

REPORT OF EXCERPTS FROM

PROVIDER ACCEPTABILITY AND PERSPECTIVES OF TELEHEALTH IN THE PROVISION OF OBSTETRIC CARE: **A FOCUS GROUP STUDY**



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I. INTRODUCTION & BACKGROUND



In August 2020, five focus groups were conducted on the Zoom platform with providers who participate in maternity care at University of North Carolina Hospitals at Chapel Hill. Twenty-three practitioners took part in this study: 20 participated in the focus groups; another three, with schedule conflicts, participated in individual in-depth interviews. The participants represented the following specialties:

- Physicians (10)
 - Ob-gyn physicians (2)
 - Family medicine physicians (2)
 - Maternal-fetal medicine specialists (3)
 - Medical residents and fellows (3)
- Nursing (1)
- Midwives (3)
- Advanced practice providers (APP) (4)
- Ultrasonographers (2)
- Genetic counselors (1)
- Staff/schedulers (2)

All of the practitioners had made, by necessity, a sudden shift to using telehealth on a regular basis because of the COVID-19 pandemic. The objective of this qualitative research study was to gain a better understanding of these practitioners' perceptions, experiences, insights and level of satisfaction providing prenatal care using telehealth during this period.

This research was part of a larger mixed-method study to generate preliminary data to guide and inform expansion, implementation and evaluation of telehealth as a provider tool for prenatal care delivery. Findings will help focus efforts to address health care disparities, support providers and families, and boost access to telehealth and distant care services for maternal health through the Coronavirus Aid, Relief and Economic Security (CARES) Act of 2020, awarded by the U.S. Health Resources and Services Administration.

2. KEY FINDINGS

2.a. Perceptions of Telehealth: Then and Now

For most, the early days of the COVID-19 pandemic were uncharted waters, full of trial and error. All reported a steep learning curve during the first few weeks of transition to telehealth. They struggled with frustrating technical glitches, which made the switchover anxiety-producing and mentally draining for some. According to those interviewed, patients were also challenged by transition to the digital platform. The patient and provider were often unable to enter the virtual session, within the allotted time frame, which limited time for actual care. Because of connectivity issues, they said that some of the early sessions had to be conducted by phone-only, which the practitioners found less effective than video calls. Some practitioners reported that between seeing patients via telehealth and attending meetings via Zoom they often experienced screen-fatigue by the end of the day.

Participants described their early days of telehealth this way:

“People who live in rural areas definitely have less access. I see patients who live in more rural communities, who are uninsured and Spanish-speaking. Many didn’t have access to broadband and didn’t have devices other than phones. And even their phone signal was poor, so being able to get Zoom on a smart phone was challenging [because of] connectivity and bandwidth issues and data demands. I would say probably for the first month we were only able to do telephone rather than incorporate any video component. That just didn’t feel like it was nearly as high quality of an interaction as we would be able to have in the clinic.” — MFM Fellow

“The privilege to plan would have been great, but we didn’t have that. If we had said, ‘We are going to roll out hybrid visits in six months,’ we would have tested and piloted this stuff. We would have worked; we would have had focus groups; we could have helped patients to work it out. But clearly we were just forced into doing it — like, tomorrow.” — MFM Fellow

“One of the initial difficulties I experienced is that I would reach out to patients by phone call and then they wouldn’t answer and they’d call back 20 to 30 minutes later. But by that time, their time had technically ended, ... so there were frustrations with that.” — MFM Fellow

“Once you got the patient on the call and you were on the call, it was actually smooth and worked well. ... But the logistics were painful, and [sometimes] continue to be painful. ... The best situations worked where the provider was in the clinic and the nurse assistant would set up the Zoom and come get you and say, ‘OK, Zoom is set up in Room 3 for you.’ And you just walk in, and it’s already on, and the patient is there. So the provider didn’t have to do all of that stuff, and it made it easier.” — MFM Fellow

“I think that the training piece that is lacking is the introduction [for] patients. We’re all of a sudden expecting them to have these skills to be able to connect by telehealth, but nobody is providing any kind of instruction. In the clinic I’ll say to a patient, ‘Do you want to do a visit by telehealth?’ And you can see the fear on their face, like, ‘Oh my gosh! I can’t do that!’ I think that we need a health-care navigator to help people who haven’t done this before, so they don’t feel afraid or miss out on it.” — APP

Gradually, the practitioners interviewed said they learned how to use telehealth, and almost all had come to value it for certain patient characteristics and visit types. According to participants, telehealth lends itself to sessions that involve information-gathering and verbal interactions, such as patient education, genetic and preconception counseling, mental health visits, MFM consults for single-issue management, follow-up visits, decision-making conversations, patient questions, post-partum visits and centering groups.

According to those interviewed, telehealth works best for patients with digital literacy who have access to computers/devices and a broadband Internet connection. It is particularly helpful to working individuals, those who can’t take off from work, and those with digital resources. They said that telehealth is problematic for non-English speakers who need interpreters, patients from rural areas who don’t have access to internet or sufficient bandwidth, and those who either don’t have computers/devices or who have to share them with family members. Practitioners also said that the best candidates for regularly scheduled telehealth visits are obstetric patients at average risk rather than their high-risk counterparts who may need more in-person visits for hands-on monitoring.

Now that many of the technological and connectivity problems have been solved, most of those interviewed said that patients feel comfortable with virtual prenatal visits and that most of the video telehealth conversations are essentially as good as in-person discussions.

2.b. Perceived Positive Aspects of Telehealth

2.b.1 Reduced risk of exposure to COVID-19

Participants cited numerous advantages to using telehealth during the pandemic; most often mentioning the reduced risk of COVID-19 exposure for patients and practitioners alike:

“I think that patients appreciated having a way to connect safely without feeling like they needed to come into the clinic. I know that clinicians and staff also appreciated the ability to minimize an office visit as well.” — APP

“Most of our patients are terrified of getting sick. They’re so worried, that they will do anything to avoid coming into the office.” — Nurse

2.b.2 Convenience for the patient

Those interviewed said that one of the most important benefits of telehealth is convenience for patients, especially those who would otherwise have to drive long distances to stay in touch with their providers. They said that the availability of telehealth sessions are especially helpful for their patients who:

- Can’t get off work
- Have children at home but no childcare
- Don’t have gas money
- Don’t have a driver’s license
- Need to find a ride
- Have to navigate work and school schedules

As these participants put it:

“The biggest reward has been being more accessible. I think it’s been rewarding that some patients who wouldn’t have been able to come in because of childcare issues or patients who are at [high] risk for COVID can now still see their provider.” — Scheduler

“We’ve been more accessible than ever. So although I still would prefer an in-person consultation for various reasons, I think that if there’s any level of difficulty for [in-person] access, it’s a really wonderful solution. And technology and logistics for scheduling aside, for the patients themselves it’s nice.” — OB-GYN Physician

“I think it shouldn’t have taken COVID-19 to get us to use digital technology to connect with patients in a way that’s more convenient for them.” — OB-GYN Physician

“I think people should definitely have it in their toolkit, because the advantages for patients who live far away are huge in terms of transit time and cost.”— OB-GYN Physician

2.b.3 Insight from seeing patients in their home environment

“Intimate” was the word many participants used to describe telehealth visits with patients connecting remotely. Some physicians considered this the greatest benefit of virtual visits. They were able to get a more holistic glimpse into their patients’ lives by seeing the inside of their houses as well as children and pets in the background. They found it was also valuable because spouses, who were not permitted to come to clinic visits because of COVID precautions, could participate. Visits by telehealth reminded some of in-home visits they used to make earlier in their careers. As this participant said:

“I’ve really liked doing home visits, but I don’t get to do them very often in my current work. One of the things I loved about them was that just stepping into someone’s house you can tell so much about them. It can be eye-opening and really personalizes who that person is as a human being I really enjoy just getting a little window to my patients’ family life.” — MFM Fellow



Other participants described telehealth visits this way:

“When things were locked down, just being able to connect with people by seeing their faces felt so refreshing. And I really enjoyed seeing folks in the context of their homes with their family around them.” — OB-GYN Physician

“Being in the privacy of one’s own home has led to disclosure and vulnerability — and an intimacy that we didn’t know before.” — MFM Fellow

“I’ve been finding [telehealth visits] just as engaging [as clinic visits]. It’s kind of fun to connect to patients on a more personal level, because I get to see their house and their kids and hear their dogs barking, and we get to have other conversations. So it doesn’t seem quite as sterile as in clinic. On [telehealth] we get to joke around. I found it helpful in that I like having a little bit of insight into their lives. That helps me understand who they are better.” — CNM Midwife

“Initially, it takes some practice. We have a lot of conversations with our patients around psychosocial issues, anxiety, depression and that type of thing. And I have found that those conversations actually have worked relatively well. I initially wondered [whether] without nonverbal cues we’d really connect well, but I feel like it’s working.” — Genetic Counselor

“One kind of surprising change is that our [telehealth] conversations often tend to be very emotional and difficult. I think sometimes being in the privacy of one’s home lends itself to an intimacy and vulnerability that maybe they wouldn’t reveal to us in person. That has been positive because we can really dig a little deeper into the psychosocial milieu for the patient.” — Genetic Counselor

“I think it’s nice to get to see people in their environments and get a little more data about what their lives look like. I have some visits with people in their workplaces, and I can kind of get to know, ‘Oh, so that’s what she’s spending her day doing.’ And it makes it more of a complete visit.” — APP

“Usually, our reward that’s my favorite thing is to have a post-partum patient visit on telehealth, and they might walk me around the nursery, and I might get to see the baby, which is awesome.” — OB-GYN Physician

2.b.4 Opportunity for practitioners to work from home some of the time

Some participants (especially those with children at home) said they value the opportunity to work from home some of the time. They found the flexibility to go for a jog, have a cup of coffee or interact with their children to be a refreshing change from their more rigid in-clinic schedules. Some participants explained it like this:

“For our mental health as providers, it’s really nice to stay home some days when so much of our work CAN be done from home.” — CNM Midwife

“I really like working from home. I like being able to make myself a cup of tea when I want to have something to drink, and I like not having to commute back and forth to the office. I think that allows a little bit more time in my day where I can go out for a walk. It’s really nice!” — CNM Midwife

“I have a son in kindergarten, and he’s being home-schooled because of COVID. I feel more satisfied personally that we’re doing telehealth, and we have an opportunity to be home.” — Scheduler

2.b.5 Greater efficiency for in-person follow-up visits

According to those interviewed, virtual telehealth visits in which patients provide information or discuss upcoming decisions allows subsequent in-person visits to be shorter and more efficient, since some of the information has already been collected:

“I think that counseling of any kind can be done over the phone or video. I’m not a provider who has to do physical exams. By the time they have their first [In-person] visit, a lot of the counseling has already been done, which can save time in that brief initial prenatal visit.” — Genetic Counselor

2.b.6 Telehealth visits are now billable

Participants said they have historically given patients a great deal of free medical advice, either through questions posted on MYCHART or through telephone callbacks. Now, participants said, they are able to bill for telehealth sessions rather than provide unbilled time for expertise, and they appreciate having the revenue capture for a time spent on phone or virtual appointments. These comments were typical:



“I think billing is important. I have done a lot of unbilled telephone follow-up over the years, so it’s nice to be able to charge for that.” — CNM Midwife



2.b.7 Patient satisfaction with telehealth visits

Most of those interviewed said that patients like telehealth for information-gathering visits. The patients also are pleased that their spouses/partners can be included in the sessions, since COVID restrictions prevent them from accompanying the patient to in-person visits:

“I think the [telehealth] conversations go fine and honestly are not much different than live conversations. I think some patients enjoy telehealth now, because we have a policy that partners can’t come to the clinic visits. But with telehealth visits, the partner can be there, and especially for the consultations and pre-conception visits, they’re often sitting right next to the women on the couch, and they have an opportunity to ask questions, which they wouldn’t be able to do [right now] in a live visit. So I think they appreciate that.” — Maternal Fetal Medicine Physician

3c. Perceived Challenges of Using Telehealth

Participants identified some of the challenges they have encountered in conducting telehealth sessions. According to those interviewed, most of the logistical challenges and impediments could have been lessened by creating guidelines and expectations for patients and practitioners up front. However, given how quickly telehealth had to be implemented, they said they did not have the luxury of planning time, and they had to do the best they could and learn along the way. According to those interviewed, this bodes well for the future of telehealth post-COVID, since many of these obstacles can be resolved given enough time and resources. The sections below enumerate some of the challenges of virtual visits.

3.c.1 Lack of body language cues

Most participants said they miss the body language cues they ordinarily get in seeing patients in-person, because on telehealth visits they are only able to see patients from the neck up:

“When you see a patient in person, you can pick up on subtle cues, ... but on telehealth we only see them from the neck up.” — MFM Physician

“The body language. ... Right now you can only see patients from the neck up. You can’t really see body language when you’re talking about something. I have had some virtual visits with my own provider outside of work, and I can tell she can’t necessarily see what I’m talking about because there’s only so much of me you can see at a time versus an in-person visit.” — Nurse

3.c.2 The digital divide

Many of those interviewed said that low-income patients, non-English speakers and patients from rural areas were not as likely to have access to devices, broadband internet connections or an interpreter. As a result, they were less likely to have access to video telehealth. As this participant explained:

“There hasn’t been as much focus on creating ways of engaging with digital health care that’s more tailored to the people who have the most barriers, whether it be because they live in rural communities or they don’t speak English or they have disabilities, or they are elderly, or they have issues with literacy in general. I think the digital health world has a ways to go to meet those needs.” — CNM Midwife

“It’s also the fact that we can only roll it out to certain patients. Patients who speak Spanish have got to be seen. So the whole idea is we’re doing this for safety. But our patients who have the least internet and are a higher risk group we’re making come in. But white folks don’t have to come in, because they have an internet connection, basically.” — OB-GYN Physician

“The most important thing for me [going forward] would be to have the same availability of video visits with patients who speak other languages apart from the provider’s primary language. So facilitating virtual visits with interpreters for the most commonly spoken languages for our patients would be a major priority. Then when it works, it’s great, but then any time you have a bad Wi-Fi connection, it frustrates everybody involved and takes time away from the patient’s time with you. So, at least setting up a place for us at the hospital when I’m already there for service [would be helpful]. Having a place with reliable connections, that’s ideal.” — MFM Nurse

“I would be disappointed if, two years from now, we’re in the same place when it comes to interpreter visits and patients who don’t speak English having limited access to care because we never made the accommodations that we needed to make this accessible and equitable for every patient.” — MFM Fellow

“I think some scheduling and standardization of how long a visit lasts [would be important]. There’s a timer that pops up on the screen that you and the patient can see, like ‘5 minutes’ that can get you out of your visit in a timely way.” — MFM Fellow

3.c.3 Downsides of seeing patients in their home environment

Although there were a lot of perceived benefits from seeing patients in their own homes, there are also legitimate downsides at this early phase of telehealth. In the abrupt switchover to virtual visits, there was no time to create a set of protocols and adequately prepare patients.

Some participants suggested that social norms are different in telehealth visits compared to conventional in-clinic visits because the former may be viewed as more casual. Some said that when patients are trying to fit telehealth sessions into their tightly packed day, they often ended up answering their video calls while driving, cooking or shopping and were unable to fully focus on the call. Similarly, patients were sometimes distracted by all that was going on in their homes, detracting from the value of the sessions.

As these participants said:

“I think [telehealth] can be difficult because patients don’t feel that it’s formal. And so we’ve had many situations where patients are driving or they’re at work. They don’t set aside time for the visit, or they don’t understand that we can’t have a sensitive conversation in public. So while it all has been quite acceptable, I think it can lead to [a patient thinking]: ‘Well, I don’t have to make a special time for this.’ We’re not going to talk to them when they’re driving, so we offer to reschedule. I’ve also had people where they’ve got the TV on in the background, or just because of necessity, their kids are running around and they can’t really focus as well as they could have in-person. I think our counseling suffers because they are not paying as close attention.”

— Genetic Counselor

“The challenges I found were around distractibility if the patient had a lot going on in their home, especially if there were several children or other family members that were asking for their attention. When patients were able to go into a separate space and engage in a conversation on the video that felt very similar to how it is in a face-to-face environment when you’re both together in the same room. So part of it was needing to minimize those distractions and being able to see the other person on the other end.” — MFM Nurse

Some practitioners also said that because of the casual feel of telehealth sessions, in contrast to more formal in-clinic visits, doctors often ended up staying on video calls longer than the allotted timeframe. Some said they found it difficult to re-direct patients on telehealth during long-winded conversations. Some also said there was often an awkwardness in ending telehealth sessions compared with an in-person visit where the doctor stands up to leave, signaling that the session is over. One suggested having an on-screen button visible to the patient and the practitioner to signal 5 minutes before the end of a session.

Some of those interviewed described their difficulty in ending sessions in a timely manner:

“Initially, there were lots of connectivity issues. Audio didn’t work. Video didn’t work, couldn’t see the patient, couldn’t hear the patient, they couldn’t see us. There was a learning curve for patients figuring out which link to click on, so it takes a while, and it delays your schedule. And it still happens now. So that was very frustrating. Patients would get the email link, then it would take about 5 minutes to connect. And once they get on, they are your ‘best friend.’ That part is great except that it doesn’t fit with our schedules. You’re on there for a lot longer than you would be if you were in the room. So a 10-minute visit takes 30 minutes, and then your schedule kind of snowballs from there.” — MFM Fellow

“I’ve had patients who, when I’ve called them for the video visit, are driving. So they have their phone on the passenger seat. They’re looking down, looking up. Another thing, I have patients outside. It’s nice for them but the wind is blowing, I can’t hear. I’ve had patients dragging on cigarettes, which doesn’t affect me other than it’s kind of odd. It does prompt me to talk about smoking cessation, but it’s just not what I’m looking for. In the office I have more control over the conversation.” — OB-GYN Physician

3.c.4 Difficulty sharing sensitive, private information

According to those interviewed, it may be difficult for the patient to talk freely about sensitive issues in front of their family members. As these practitioners explained:

“I find women who say, ‘I can’t have a televisit because it’s not safe in my house to have a private conversation.’” — OB-GYN Physician

“Ensuring confidentiality felt challenging when people were in a car or at home with other people. Having more sensitive conversations, whether they’re about mental health or reproductive planning, just got more difficult. And now we are seeing an increase in the intimate partner violence that some of our patients are experiencing. So finding safe ways of talking to people in their home when they’re experiencing violence has been another challenge. And even with [just] their children around, it may not really be appropriate to be having those conversations. That can be traumatizing for the kids.” — Genetic Counselor

3.c.5 Extra steps involved in keeping team members informed about patients and scheduling follow-up appointments

After an in-person visit, patients generally stop by the front desk to check out and make subsequent appointments. Now, since the schedulers are working from home, there are more calls back and forth to schedule the patient’s next visit. In addition, it is more involved for practitioners to keep the rest of their team, such as nursing and front desk staff, informed about a patient’s status and needs:

“I think communicating with the support staff about a plan for a patient is 10 times more complicated because we can’t just walk to the desk and say, ‘She’s getting her blood drawn.’ We have to email, chat, text people who are Attendings, Fellows, residents, nurses and sonographers. They all need to know a plan, and that’s multiple communications for simple tasks. Like a routine blood draw is 10 more steps.” — MFM Fellow

“Sometimes when we are trying to get back to a patient about a follow-up, it’s challenging. If we call them after a virtual visit and leave a message and they don’t get back with us, sometimes they’re late for care. And they’ll call us back in a couple of weeks and say, ‘I think I was supposed to have an appointment but I never got scheduled.’ So sometimes when you don’t see them at the initial check-out, it’s hard to get them back in for a follow-up as well to make sure they return to care in a timely way.” — Scheduler



3.c.6 Inability to virtually monitor patients' blood pressure

Some practitioners said that one of the major challenges of telehealth was not having patients physically present to do blood pressure checks. Although, through a donation drive, some patients were able to get blood pressure monitors, it has been difficult to get enough cuffs for all patients to monitor their own blood pressure at home:

“We had issues in terms of trying to get virtual blood pressure during telehealth visits, with a lot of community sources for blood pressure cuffs being pharmacies. You could normally go to Wal-Mart or Walgreens, but a lot of those were closed because of COVID. Getting patients' blood pressure cuffs for home use is difficult, especially if there's financial limitations.” — MFM Fellow

“For us, especially in the second half of the pregnancy, having blood pressure information is really important. And we have not figured out an easy way to get patients' blood pressure cuffs and have them get that information themselves. So that's a big limitation for us.” — MFM Physician

3.D Practitioner Satisfaction With Telehealth and Their Preferences for Post-COVID Patient Care.

Almost all of the participants said that they believe telehealth is here to stay, because it has now been demonstrated that many types of informational sessions can be successfully conducted virtually, and because it is more lucrative now that UNC is allowed to bill for these sessions. In terms of job satisfaction, the majority of those interviewed said that they found telehealth satisfying and that patients appreciated those virtual visits. Most experienced a great deal of human presence during virtual sessions. Some said they liked being able to concentrate on each patient with fewer interruptions from staff and phone calls that typically occur in the clinic. Going forward, most said a hybrid model of seeing patients on telehealth as well as in the office for some visits is the wave of the future. As these participants explained:

"[Being able to do] a hybrid of alternating between in-office visits and telehealth visits felt really good. A lot of our patients have barriers to coming to clinic, so often driving long distances and the transportation itself can be a barrier, either because of not having a driver's license or gas money or needing to find a ride. [This] can be challenging with navigating work and school schedules and health care. So being able to remove some of those barriers and bring care to people's homes felt good." — Family Medicine Physician

"I think there's a role for telehealth in the future for a variety of things. I don't think it's going away completely. In fact, I think we'll probably end up using it more. However, how that is integrated will vary depending on what visit types it's used for. But I do think a hybrid is nice. I certainly wouldn't want to envision myself in a practice where I only did telehealth. That would be difficult." — MFM Fellow

"I like a blend. I like having both. If I'm on video all day, whether it's meetings or patient encounters I get screen fatigue. But I'm also fatigued if I'm in clinic seeing 20 patients in a day. So I like them mixed." — Family Medicine Physician

"I think there are some visits that are perfect for telehealth, and then there are some that probably aren't. I think along the way we're going to figure that out. It would be great to still be able to incorporate video visits into our routine prenatal care." — Nurse

"In the beginning I missed being on campus and seeing the patients. But now I feel like I can talk to them and be more comfortable. [In the office] I'd sometimes get a phone call from a patient, and there's a patient in front of me or a provider who needs to talk to me. [Working from home] I feel like I can actually talk to patients more calmly and figure everything out and then move on to the next task." — Scheduler

*"One thing I've learned is how much of my job **doesn't** have to be done in the office, and I think for our mental health as providers it's really nice to have that option. If my patients need follow-up, that can be done virtually, so [I can] ... take a break from clinic. And some of our schedulers travel from far, so it's nice for them to not have to drive an hour every day to do something that they totally can do remotely." — OB-GYN Physician*

"After COVID, I would want to continue [with telehealth] because, for some patients, it could cut their in-person visits in half or more. It's a massive advantage in terms of the cost of childcare or transportation." — OB-GYN Physician

"I definitely think I will always prefer in-person, but I think I'll adapt [to telehealth sessions], and I'm already adapting. And I don't mind it nearly as much as I did when I first started." — CNM Midwife

A minority of participants who were not big fans of doing telehealth visits said they missed the hands-on, in-person interactions with patients as well as relationships with their colleagues at work. This second group also saw the benefits and potential of telehealth but personally found in-person visits with their patients more satisfying and more conducive to relationship-building. In addition, most of these practitioners said they did not like working from home because of the inherent distractions and because they missed the collegiality of working with their team. This group said that they would prefer to work only at the clinic seeing patients in-person in the post-COVID era.

These practitioners explained their preferences this way:

"I don't enjoy working from home — I feel like I'm missing out on things." — OB-GYN Physician

"You lose the social aspect of work. I enjoy seeing my nurse. I enjoy seeing the sonographers. I enjoy seeing my partner who is working there that day. You lose that working from home." — MFM physician

"A lot of what I've enjoyed in my professional career, although I realize this sounds weird, but is helping women and their support people through these difficult situations. And I honestly don't do that anymore [with telehealth]." — MFM physician

“I think that some of the TLC that you get when you come in-person gets lost when you’re not in-person. We have a lot of anxious patients, and it’s easier to reassure them in-person rather than on-screen.” — MFM Nurse

“Medicine is a collaborative sport, and care coordination is faster and more efficient in-person rather than doing everything by yourself. [With telehealth], you lose the social aspect of work, and it feels more isolating.” — APP Physician Specialist

“I still prefer in-person because about half our training is in crisis intervention and psychosocial counseling. And historically all of the training has relied on body language — where someone seats themselves in a room, how they are relating to their partner in the space, and their eye contact. With telehealth a lot of that is out the window. Sometimes it’s difficult to read somebody and imagine how they’re feeling because you don’t have an opportunity to see it. I’ve had situations where someone is emotional, and because they’re on the phone, they can choose to turn their phone away so I don’t get to see their face.” — Genetic counselor

“I don’t think you can show empathy as well from a screen as much as in person.” — OB-GYN Physician

“Interacting with staff and colleagues is important, and it’s a part of being in a clinical setting, rather than sitting at your own desk and being in your own bubble. Interacting with patients, the staff and residents feels different when you’re all together in person.” — MFM Fellow

“I’m glad when I’ve got the [telehealth] visit done. My neck hurts. One thing about in-person visits is that you can move around, and so you’re not constantly hunched over the computer and typing.” — OB-YN Physician

“I miss the contact. I like getting to know my patients. I like the laying on of hands, and hearing doptones does a lot to reassure the patient early in pregnancy.” — OB-GYN Physician

“I prefer in person. I think it’s the quality of the interaction to the people that you’re serving. Whether by phone or video, even though there were some [sessions] that were high quality, overall they felt like they were not as high quality as the interactions we are able to have in person.” — OB-GYN Physician

Some practitioners said that their high-risk patients, including those who have had previous problematic pregnancies, are more inclined to opt for in-person visits, especially now that there is more known about COVID transmission and some are less frightened of contracting it. The practitioners said that in-person visits help allay the anxiety of their patients with complex medical issues and help assure them that things are progressing normally. As this practitioner said:

“If given the choice, I think the majority of [my] patients, would prefer to be seen at in-person visits. They like to know that their belly is growing normally. They like to hear the baby’s heartbeat. So if I give them a choice, most of them like to come in person. ... You have to keep in mind that we are taking care of [some] complicated, high-risk obstetrical patients. They’re not birthing center patients, so they’ve got hypertension, diabetes or whatever going on, and they like the reassurance of a physical exam.” — MFM Specialist

3.E Suggestions for Conducting Telehealth Sessions Going Forward

Based on their experiences conducting telehealth sessions over the last 5 months, participants suggested the following to help address some of the impediments they have experienced:

- Have a health navigator prepare patients for the logistics of telehealth sessions;
- Address the digital divide by having seamless and consistent Wi-Fi access for all patients;
- Arrange for interpreters for non-English speaking patients;
- Create flexible scheduling guidelines of which sessions are typically in-person and which are typically virtual, and how long telehealth sessions should last;
- Give patients guidelines for successful visits, e.g., set aside time for the visit, go to a quiet place in the house without distractions, etc.;
- For telehealth sessions, incorporate a timer that indicates 5 minutes remaining that pops up on the screens of practitioners and patients so they can end the visit in a timely and less awkward way;
- Return to the pre-COVID schedule of seeing prenatal patients more frequently, e.g., every four weeks; and
- Have a dedicated room in the clinic or hospital with two screens and a reliable Wi-Fi connection set up for telehealth visits. Similar to in-person visits, have a nursing assistant set up the logistics of the video call, and have the patient on-screen before calling in the practitioner. This will save the practitioner a lot time and frustration and allow them to concentrate on the medical aspects of the visit rather than having to solve potential technical problems.

4. Strengths, Limitations, and Future Directions



Our study has several strengths. First, this assessment was conducted at a large, regional perinatal center, allowing us to include the breadth of provider roles and types involved in maternity care. The interviewed providers care for a diverse pregnant population in various outpatient settings that have differing clinical infrastructure and support. Pregnant populations characteristics that are well represented at our center include non-English speakers, various cultural backgrounds, rural and urban residents, those with a range of psychosocial risk factors, and various insurance types. Thus, the range of maternity care provider types, diversity of patients and provider experiences at different clinical sites, allows us to broadly conceptualize the experience of telehealth for maternity care in different circumstances and for different populations. We suggest that the conclusions drawn from our sample regarding provider satisfaction, preferences, and recommendations for future use are representative of other similar centers, nationally, that may have comparable infrastructure, patient populations, and provider roles/types. Second, this assessment is part of a broader evaluation of telehealth use including local, state, and national quantitative data of provider preferences and national data on patient preferences. Comparison of themes generated through qualitative study to the aforementioned survey informs recommendations for practices that improve patient experience and provider satisfaction and workflow. Finally, our focus groups included not only primary maternity care providers, such as physicians, midwives, and advanced practice providers, but also ancillary care staff, such as nursing, ultrasonographers, and administrative support staff. Thus, recommendations regarding workflow are derived from all key stakeholders involved in patient transitions and care and not from the singular vantage point of the provider.

This study is not without limitations and conclusions should be interpreted within that context. The study was conducted at a large regional center with associated infrastructure and system complexity. The experiences recorded may not be representative of providers working in community settings or small practices with different resources and patient population. Additionally, our current analysis was conducted using a rapid qualitative approach, allowing us to conceptualize themes that arose regarding particular domains of interest (e.g. current perceptions, future needs, etc.) for the entire interviewed sample. Therefore, nuanced differences in the experience of telehealth by provider type and role, provider demographics, or individual practice type were not studied.

This qualitative assessment of provider perceptions of telehealth and needs for future use provides preliminary data to inform further implementation and extensions for telehealth for maternity care. Our data demonstrated that providers believe that telehealth is an important tool that can increase convenience and access to care. Yet, it was noted that convenience and access might only benefit some patients, as the digital divide disproportionately affects certain birthing populations. Several questions arise from these conclusions and demonstrate need for future studies to inform implementation of telehealth. First, given the strengths and limitations noted in our study, a scaled qualitative assessment is necessary to determine if the themes demonstrated at our center are applicable to other sites. A regional or national cohort of providers purposefully sampled from varying geographic settings, clinical types, and serving diverse patients, would help to inform broader recommendations. Secondly, as our study noted, telehealth may provide greater benefit for particular clinical visits, and expand access to certain services. It is necessary to understand which particular visit types, from the provider and patient perspective, could best be formatted to telehealth. Focus groups with patients in parallel with their providers, identifying converging and diverging themes would be most informative. Third, workflow was rapidly changed with the incorporation of telehealth, with significant challenges noted by providers, including structure of a clinical session, patient navigation, and previous team-based workflows. Implementation research on how to better incorporate telehealth into a patient-centered prenatal context, including preparing patients for the experience, and maximizing provider and ancillary staff roles, are provide effective and efficient telehealth services. Finally, and most importantly, recognition of the digital divide suggests that telehealth may have exacerbated existing disparities in care delivery. Understanding personal, social, and structural facilitators and barriers to telehealth care and how to eradicate disparate access is important to equitable implementation of this technology for care delivery.