges related to telemedicine use, including having staff help with downloading apps and learning unfamiliar technology, integrating the telemedicine interface with scheduling, and setting guidelines for patient use, especially recommendations on how to maintain privacy during a remote visit. These guardrails can help ensure equitable access to all patients as we move to a new post-COVID-19 “normal” marked by a reliance on telemedicine and technology.
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Declarations:

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