



Patient and provider experiences using a site-to-site telehealth model for medication abortion

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Background: In the site-to-site telehealth for medication abortion model, patients visit a health center to meet with a remote clinician using telehealth technology. This model is safe, effective, and acceptable to patients and providers. The objective of this study was to document the experiences of patients and providers using telehealth for medication abortion in Planned Parenthood health centers across different geographical contexts in the United States.

Methods: We conducted in-depth interviews with Planned Parenthood medication abortion patients who either met with a clinician at the clinic via telehealth or in-person about their experiences receiving care. We also interviewed Planned Parenthood staff members about their experiences implementing telehealth for medication abortion at their health center.

Results: We interviewed 29 patients who received care at Planned Parenthood health centers in five states. Both telehealth and in-person patients described positive interactions with health center staff and clinicians. The vast majority of telehealth patients said that they felt comfortable speaking with the clinician over telehealth and had no trouble using the telehealth technology. We interviewed 12 providers, including clinicians and administrative staff, who worked in seven states. Providers largely thought that telehealth for medication abortion expanded access to medication abortion.

Conclusions: Across different locations, our findings indicate that patients found telehealth for medication abortion services to be highly acceptable and providers found that telehealth services may help improve medication abortion access. As the use of telehealth for medication abortion expands, future research should include additional measures of quality to ensure that services are acceptable across different identities and experiences, including age, race, gender, and income level.

Keywords: Telehealth; medication abortion; patient experiences; provider experiences

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Introduction

Abortion can be difficult to access in the United States for many reasons, including state and federal regulations that restrict how a pregnant person can access abortion care (1-3); decreasing numbers of abortion providers (4,5); the need to travel long distances to reach an abortion-providing facility (6-8); and costs associated with the procedure and/or travel to the facility (9,10). Over the past decade, abortion providers have implemented site-to-site telehealth for medication abortion (referred to here as “site-to-site TeleMAB”) services to allow health centers that do not have a clinician onsite to provide medication abortion services remotely. Similar to in-person medication abortion care, site-to-site TeleMAB patients visit a health center where they meet with staff to receive pregnancy options counseling and diagnostic testing, such as an ultrasound. Instead of meeting with the clinician in-person, patients meet with the clinician via online videoconference platform on a clinic computer in a private room. Prior to the clinician-patient encounter, clinic staff set up the videoconference platform and ensure that the audio and video functions are working. If the patient is eligible for medication abortion, the clinician will answer questions and give the patient information about how to take the medication and when to seek follow-up care. The site-to-site TeleMAB model can mitigate some obstacles to accessing abortion care by increasing the availability of medication abortion in facilities that would otherwise not have services or have only limited availability (11,12), thereby enabling some patients to obtain care closer to home (12).

Site-to-site TeleMAB is safe, effective, and comparable to in-person care (11,13-17). However, quality abortion care must be more than just safe and effective; Price and Hawkins’ social analysis framework for reproductive health services defines quality as the social experience of services and includes the extent to which a program “is responding to the perceived needs and demands of patients and potential patients” (18). They suggest that assumptions about quality do not always align between patients and providers, and therefore patient and provider interactions are an important—and often neglected—aspect of quality, which can provide critical insights into how to improve quality of care (18). Price and Hawkins’ approach to evaluating reproductive health services provides an important basis for examining the acceptability of the site-to-site telehealth model for patients and providers. Ibis Reproductive Health (Ibis) has partnered with Planned Parenthood Federation of America (PPFA) to assess the acceptability of the site-to-site

TeleMAB services for patients and providers and identify areas for improvement. In 2011, an evaluation of site-to-site TeleMAB services in Iowa demonstrated that both patients and providers found the service to be highly acceptable and most patients reported feeling positive or indifferent about meeting with the provider over videoconference (14). In addition, a 2013 study of provider experiences with a site-to-site TeleMAB service at Planned Parenthood health centers in Alaska found that the service allowed the clinic to increase the number of medication abortion appointments, which supported patients in receiving care sooner and at earlier gestational ages (13).

As the use of site-to-site TeleMAB services continues to expand, it is important to examine providers’ and patients’ experiences to ensure that these services meet the needs and expectations of both groups. This study sought to document the experiences of patients and providers using site-to-site TeleMAB with a focus on acceptability and perceptions of access. The findings presented below fill a gap in the literature by providing evidence about experiences using the site-to-site TeleMAB model across multiple locations in the United States. We present the following article in accordance with the Standards for Reporting Qualitative Research (SRQR) reporting checklist (available at <https://mhealth.amegroups.com/article/view/10.21037/mhealth-22-12/rc>).

Methods

Patient interviews

We conducted in-depth interviews with 29 abortion patients as part of a larger study that aimed to evaluate patient acceptability of medication abortion services received at Planned Parenthood affiliate health centers in five states: Alaska, New York, Maryland, Montana, and Nevada. Participants received medication abortion care by visiting a health center and meeting with the clinician either in person or via telehealth technology. When patients contacted Planned Parenthood, they received information about their abortion care options (i.e., medication or aspiration) and were offered appointment options based on the option they preferred.

Patients seeking abortion were eligible to participate in the study if they obtained a medication abortion (i.e., were ≤ 70 days’ gestation and did not have other medical contraindications), were at least 18 years of age, were able to read and speak English, and were able to give informed consent. The gestational age limit for medication abortion

was set by the Planned Parenthood health centers. As part of the larger medication abortion acceptability study among Planned Parenthood patients, eligible patients were invited to complete an online survey two weeks after the appointment where they received the medication abortion pills. We recruited interview participants from the pool of patients who completed the online survey; upon completing the survey, participants interested in interviewing were redirected to an anonymous online interview interest form where they could provide their contact information. We did not link participant survey responses to the interview interest form or subsequent interview responses to ensure confidentiality and to increase the candidness of the interviewee's responses. Patients who expressed interest in participating in the interview by completing the online interest form were contacted by phone and screened by study staff to determine eligibility.

We initiated recruitment for interviews on a rolling basis as site-to-site TeleMAB services were introduced across different health centers between August 2016 and January 2019. Patient interviews were conducted by telephone using a semi-structured interview guide adapted from a previously published study assessing patient acceptability of site-to-site TeleMAB services in Iowa (14). We aimed to assess acceptability of services by asking participants about various aspects of perceived quality of care (19), such as how they were treated in the clinic and if they felt comfortable in the exam room. We also asked site-to-site TeleMAB patients about their comfort level meeting with the doctor remotely, if they had all of their questions answered, the level of privacy, the sound quality of the videoconference, and things they liked and disliked about the experience. We also asked both site-to-site TeleMAB and standard in-person medication abortion (MAB) patients whether they would recommend site-to-site TeleMAB services or the standard in-clinic MAB services to a friend. Patient interviews lasted from 15 to 50 minutes. Patients received a \$40 electronic Amazon gift card upon completing the interview.

Provider interviews

We also conducted in-depth phone interviews between June 2017 and July 2019 with 12 providers who were involved with both in-person and site-to-site TeleMAB services. Providers were eligible to participate if they were a doctor, advanced practice clinician, nurse, medical assistant, health center manager, counselor, or other administrative personnel on staff involved in the implementation or

administration of site-to-site TeleMAB. We included a broad range of providers, both clinical and administrative staff, in order to capture a holistic and nuanced perspective of the impact and acceptability of site-to-site TeleMAB services. Study team members from PPA screened for initial interest among eligible providers, and Ibis study team members conducted the interviews by telephone. Prior to the interview, participants were read the study consent form and informed that participation in the study was voluntary and confidential. The provider interview guide was adapted from a previously published study examining provider acceptability and perspectives of a site-to-site TeleMAB model in Alaska (13). In order to capture provider acceptability of the site-to-site TeleMAB services, we asked providers to share their opinions about the services, including benefits and challenges. We also asked providers to share their perspectives of the site-to-site TeleMAB services, including its impact on abortion access, who benefitted the most from the site-to-site TeleMAB services, and if there were patients who might be better served by an in-person visit. Provider participants did not receive compensation. Provider interviews lasted from 30 to 60 minutes.

All study participants, patients and providers, provided verbal informed consent to participate in the study and to be audio recorded. For those who did not want their interview recorded (n=1 patient), study staff took handwritten notes. Audio files were transcribed verbatim by a third-party transcription company and study staff performed quality assurance checks on all transcriptions. De-identified transcriptions were analyzed qualitatively with inductive coding using modified grounded theory methods (20). A modified grounded theory approach was applied to our analysis to assess the factors that impacted participants' perspectives of acceptability and impact on access (21,22). Analyses were facilitated by the use of Dedoose to identify themes related to acceptability of medication abortion and site-to-site TeleMAB by study staff. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013), and was approved by Allendale Investigational Review Board (No. IRB00005829).

Results

Patients

Participant characteristics

Twenty-nine medication abortion patients participated in an interview. Sixteen of these participants met with a

Table 1 Participant characteristics-patients (N=29)

Participant characteristics	n	%
Age (median, range), years	25 [19–41]	
Education		
Some high school	1	3.4
High school or GED	5	17.2
Some college or Associate's degree	12	41.4
Bachelor's degree	9	31.0
Master's degree	2	6.9
Student		
Yes	9	37.5
No	15	62.5
Missing	5	20.8
Relationship status		
In a relationship	9	31.0
Married	6	20.7
Single	14	48.3
Race/ethnicity		
Asian American/Pacific Islander	3	10.3
Black	7	24.1
Hispanic	4	13.8
Multi-racial	2	6.9
White	13	44.8
Parous		
Yes	15	51.7
No	14	48.3
Past abortion		
Yes	7	24.1
No	22	75.7
Dependents at home		
Yes	14	48.3
No	15	51.7

GED, general education development.

remote provider via site-to-site TeleMAB. Thirteen of the 29 participants met with the provider in-person at the health center (“MAB” patients). Patients received care at Planned Parenthood health centers in five states, including

Alaska, New York, Maryland, Montana, and Nevada. Patient demographics are summarized in *Table 1*. Patient participants ranged in age from 19 to 41 years old, with a median age of 25. Nearly 80% of participants reported having at least some college education, and roughly a third (38%) were students. About half of the participants (52%) were in a relationship or married and most participants identified as White (45%) or Black (24%). Seven participants reported having had a previous abortion.

Site-to-site TeleMAB and MAB patients' health center experiences

Both site-to-site TeleMAB and MAB patients were required to visit the health center in order to receive the medication abortion pills. When asked about their experiences in the clinic, the vast majority of participants reported that they had positive experiences with staff and were comfortable in the health center including one site-to-site TeleMAB patient who said, “[The staff] were very nice, not judgmental. It was just—I felt like a regular patient coming in for something very regular and normal, and there's not—it didn't seem like a taboo situation”. Two participants described mixed feelings about their comfort level in the health center; one said they were “fairly” comfortable, but felt a little awkward because of the medical illustrations of reproductive anatomy on the wall. One participant's negative interactions with staff resulted in an uncomfortable health center experience.

Patient experiences with telehealth platform

Site-to-site TeleMAB patients were asked to describe their experience using telehealth to meet with the provider. Many participants reported feeling comfortable during the telehealth visit, including one person who said that they felt more comfortable than they would have in an in-person visit, “I think I felt more comfortable speaking to her on the screen than I would be in person”. Several participants reported that they would have felt more comfortable during an in-person visit, and of those participants, some reported a preference for in-person care. However, the telehealth participants who reported a preference for in-person care reflected that they still felt comfortable during the site-to-site TeleMAB visit. In addition, all reported having had an opportunity to have their questions answered, though some didn't have specific questions to ask. One participant said, “[the doctor] answered any questions I had. It's just as much as—I mean it's not the same as a doctor next to you, but it's just as much the same. I mean I thought it was very good. I look at it as good technology”.

Site-to-site TeleMAB participants were also asked to describe what they thought about the privacy in talking with the doctor by videoconference, including whether they thought that the level of privacy was different from an in-person visit. Of the 13 participants who were asked about privacy, most thought that the privacy in a site-to-site TeleMAB visit was no different from how it would be during an in-person visit. Some described their appointment as private, including one participant who said, *“I wasn’t worried about anybody over-hearing or—it felt comfortable with the confidentiality that Planned Parenthood provided in the first place, so that privacy wasn’t an issue when it came to the telemedicine”*. However, some participants said that they would have preferred a greater level of privacy, including two people who noted that a door was left ajar while they were waiting to meet with the doctor, and two others who reported that they would not have known if there was anyone listening in on the doctor’s end. In addition, one person said the level of privacy felt different and they would have preferred to meet with the doctor in-person, and another said they were not sure if the visit would have been any different. An additional person said that they were not concerned with privacy.

The majority of site-to-site TeleMAB participants said that the sound quality was good, and one person said there was a slight delay in the audio. Many noted that they did not encounter any technical difficulties throughout their appointment, however, four participants mentioned that they experienced minor technical glitches, such as their internet connection briefly cutting out, or a wait for the teleconference system to load prior to meeting with the doctor. Only one person reported experiencing a connectivity issue that delayed their appointment by about two hours.

When asked to describe anything they liked about the site-to-site TeleMAB appointment, participants identified positive aspects of their visit, including liking their interaction with the provider via telehealth. Of these, one participant said, *“I was expecting it to be awkward, but it wasn’t. And the nurse practitioner was kind and I thought that maybe it would be [rushed]—or my concerns would be [rushed] over, but they were not. She still listened and addressed my concerns just as if she was in the room with me”*. Patients also reported that they liked that telehealth increased the availability of medication abortion and abortion care generally, including one person who said, *“Being able to be seen sooner than later, obviously, because I was really adamant about doing the pill abortion. So they did mention that they’re starting this [telehealth] program to be able to see more patients a day, which I was extremely grateful for”*, and another who

said that they would otherwise not have been able to access care. Other positive aspects of the site-to-site TeleMAB visit described by patients included that it was a more personal experience than an in-person visit with a shorter wait time for meeting with the physician, and that the virtual waiting room gave them time to acclimate to the visit.

Some participants highlighted things they disliked, or perceived to be negative, about the site-to-site TeleMAB visit itself. Some participants who indicated a preference for in-person care also reported that they disliked the remote aspect of the visit or that the visit would have been improved by having an in-person encounter with the doctor. One participant expressed a negative experience discussing birth control options, and two participants, as mentioned above, shared concerns about privacy because of a door left ajar. Another person, also mentioned above, had technical issues that resulted in a longer-than-anticipated wait time. In contrast, four participants reported that there were no aspects of the site-to-site TeleMAB visit that they disliked.

Lastly, site-to-site TeleMAB participants were asked if they would recommend that a friend receive the medication abortion in the same way they did, via telehealth. Of these, the majority said that they would. Some participants said that they would recommend site-to-site TeleMAB if their friend was comfortable meeting with a doctor over videoconference. Of those who said they would recommend the service, some said they would make sure their friend understood that they would be meeting with the clinician remotely. In contrast, one participant said that they *“didn’t really mind the web cam. I really don’t care either way. So I don’t even think I would bring that up to a friend, really. I don’t think that was anything to change my mind about anything”*.

We also described the site-to-site TeleMAB system to MAB participants and asked if they would recommend site-to-site TeleMAB to a friend; some said site-to-site TeleMAB sounded like it could be a good option, and others said they would recommend site-to-site TeleMAB based on their friend’s preferences or situation. Of those MAB patients who said they would recommend an in-person visit over a site-to-site TeleMAB visit, some thought an in-person visit seemed more personal and comforting than a site-to-site TeleMAB visit, one stated a personal preference for in-person care based on their medical history, and one participant said that, if they were already in the health center, they would prefer to see the clinician in-person; however, this participant added that if they could avoid going into the health center at all, they would meet with the clinician over telehealth from their home.

Providers

Participant characteristics

We interviewed 12 clinicians and/or administrative staff from Planned Parenthood affiliates, including eight health center managers/directors, two medical directors, one nurse, and one administrator. Of these, two held clinical positions, eight held administrative positions, and two split their time between clinical and administrative tasks. Providers worked in four of the same states as the patients, including Maryland, Montana, New York, Nevada, while others worked in Oregon, Idaho, and Washington.

Improving access to medication abortion via telehealth

Participants were asked whether they thought the introduction of site-to-site TeleMAB services had an impact on abortion access. The majority said that the service had increased access to abortion. One manager said that site-to-site TeleMAB increased the availability of medication abortion appointments: *“So I think that women have been able to have a medication abortion either closer to the timeline that they would prefer or closer to home, and I think that that’s a really good thing”*. In addition, when asked what they liked about the telehealth service, the majority of participants said that they liked that the telehealth service expanded access to abortion, especially in areas where there are few abortion providing facilities. One administrator said, *“[Telehealth]... improves access to our patients and provides an opportunity for patients to receive their healthcare in a more localized way... just seven years ago, there were many more abortion facilities and abortion providers but due to increased state regulation... we’ve gone in this state from having 13 abortion providers to now I believe the number is down to five or six”*. One participant said that they thought the implementation of telehealth would impact access to abortion once word spread, but that many people were still unaware of the service.

Some participants also commented on whether the site-to-site TeleMAB service impacted how soon pregnant people were able to access abortion care. Of these, some thought that people were able to access care earlier in a pregnancy, including one participant who also added that site-to-site TeleMAB provided an additional care option for patients: *“I mean, some patients like to do the in-clinic procedure regardless of how far along they are. Having the option to do the telemed, they have the option of [experiencing the abortion] at home if they choose so”*. Another participant said that they thought telehealth increased availability, but did not

necessarily impact how early in pregnancy people were able to access care.

Some participants described whether they thought there was any particular population or type of patient who benefited the most from site-to-site TeleMAB. Of these, some said that patients whose pregnancy was at the upper gestational limit for medication abortion, prefer medication abortion over aspiration abortion, need to travel long distances to care, and those who may need to take time off of work for the procedure would benefit from telehealth. Another participant thought telehealth benefited all patients.

Additionally, some participants discussed whether certain types of patients might be better served by an in-person visit than a telehealth visit. Of those, five reported that the majority of patients would not necessarily be better served by an in-person visit unless they had a medical condition that would put them at risk for complications or if they were uncomfortable being on video. One participant said in-person visits may be better for those who prefer a face-to-face visit. Another participant, a clinician, said that they were able to provide the same level of emotional support over videoconference as in-person: *“I actually got to do a counseling session like that through telemedicine where a patient was just crying and it went really well... And so, I kind of felt really comfortable with that. I felt like I was able to do the same level of counseling that I do with people in person, and it was fine”*. One participant, an administrator, said they were not sure if patients might be better served by an in-person visit with the clinician physically present in the room.

Provider experiences delivering telehealth care

Providers were asked to share their experiences using site-to-site TeleMAB, including things they liked and challenges they encountered. One director said they liked that the telehealth service enabled teamwork among the remote clinician and the health center staff. Another director said that the telehealth service was “great” but more marketing was needed to get the word out. In addition, a nurse practitioner said that they were looking forward to adapting telehealth services for other family planning services. Some participants said they encountered technical problems, such as issues with connectivity or equipment, system outages, and a lack of technical familiarity among staff. The vast majority of these participants, however, also noted these issues did not prevent the delivery of care. One person said they had not encountered any technical problems.

Discussion

Our findings indicate that most site-to-site TeleMAB patients felt comfortable using the telehealth service, and that providers thought that site-to-site TeleMAB made medication abortion more accessible. Although the majority of the site-to-site TeleMAB patients reported feeling comfortable, some respondents reported a preference for meeting with the clinician in-person, rather than over videoconference. A few site-to-site TeleMAB patients discussed concerns around privacy during their conversation with the clinician, and some patients reported encountering technical difficulties. Two participants noted negative interactions with staff.

These findings align with previous evidence on patient acceptability of site-to-site TeleMAB services, and add new evidence of high acceptability for site-to-site TeleMAB across a range of different geographic settings. Consistent with previous findings, the majority of site-to-site TeleMAB and MAB patients reported positive interactions with clinic staff (13,14). Our results are also consistent with earlier findings on patient-provider interactions, as the majority of site-to-site TeleMAB patients felt comfortable with their conversation with the clinician, and, in some cases, were more comfortable meeting with the clinician via telehealth than in-person (14,23). In addition, the reasons why some site-to-site TeleMAB patients would have felt more comfortable with an in-person visit align with previous qualitative studies that have found that some people prefer in-person care (14,15). Reasons for privacy-related concerns, including not being able to tell if anyone else was in the room with the remote physician, have been documented in a previous study (14). Results from provider interviews add to existing evidence demonstrating that providers perceive that site-to-site TeleMAB services expand access to abortion care by increasing the availability medication abortion closer to where patients live, and that they are able to provide the same level of care regardless of whether they are in-person or on videoconference (13,14).

Providers in this study highlighted the ways in which the site-to-site TeleMAB model could address some of the disparities in abortion access in the United States. They reported that site-to-site TeleMAB benefited people who lived far away from the clinic, and that the services helped increase medication abortion availability in states where abortion care options are limited. Their experiences align with findings from a recent study that found that the introduction of site-to-site TeleMAB in Montana and

Nevada led to an increase in the uptake of medication abortion in both states (11). Providers also reported that the site-to-site TeleMAB model may have helped patients get to the health center earlier, and that the populations who may benefit the most from the site-to-site TeleMAB services include those who prefer medication abortion over aspiration abortion and are close to the gestational age limit for medication abortion. Current evidence suggests that many abortion patients who express a preference for medication abortion encounter delays in accessing care and are beyond the gestational age limit for medication abortion, making them ineligible for the procedure (24). This underscores the importance of increasing overall availability of medication abortion, as well as reducing delays in access.

There are several limitations to this study. First, the qualitative findings from this study do not allow us to assess whether site-to-site TeleMAB services are meeting the needs of different groups equally. In addition, the vast majority of patients were not told ahead of their abortion appointment that it would be conducted via telehealth and, as a result, we were not able to assess whether knowledge of site-to-site TeleMAB services impacted patients' decision making when scheduling an appointment. Lastly, the small number of participants per state did not allow us to immediately identify any trends or differences in experiences across states. Despite these limitations, this study fills a gap in the literature by documenting the use of site-to-site TeleMAB across different geographical settings, and by providing additional data on site-to-site TeleMAB patient and provider experiences.

These findings also provide a strong foundation for further telehealth for medication abortion evaluations. Future studies of telehealth for medication abortion services should incorporate additional quality of care measures to gain deeper insight into how telehealth for medication abortion is meeting the care needs of patients. Researchers should also include measures such as accessibility of accurate and unbiased information about abortion care and telehealth in order to better understand care decision-making. In addition, future quality of care measures should also assess how patients from groups that are targeted by systems of oppression experience telehealth for medication abortion; for example, how provider use of gendered terminology and other cultural competencies can impact patient-provider interactions. Lastly, our study did not evaluate differences in feelings about privacy for site-to-site TeleMAB and MAB patients, however this information would be valuable for

identifying ways to ensure patient confidence in the privacy and security of TeleMAB and MAB appointments, especially for those who are experiencing intimate partner violence, which is common among people seeking abortion (25).

All of the participating sites in this study provided site-to-site telehealth, such that patients still had to travel to a health center. During the onset of the COVID-19 pandemic, in-clinic requirements for medication abortion were lifted in some countries, including the United States, in order to mitigate the risks of contagion associated with in-person care. As a result, abortion providers were able to implement direct-to-patient medication abortion using telehealth. Studies in the United States found that the direct-to-patient models implemented during the pandemic were safe, effective (26,27), and acceptable to patients (27). These findings were also echoed in studies examining patient experiences using direct-to-patient models during the pandemic in 2020 in the United Kingdom (28-30) and France (31). Given the recent change in mifepristone's Risk Evaluation and Mitigation Strategy (REMS) (32) more US providers will be able to implement direct-to-patient telehealth for medication abortion provision services. Additional research on direct-to-patient telehealth models for medication abortion is needed to support broadening the use of telehealth to further increase access to medication abortion.

Although both the direct-to-patient and the site-to-site model offer opportunities to expand access to abortion care in the United States, more work is needed to dismantle the structural systems that prevent access to telehealth (33). Digital redlining, for example, has resulted in a lack of internet access for communities of color compared to wealthier white communities (34). Studies evaluating the use of telehealth during the COVID-19 pandemic also demonstrated that the use of telehealth was lower among communities of color, rural populations, and those using Medicare or Medicaid (35,36). These findings underscore the need to address inequitable policies and practices in order to maximize the potential of telehealth. Additionally, some patients may prefer the direct-to-patient model because they do not want to (as one participant in our current study suggested) or are not able to visit a health center to obtain abortion care.

The high quality of care provided in-person and via telehealth suggests that Planned Parenthood health centers should continue to offer and seek ways to improve and expand telehealth services. The high-level of acceptability for the site-to-site TeleMAB services demonstrated in this study and others, suggests that this service model should

be offered as part of a range of safe and acceptable service models available to patients to ensure they receive care the way they prefer. More context is still needed to better understand how telehealth for medication abortion services is experienced by different groups. Further research should aim to broaden the aspects of perceived quality assessed in this study to ensure that telehealth for medication abortion services is acceptable and accessible to patients with a range of identities and experiences across age, race, gender, and income levels.

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Footnote

Reporting Checklist: The authors have completed the SRQR reporting checklist. Available at <https://mhealth.amegroups.com/article/view/10.21037/mhealth-22-12/rc>

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Conflicts of Interest: All authors have completed the ICMJE uniform disclosure form (available at <https://mhealth.amegroups.com/article/view/10.21037/mhealth-22-12/coif>). After the completion of this study, JWS served as a consultant to an independent US-abortion provider. In this capacity she provided technical assistance with data analysis regarding the effects of implementation of a telemedicine for medication abortion care model on service delivery patterns. TAT, Principal Investigator of this study, reports that all payments from the anonymous grant that supported this research were made to the primary institution and used solely for research costs, including travel to meetings to present on work broadly related to telehealth for medication abortion but not specific to this manuscript. DG has received payment from Lawyering Project and Planned Parenthood Federation of America for his role as an expert witness in legal cases challenging laws that limit the use of telemedicine in abortion care. The other authors have no conflicts of interest to declare.

Ethical Statement: The authors are accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. The study was conducted in accordance with the Declaration of Helsinki (as revised in 2013). The study was approved by Allendale Investigational Review Board (No. IRB00005829). All study participants, patients and providers, provided verbal informed consent to participate in the study and to be audio recorded.

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References

1. Karasek D, Roberts SC, Weitz TA. Abortion Patients' Experience and Perceptions of Waiting Periods: Survey Evidence before Arizona's Two-visit 24-hour Mandatory Waiting Period Law. *Womens Health Issues* 2016;26:60-6.
2. Upadhyay UD, Weitz TA, Jones RK, et al. Denial of abortion because of provider gestational age limits in the United States. *Am J Public Health* 2014;104:1687-94.
3. Ralph LJ, King E, Belusa E, et al. The Impact of a Parental Notification Requirement on Illinois Minors' Access to and Decision-Making Around Abortion. *J Adolesc Health* 2018;62:281-7.
4. Grossman D, Baum S, Fuentes L, et al. Change in abortion services after implementation of a restrictive law in Texas. *Contraception* 2014;90:496-501.
5. Gerdts C, Fuentes L, Grossman D, et al. Impact of Clinic Closures on Women Obtaining Abortion Services After Implementation of a Restrictive Law in Texas. *Am J Public Health* 2016;106:857-64.
6. Jones RK, Ingerick M, Jerman J. Differences in Abortion Service Delivery in Hostile, Middle-ground, and Supportive States in 2014. *Womens Health Issues* 2018;28:212-8.
7. Fuentes L, Jerman J. Distance Traveled to Obtain Clinical Abortion Care in the United States and Reasons for Clinic Choice. *J Womens Health (Larchmt)* 2019;28:1623-31.
8. Thompson KMJ, Sturrock HJW, Foster DG, et al. Association of Travel Distance to Nearest Abortion Facility With Rates of Abortion. *JAMA Netw Open* 2021;4:e2115530.
9. Upadhyay UD, Ahlback C, Kaller S, et al. Trends In Self-Pay Charges And Insurance Acceptance For Abortion In The United States, 2017-20. *Health Aff (Millwood)* 2022;41:507-15.
10. Dickman SL, White K, Sierra G, et al. Financial Hardships Caused by Out-of-Pocket Abortion Costs in Texas, 2018. *Am J Public Health* 2022;112:758-61.
11. Kohn JE, Snow JL, Grossman D, et al. Introduction of telemedicine for medication abortion: Changes in service delivery patterns in two U.S. states. *Contraception* 2021;103:151-6.
12. Grossman DA, Grindlay K, Buchacker T, et al. Changes in service delivery patterns after introduction of telemedicine provision of medical abortion in Iowa. *Am J Public Health* 2013;103:73-8.
13. Grindlay K, Grossman D. Telemedicine provision of medical abortion in Alaska: Through the provider's lens. *J Telemed Telecare* 2017;23:680-5.
14. Grindlay K, Lane K, Grossman D. Women's and providers' experiences with medical abortion provided through telemedicine: a qualitative study. *Womens Health Issues* 2013;23:e117-22.
15. Grossman D, Grindlay K, Buchacker T, et al. Effectiveness and acceptability of medical abortion provided through telemedicine. *Obstet Gynecol* 2011;118:296-303.
16. Kohn JE, Snow JL, Simons HR, et al. Medication Abortion Provided Through Telemedicine in Four U.S. States. *Obstet Gynecol* 2019;134:343-50.
17. World Health Organization. Abortion care guideline [Internet]. 2022 Mar. Available online: <https://www.who.int/publications/i/item/9789240039483>
18. Price NL, Hawkins K. A conceptual framework for the social analysis of reproductive health. *J Health Popul Nutr* 2007;25:24-36.
19. Agency for Healthcare Research and Quality (AHRQ). Six Domains of Health Care Quality [Internet]. Agency of Healthcare Research and Quality. 2018. Available online: <https://www.ahrq.gov/talkingquality/measures/six-domains.html>
20. Glaser B, Strauss A. *Discovery of grounded theory: Strategies for qualitative research*. New York: Routledge; 2017.
21. Chun Tie Y, Birks M, Francis K. *Grounded theory research: A design framework for novice researchers*.

- SAGE Open Med 2019;7:2050312118822927.
22. Urcia IA. Comparisons of Adaptations in Grounded Theory and Phenomenology: Selecting the Specific Qualitative Research Methodology. *Int J Qual Methods* 2021;40:1-20.
 23. Research brief: Patient experiences with medication abortion services provided via telemedicine at Whole Woman's Health of Peoria, Illinois, clinic. *Ibis Reprod Health*. 2020 Apr. Available online: <https://www.ibisreproductivehealth.org/sites/default/files/files/publications/Whole%20Woman%27s%20Health%20Illinois%205.1.20.pdf>
 24. Wingo E, Ralph LJ, Kaller S, et al. Abortion method preference among people presenting for abortion care. *Contraception* 2021;103:269-75.
 25. Roberts SC, Biggs MA, Chibber KS, et al. Risk of violence from the man involved in the pregnancy after receiving or being denied an abortion. *BMC Med* 2014;12:144.
 26. Upadhyay UD, Koenig LR, Meckstroth KR. Safety and Efficacy of Telehealth Medication Abortions in the US During the COVID-19 Pandemic. *JAMA Netw Open* 2021;4:e2122320.
 27. Chong E, Shochet T, Raymond E, et al. Expansion of a direct-to-patient telemedicine abortion service in the United States and experience during the COVID-19 pandemic. *Contraception* 2021;104:43-8.
 28. Porter Erlank C, Lord J, Church K. Acceptability of no-test medical abortion provided via telemedicine during Covid-19: analysis of patient-reported outcomes. *BMJ Sex Reprod Health* 2021;47:261-8.
 29. Reynolds-Wright JJ, Johnstone A, McCabe K, et al. Telemedicine medical abortion at home under 12 weeks' gestation: a prospective observational cohort study during the COVID-19 pandemic. *BMJ Sex Reprod Health* 2021;47:246-51.
 30. Boydell N, Reynolds-Wright JJ, Cameron ST, et al. Women's experiences of a telemedicine abortion service (up to 12 weeks) implemented during the coronavirus (COVID-19) pandemic: a qualitative evaluation. *BJOG* 2021;128:1752-61.
 31. Atay H, Perivier H, Gemzell-Danielsson K, et al. Why women choose at-home abortion via teleconsultation in France: drivers of telemedicine abortion during and beyond the COVID-19 pandemic. *BMJ Sex Reprod Health* 2021;47:285-92.
 32. US Food and Drug Administration. Approved Risk Evaluation Mitigation Strategies (REMS): Mifepristone [Internet]. 2021. Available online: <https://www.accessdata.fda.gov/scripts/cder/remis/index.cfm?event=RemsDetails.page&REMS=390>
 33. Thompson TA, Northcraft D, Carrión F. Addressing Structural Inequities, a Necessary Step Toward Ensuring Equitable Access to Telehealth for Medication Abortion Care During and Post COVID-19. *Front Glob Womens Health* 2022;3:805767.
 34. Tibken S. The broadband gap's dirty secret: Redlining still exists in digital form. *CNET* [Internet]. 2021 [cited 2022 May 13]; Available online: <https://www.cnet.com/home/internet/features/the-broadband-gaps-dirty-secret-redlining-still-exists-in-digital-form/>
 35. Chunara R, Zhao Y, Chen J, et al. Telemedicine and healthcare disparities: a cohort study in a large healthcare system in New York City during COVID-19. *J Am Med Inform Assoc* 2021;28:33-41.
 36. Pierce RP, Stevermer JJ. Disparities in use of telehealth at the onset of the COVID-19 public health emergency. *J Telemed Telecare* 2020. [Epub ahead of print]. doi: 10.1177/1357633X20963893.

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