Perceptions and experiences with two no-test direct-to-patient telehealth medication abortion regimens in the USA: an exploratory study with mifepristone and misoprostol and misoprostol-only regimens

Dana Johnson ,[1] Terri-Ann Thompson ,[1] Laura Fix ,[1] Ibtehal Jastaniah,[1] Melissa Grant[2]

To cite: Johnson D, Thompson T-A, Fix L, *et al*. Perceptions and experiences with two no-test direct-to-patient telehealth medication abortion regimens in the USA: an exploratory study with mifepristone and misoprostol and misoprostol-only regimens. *BMJ Public Health* 2024;**2**:e000808. doi:10.1136/bmjph-2023-000808

► Additional supplemental material is published online only. To view, please visit the journal online (https://doi.org/10.1136/bmjph-2023-000808).

Received 29 November 2023
Accepted 28 August 2024

© Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. Published by BMJ.

[1]Ibis Reproductive Health, Cambridge, Massachusetts, USA
[2]Carafem, Chevy Chase, Maryland, USA

Correspondence to
Dr Dana Johnson; djohnson@ibisreproductivehealth.org

ABSTRACT

Introduction Telehealth medication abortion (teleMAB) is an option for expanding abortion access in the USA. In this study, we compared the accessibility of two no-test, direct-to-patient teleMAB regimens: mifepristone and misoprostol, and misoprostol-only.

Research design and methods Over a 5-month period, we conducted an exploratory study surveying clients who received teleMAB services from an abortion clinic offering teleMAB. We calculated descriptive statistics focusing on the healthcare access dimensions of acceptability and accommodation. We conducted a content analysis of open-response comments focusing on convenience.

Results Of the 218 clients in the study: 195 (89%) selected the mifepristone and misoprostol regimen and 23 (11%) selected the misoprostol-only regimen. Across all respondents, 88% reported they would use the service again if they needed an abortion in the future. Half of the respondents (52%) connected to the service using a smartphone, 99% owned the device that they used, 98% could easily hear and 99% could easily talk to the prescribing provider, and only 7% had a problem connecting to the service. Respondents felt that teleMAB was convenient because they had quality and trustworthy communications. It also accommodated their childcare needs, travel, and scheduling, felt private and comfortable, and facilitated a sense of reproductive autonomy.

Conclusions Respondents found both teleMAB regimens to be acceptable, technologically accommodating and convenient. These results have promising implications for states positioned to expand insurance coverage and reimbursement for teleMAB, including misoprostol-only regimens. Results also inform a need to focus on policies that expand access to teleMAB through nationwide internet connectivity.

WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Telehealth provision of medication abortion is safe and acceptable, but data are based solely on models of care that use mifepristone and misoprostol.

WHAT THIS STUDY ADDS

⇒ This exploratory study assessed client experiences with mifepristone and misoprostol, and misoprostol-only regimens and found both to be acceptable, technologically accommodating and convenient.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ The high acceptability of telehealth abortion irrespective of regimen has promising implications for states positioned to expand access to and options for telehealth services. These results also raise key questions for future research comparing experiences with both mifepristone and misoprostol, and misoprostol-only regimens.

INTRODUCTION

Telehealth provision of medication abortion (hereafter referred to as telehealth medication abortion (teleMAB)) using mifepristone and misoprostol (mifepristone/misoprostol),[1–3] or misoprostol-only,[4 5] are two safe and effective abortion care options. TeleMAB typically occurs when a client and provider are in different locations. Asynchronous telehealth occurs when the client and provider interact through a secure messaging platform, and synchronous telehealth occurs when the client and provider connect via live video or phone. In some teleMAB models, these medications are mailed directly to a client's home, and in other models, a client may pick up the medications at a pharmacy or clinic site.[6]

There has been a rapid expansion of the provision of teleMAB services in the USA, with virtual abortion clinics, brick-and-mortar

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

abortion-providing facilities with virtual options and online telemedicine services providing abortion medications to people throughout the USA. In the first 18 months following the Dobbs vs Jackson Women's Health Organization (Dobbs) ruling that overturned the right to legal abortion in the USA, telehealth accounted for 19% of all abortions in the formal healthcare system.[7] As teleMAB services continue to expand, there is a growing understanding of patient experiences. In states and countries where it is legal to provide teleMAB, services reduce distance to appointments and travel time[8] and may open the availability of in-person appointments for those travelling to other states for abortion.[9] Patients highlight the privacy and expediency of teleMAB,[10] reporting that it is an acceptable way to receive abortion care,[11] and that receiving medications by mail meets their need for autonomy,[12] as well as preferences for privacy and confidentiality,[13] convenience, comfort,[14] and the ability to schedule appointments around personal responsibilities.[15]

Although medication abortion is not medically appropriate nor the desired abortion care option for all people, the distinct rise in teleMAB utilisation highlights an urgent need to understand client experiences across telehealth models. There is growing literature examining patient outcomes and experiences with teleMAB provision of mifepristone/misoprostol, and some research has examined experiences with misoprostol-only medications sent by mail.[16] However, to date, no research has directly explored client experiences across both medication regimens and within the same client population. This is particularly important because there is an urgency to understand experiences with misoprostol-only. The dispensing of mifepristone is restricted in the USA and has faced numerous legal challenges, including the 2024 Supreme Court Case Alliance for Hippocratic Medicine vs US Food and Drug Administration, which mostly recently threatened mifepristone's availability.

As the future availability of mifepristone is uncertain, evidence must be gathered regarding the safety, effectiveness and acceptability of alternative medication abortion regimens for those aiming to support people with abortions. This study broadens the knowledge based on no-test telehealth abortions and offers preliminary evidence on the experiences of clients who use mifepristone/misoprostol and misoprostol-only regimens. To address this gap in the literature, the objective of this study is to understand client experiences with two no-test direct-to-patient services in the USA: teleMAB using mifepristone used with misoprostol and misoprostol-only.

METHODS

Study design

This study recruited respondents who received teleMAB services through Carafem, a virtual clinic with brick-and-mortar clinic sites serving the USA Because this was an exploratory study, we based our sample size on resource and study time constraints, aiming to recruit at least 200 respondents. Services were available to clients in Connecticut, Georgia, Iowa, Illinois, Maryland, Massachusetts, Michigan, New Jersey, Virginia and Washington D.C. Clients chose between teleMAB using mifepristone/misoprostol or misoprostol-only. The misoprostol-only regimen costs US$75 less than the mifepristone/misoprostol regimen. If a client wanted mifepristone/misoprostol and was concerned about cost, Carafem reduced the rate to provide mifepristone. The only clients for whom Carafem did not offer mifepristone were those who were medically ineligible. This was rare and only applied to those using long-term corticosteroids.

Services were available up to 10 weeks' gestation for both regimens. Clients first connected with a clinic staff member via telephone or web platform to assess their eligibility. If eligible, clients connected online with a provider who prescribed the medication(s) and counselled them on the two regimens: mifepristone/misoprostol and misoprostol-only. Providers informed clients of medication(s) cost, side effects, pain and how to connect with staff if they have questions or concerns. Abortion care was provided using a 'no-test' telehealth model, meaning that no ultrasound, Rhesus factor or other in-person tests were conducted prior to the dispensing of medication. Medications were available by mail or pick-up at the closest clinic.

Patient and public involvement

Patients were not included in the research design or the research instrument developments. Because participants are anonymised, we cannot share the results with them. However, we aim to share the results of the study with the clinic from which we recruited the patients. The clinic may disseminate these findings with current clients and others.

Participants

Between 5 October 2021 and 6 May 2022, we recruited 251 survey respondents, and 218 were valid responses. Approximately 5% of clients selecting mifepristone/misoprostol, and 4% of clients selecting misoprostol-only responded to the survey. To be eligible to participate clients had to be at least 18 years old, provide consent and complete a self-administered online survey on their own device. This survey was presented in English and a digital flyer was sent to clients at the end of their telehealth consultation but prior to receiving medication. Each respondent received a US$35 online gift card and was entered into a raffle to win one of two US$100 gift cards.

Demographic survey items were informed by prior work aimed at creating survey questions that resonate with participants' lived experiences and diverse identities.[17] Survey items on the acceptability of services were sourced from prior telemedicine studies[14 18] with adaptations for COVID-19, the recent removal of the preabortion ultrasound requirement and the

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

expansion of Carafem's telehealth model. Survey items on healthcare utilisation were sourced from the 2019 redesign of the National Health Interview Study.[19] Select survey questions are in online supplemental appendix 1.

Analysis

We assessed two dimensions of patient-centred access to healthcare, drawn from Levesque *et al*'s conceptualisation of access within health systems and populations.[20] Access is defined (broadly) as 'the opportunity to reach and obtain appropriate healthcare services in situations of perceived need for care'. We focused our analyses on the dimensions of (1) Acceptability, the social factors determining the possibility for people to accept the aspects of the service and determined appropriateness for the person seeking care. (2) Accommodation, the corresponding ability for a person to seek, reach and engage with the service. Finally, we incorporate an additional element to our analysis by qualitatively examining the convenience of the model, as reported by open-response comments from survey respondents.

To understand regimen-specific differences, we compared measures across the two teleMAB regimens. We did not conduct statistical tests or bias checks between regimens because of the small sample size of misoprostol-only users. Descriptive analyses were conducted using R and R studio V.4.1717.

To understand the thematic nuances of convenience, two members of the research team conducted an inductive content analysis[21] with a modified conventional analysis approach.[22] We analysed 215 written responses to the survey question: 'Please rate your level of agreement or disagreement with the statement telehealth is a convenient form of healthcare.' If a respondent selected agree or disagree with the statement, they were asked to elaborate in an open-response format on their selection. This analysis was intended to illustrate the range of qualitative responses to a general question about the convenience of telehealth. Early in the coding process, we found thematic consistency across regimens, which removed the need to compare responses between regimens.

To establish intercoder consistency, we coded the first 50 comments separately, compared codes and discussed any discrepancies.[23] The first 50 comments were chosen to balance available resources and researcher time. This represented about a quarter of all comments. After we double-coded 50 comments, we met to determine thematic consistency between the two coders and to confirm that no additional themes had emerged. We also compared notes and discussed discrepancies. At the time of manuscript preparation, we also met to discuss any potential new themes or perceptions and discuss the quotations that should be included in the manuscript.

RESULTS

Participant characteristics

Of the 218 teleMAB clients who completed the survey, 195 (89%) selected mifepristone/misoprostol, and 23 (11%) selected misoprostol-only. Differences in characteristics by the type of regimen are in table 1. Across both regimens, 57% of clients had some college or a bachelor's degree. Most were never married and currently single (38%) or never married and currently partnered (32%). Over half of clients were white (54%) and just over one-third were Black/African American (37%). Most were non-Hispanic (87%) and 13% were Hispanic. Nearly all participants selected 'woman' (76%) or 'cisgender' (34%) as a gender category that they identify with, however, participants could select multiple gender categories. Two respondents selected 'yes' that they were intersex. Over half (52%) had no children, 38% had previously had an abortion and 60% of previous abortions were with pills. The majority (70%) of clients had health insurance at the time. Compared with mifepristone and misoprostol users, a higher proportion of misoprostol-only users had some college or a bachelor's degree, were black/African American, had children, were single and were uninsured.

Acceptability

Most respondents found the no-test provision of mifepristone/misoprostol and misoprostol-only to be acceptable. Results on the acceptability of teleMAB by regimen are in table 2. Among respondents who selected mifepristone/misoprostol, 89% rated the telehealth visit as 'excellent', 96% would use the service again for a future abortion, 88% would recommend an abortion with pills and 97% would recommend this service to a friend. Among respondents who selected misoprostol-only, 82% rated the telehealth visit as 'excellent', 91% would use the service again for a future abortion, 87% would recommend an abortion with pills and 96% would recommend this service to a friend.

Accommodation

The majority of respondents found the no-test provision of mifepristone/misoprostol and misoprostol-only to be accommodating. Results on the accommodation of teleMAB by regimen are in table 2. Both mifepristone/misoprostol and misoprostol-only users reported similar frequencies. Among respondents who selected mifepristone and misoprostol, the most important factors when deciding what type of abortion to have, in order of frequency, were the desire to have the abortion as soon as possible (32%), desire to have the abortion at their home (17%), wanting to avoid going to an abortion clinic (16%) and wanting an abortion that was affordable (15%). Among respondents who selected misoprostol-only, the most important factors were the desire to have the abortion as soon as possible (39%), to have the abortion at their home (30%) and wanting an abortion that was affordable (17%).

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

Table 1 Characteristics by medication abortion regimen among clients who used teleMAB and responded to a client survey between 6 October 2021 and 6 May 2022

	Overall (N=218) n (%)	Mifepristone and misoprostol (n=195) n (%)	Misoprostol-only (n=23) n (%)
Education			
Associate or some high school	24 (11.0)	23 (11.8)	1 (4.4)
High school	41 (18.8)	38 (19.4)	3 (13.0)
Some college	61 (27.9)	51 (26.2)	10 (43.4)
Bachelor's degree	64 (29.4)	57 (29.2)	7 (30.4)
Master's or doctorate degree	22 (10.1)	20 (10.2)	2 (8.7)
Other	6 (2.8)	6 (3.1)	0 (0.0)
Relationship status			
Never married, single	82 (37.6)	68 (34.9)	14 (60.9)
Never married, partnered	70 (32.1)	64 (32.8)	6 (26.1)
Married	40 (18.3)	37 (19.0)	3 (13.0)
Divorced or separated	19 (8.7)	19 (9.7)	0 (0.0)
Prefer not to answer or missing	7 (3.2)	7 (3.6)	0 (0.0)
Race*			
American Indian or Alaska Native	4 (1.8)	4 (2.1)	0 (0.0)
Black/African American	81 (37.2)	69 (35.4)	12 (52.2)
East Asian or Southeast Asian	9 (4.1)	9 (4.6)	0 (0.0)
Middle Eastern/North African	3 (1.4)	3 (1.5)	0 (0.0)
Native Hawaiian/Pacific Islander	3 (1.4)	3 (1.5)	0 (0.0)
White	117 (53.7)	107 (54.9)	10 (43.5)
Unknown or not listed or prefer not to answer	13 (5.9)	12 (6.2)	1 (4.3)
Ethnicity			
Hispanic	28 (12.8)	24 (12.3)	4 (17.4)
Non-Hispanic	189 (86.7)	170 (87.2)	19 (82.6)
Prefer not to answer	1 (0.5)	1 (0.5)	0 (0.0)
Gender*			
Agender	1 (0.5)	0 (0.0)	1 (4.3)
Cisgender woman	73 (33.5)	65 (33.3)	8 (34.8)
Genderfluid	1 (0.5)	1 (0.5)	0 (0.0)
Non-binary	1 (0.5)	1 (0.5)	0 (0.0)
Woman	169 (77.5)	149 (76.4)	20 (86.7)
Intersex			
Yes	2 (1.0)	2 (1.0)	0 (0.0)
No	215 (98.5)	192 (98.5)	23 (100.0)
Prefer not to answer	1 (0.5)	1 (0.5)	0 (0.0)
Children			
0	114 (52.3)	104 (53.3)	10 (43.5)
1+	104 (47.7)	91 (46.6)	13 (56.5)
Previous abortion			
Yes	83 (38.1)	75 (38.5)	8 (34.8)
No	133 (61.1)	118 (60.5)	15 (60.2)
Prefer not to answer	2 (0.9)	2 (1.0)	0 (0.0)
Previous abortion type			
Surgical abortion	33 (15.1)	32 (16.4)	1 (4.3)
Abortion with pills, at home	15 (7.0)	10 (5.1)	5 (21.7)
Abortion with pills, in clinic	35 (16.1)	33 (16.9)	2 (8.7)

Continued

Table 1 Continued

	Overall (N=218) n (%)	Mifepristone and misoprostol (n=195) n (%)	Misoprostol-only (n=23) n (%)
Insurance			
Yes	154 (70.6)	149 (76.4)	5 (21.7)
No	64 (29.4)	46 (23.6)	18 (78.3)

*Multiple response.
teleMAB, telehealth medication abortion.

Within accommodation, we also examined the client's technological engagement with the service measures of connectivity. Measures included multiple choice questions regarding what device people used to connect, their ability to digitally connect and their experiences with using the telehealth systems. Differences in the connectivity of teleMAB by regimen are in table 3. The most frequent way clients connected to the service was with a smartphone (50% for mifepristone-misoprostol and 60% for misoprostol-only). The vast majority owned the device that they used to connect (99% mifepristone-misoprostol and 100% misoprostol-only), found the telehealth system easy to understand (99% mifepristone-misoprostol and 99% misoprostol-only) and easy to use (99% mifepristone-misoprostol and 100% misoprostol-only). Most could easily hear (99% both regimens) and talk to the provider of the medication (99% mifepristone-misoprostol and 96% misoprostol-only). A small group had a problem connecting with the service (8% mifepristone-misoprostol and 4% misoprostol-only).

Convenience

Themes from the open-response comments were thematically consistent across regimens and excerpts illustrative of each theme are presented in figure 1. Overall, respondents found the no-test provision of mifepristone/misoprostol and misoprostol-only to be convenient and highlighted six aspects of this convenience. First, it met their need for childcare during their abortion. As one client wrote, 'I do not have childcare, so telehealth made it convenient to have the appointment at home'. Others felt the communications they had with the clinic were high quality and fostered a sense of trustworthiness between client and provider. One client wrote, 'It allowed me to reach out to a professional and receive quality information about a problem I was having'. And another wrote 'I felt just as heard and cared for as I would in a regular in-person clinic'. Telehealth also met their scheduling needs and was efficient. A client wrote 'It was no wait time; everything was clear & afterwards I could easily go on about my day'. Clients also expressed that the service facilitated reproductive autonomy, respondents felt that 'abortion is a human right and telehealth made that right accessible'. They also highlighted the privacy and comfort of telehealth. One client wrote, 'It's discreet, it's confidential, yet it was still a personal experience'. Finally, clients wrote that with telehealth, they were able to avoid travel, and it met a desire for being at home. As one client explained 'Not everyone has a way to travel to a clinic, and for some like myself may be nervous and needing help fast. It felt safe, more comfortable than going into a clinic for the appointment'.

DISCUSSION

In this exploratory study of 218 clients who used no-test teleMAB services from Carafem, respondents found the service delivery model to be acceptable, technologically accommodating and convenient. The high acceptability findings in this study are consistent with prior research. Like a study of 1600 telehealth abortion patients in 2021 and 2022, we found that trust was high between patient and provider, and the vast majority of clients were satisfied with their treatment.[24] Furthermore, our findings about the privacy of telehealth, and convenience of staying at home,[12] are consistent with previous research. Our study offers preliminary data that suggest no difference in acceptability between no-test models using mifepristone/misoprostol and misoprostol-only, an important contribution as providers explore other models of telehealthcare.

We consider acceptability with the understanding that for those who want to have an abortion, obtaining any abortion (regardless of modality, pathway or medication abortion regimen) is likely seen as favourable when compared with no abortion access at all. Acceptability in this study is contextualised by the lack of resources and treatment options in a legally constrained context. This is critical to underscore. To ensure reproductive autonomy, people require access to a full range of safe and supported abortion methods.

These results have several policy-relevant implications. Clients find no-test medications dispensed by mail to be acceptable, convenient and accommodating. This is an important consideration for advocates working to ensure the option of mailing abortion medicines remains available in the USA. Preliminary evidence that acceptability rates do not differ between these two regimens is hopeful for providers who want to offer teleMAB options at different price points and/or to expand the care models available to clients. Given the surge in teleMAB use in the USA following the Dobbs decision, our results join

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

Table 2 Acceptability and accommodation of teleMAB service, by medication abortion regimen among clients who used teleMAB and responded to a client survey between 6 October 2021 and 6 May 2022

	Overall (N=218) n (%)	Mifepristone and misoprostol (n=195) n (%)	Misoprostol-only (n=23) n (%)
How would you rate the Carafem telehealth visit?			
Excellent	192 (88.1)	173 (88.7)	19 (82.6)
Good	4 (1.8)	3 (1.5)	1 (4.4)
Very good	18 (8.3)	16 (8.2)	2 (8.7)
Fair	0 (0.0)	0 (0.0)	0 (0.0)
Poor	0 (0.0)	0 (0.0)	0 (0.0)
Missing	4 (1.8)	3 (1.5)	1 (4.3)
If I needed an abortion in the future, I would use the telehealth service again?			
Yes	208 (95.4)	187 (95.9)	21 (91.3)
Depends	3 (1.4)	2 (1.0)	1 (4.3)
Not sure	1 (0.5)	1 (0.5)	0 (0.0)
No	0 (0.0)	0 (0.0)	0 (0.0)
Prefer not to answer	3 (1.3)	2 (1.0)	1 (4.3)
Missing	3 (1.3)	3 (1.5)	0 (0.0)
If you had a friend who was pregnant and wanted to have an abortion with pills, would you recommend that they had a medical abortion (an abortion with pills)?			
Yes	191 (87.6)	171 (87.7)	20 (87.0)
Depends	16 (7.3)	15 (7.7)	1 (4.3)
Not sure	4 (1.8)	4 (2.1)	0 (0.0)
Prefer not to answer	1 (0.5)	1 (0.5)	0 (0.0)
No	2 (0.9)	1 (0.5)	1 (4.3)
Missing	4 (1.8)	3 (1.5)	1 (4.3)
If you had a friend who was pregnant and wanted to have an abortion with pills, would you recommend that they use the telehealth service?			
Yes	211 (96.8)	189 (96.9)	22 (95.6)
Depends	1 (0.5)	1 (0.5)	0 (0.0)
Not sure	0 (0.0)	1 (0.5)	0 (0.0)
No	0 (0.0)	0 (0.0)	0 (0.0)
Prefer not to answer	1 (0.5)	1 (0.5)	0 (0.0)
Which factor was the most important when you were deciding what type of abortion you were going to have			
I wanted to have the abortion as soon as possible	71 (32.6)	62 (31.8)	9 (39.1)
I wanted to have the abortion at my home	41 (18.8)	34 (17.4)	7 (30.4)
I wanted to have an abortion that was affordable	34 (15.6)	30 (15.4)	4 (17.4)
I wanted to have the abortion pill (medical abortion)	22 (10.1)	20 (10.3)	2 (8.7)
I wanted to have an abortion without having to do an ultrasound	5 (2.3)	5 (2.6)	0 (0.0)
I wanted to have a friend/family member with me when I was having my abortion	5 (2.3)	5 (2.6)	0 (0.0)

teleMAB, telehealth medication abortion.

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

Table 3 Connectivity of teleMAB service, by medication abortion regimen among clients who used teleMAB and responded to a client survey between 6 October 2021 and 6 May 2022

	Overall (N=218) n (%)	Mifepristone and misoprostol (n=195) n (%)	Misoprostol-only (n=23) n (%)
What type of device did you use to connect?			
Computer	80 (36.27	74 (37.9)	6 (26.1)
iPad/tablet	11 (5.0)	11 (5.6)	0 (0.0)
Smartphone	115 (52.8)	99 (50.8)	16 (69.6)
Telephone	12 (5.5)	11 (5.6)	1 (4.3)
Do you own the device that you used to connect to the telehealth service?			
Yes	216 (99.1)	193 (99.0)	23 (100.0)
No	2 (0.9)	2 (1.0)	0 (0.0)
If no, who owns the device?			
'Employer'	2 (0.9)	2 (1.0)	0 (0.0)
The telehealth system is easy to understand			
Yes	216 (99.0)	194 (99.5)	22 (95.7)
No	1 (0.5)	1 (0.5)	0 (0.0)
Declined	1 (0.5)	0 (0.0)	1 (1.3)
The telehealth system is easy to use			
Yes	217 (99.5)	195 (100.0)	22 (95.7)
No	0 (0.0)	0 (0.0)	0 (0.0)
Declined	1 (0.5)	0 (0.0)	1 (1.3)
I had a problem connecting with the telehealth service			
Yes	16 (7.3)	15 (7.7)	1 (4.3)
No	201 (92.2)	180 (92.3)	21 (91.3)
Declined	1 (0.5)	0 (0.0)	1 (4.3)
I could easily hear the person who prescribed me the abortion pills			
Yes	214 (98.2)	192 (98.5)	22 (98.7)
No	3 (1.4)	3 (1.5)	0 (0.0)
Declined	1 (0.5)	0 (0.0)	1 (1.3)
I could easily talk to the person who prescribed me the abortion pills			
Yes	216 (99.0)	194 (99.5)	22 (95.7)
No	1 (0.5)	1 (0.5)	0 (0.0)
Declined	1 (0.5)	0 (0.0)	1 (1.3)

teleMAB, telehealth medication abortion.

other research findings that suggest a greater adoption of teleMAB services across various health models.

These results are timely as some continue to bring legal challenges and introduce policies that threaten the availability of mifepristone. As such, it is imperative that we understand client experiences with misoprostol-only teleMAB. In this study, 91% of misoprostol-only users rated their experience as 'excellent' or 'very good', and 96% said they would recommend the service to a friend. This is consistent with studies from within[25] and outside[26] formal healthcare settings that find misoprostol-only to be acceptable. However, these findings are limited by our sample size and more research is needed to understand client experiences with the telehealth provision of misoprostol.

Prior research has highlighted how telehealth will expand abortion access,[27–29] and the rapid expansion of telehealth models broadly informs a need to focus on policies that democratise internet capabilities throughout the USA. 21 million people in the USA lack broadband connectivity,[30] and neighbourhoods populated predominantly by people of colour lack access to technology resources, compared with higher-income white neighbourhoods.[31] Over half of all respondents connected to the service using a smartphone. Nationwide access to broadband and high-quality cellular reception would actualise clients' expressed desires for expedient digital access to care. These findings inform the necessity of such investments at a time when abortion access is becoming increasingly digital. To fully meet the needs of all abortion care seekers, we must address the

Childcare needs:

"Because you are able to access when you're not able to take off and find a babysitter for the kids."

"I do not have childcare so telehealth made it convenient to have the appointment at home."

Quality and trustworthy communications with Carafem:

"I felt just as heard and cared for as I would in a regular in person clinic."

"I felt more comfortable discussing with my healthcare provider."

"It allowed me to reach out to a professional and receive quality information about a problem I was having."

Convenience, ease, scheduling:

"It was quick and easy to make an appointment"

"It was no wait time, everything was clear & afterwards I could easily go on about my day"

Reproductive autonomy:

"Abortion is a human right and telehealth made that right accessible to someone like me"

Privacy and comfort:

"It's discreet, it's confidential, yet it was still a personal experience"

"I was able to get what I needed done and feel comfortable and private. Don't feel like I was rushed or judged. I was also able to reschedule and pick times and days that was more comfortable for me."

Traveling, desires to be at home:

"Not everyone has a way to travel to a clinic, and for some like myself may be nervous and needing help fast. It felt safe, more comfortable than going into a clinic for the appointment."

"I was able to attend appt in comfort of my own home. It put me at ease."

Figure 1 Themes and quotations from open responses to the question: Please tell us why you agree with the statement: 'The telehealth visit was a convenient form of healthcare'.

structural inequalities within the digital systems facilitating new abortion care models.[32]

Finally, although this study was set in the USA, these findings have broader implications for abortion access as they further strengthen the evidence base regarding teleMAB as a cost-effective and accessible form of abortion care, particularly in low-resource settings.

Limitations

Our study has several limitations. First, this small convenience sample limits our ability to generalise these study findings to all teleMAB clients in the USA. Further, our small sample size of misoprostol-only users limits our ability to detect significant differences in acceptability across regimens, especially demographic subgroup differences. This small sample size of misoprostol-only users limits our understanding of experiences among those who chose this regimen. Overall misoprostol-only regimens are a much smaller proportion of Carafem's teleMAB services. This is likely why there were so few misoprostol-only responses compared with mifepristone and misoprostol. Furthermore, we lack information on why individuals chose the medication regimen they used. However, understanding medication abortion regimen preferences and motivations is a key area for future research. This survey only captures respondents able to complete an online survey. Future research aimed at understanding the acceptability and connectivity (or lack thereof) among populations who are not able to respond to an online survey is necessary. Finally, this survey was only offered in English. Language access is crucial for navigating health systems, and this survey likely did not capture client experiences among adults with limited English language proficiency.

CONCLUSION

As teleMAB and similar models grow in the USA, more research is needed to understand how clients engage with and experience these models across different regimens. This is especially relevant because abortion restrictions and persistent legal challenges threaten the provision of mifepristone and telehealth models where pills are mailed. While our study is novel in its detailed focus on two core dimensions of acceptability and comparison across two medication abortion regimens, future research must expand on misoprostol-only

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

user experiences and centre those for whom digital survey participation may be a challenge.

Acknowledgements We would like to thank the Carafem staff for assisting with data collection.

Contributors DJ is responsible for all content and is the guarantor. DJ led data analysis and drafted the original manuscript. DJ accepted full responsibility for the finished work and/or the conduct of the study, had access to the data and controlled the decision to publish. T-AT contributed to the acquisition of funding, research design, ethics review submission, oversight of data collection and analysis and reviewed drafts of the manuscript. T-AT accepted full responsibility for the finished work and/or the conduct of the study, had access to the data and controlled the decision to publish. LF assisted with ethics review, data collection, data cleaning and reviewed drafts of the manuscript. LF accepted full responsibility for the finished work and/or the conduct of the study, had access to the data and controlled the decision to publish. IJ/IJ assisted with data collection, data cleaning, data analysis and reviewed drafts of the manuscript. IJ accepted full responsibility for the finished work and/or the conduct of the study, had access to the data and controlled the decision to publish. MG contributed to the review of the original study design, connected the research team to the clinic staff for recruitment and reviewed drafts of the manuscript. MG accepted full responsibility for the finished work and/or the conduct of the study, had access to the data and controlled the decision to publish.

Funding This study was supported by Carafem (Grant/Award: not applicable), a non-profit health care provider.

Disclaimer None of the sources of funding had any involvement in the design and conduct of the study; the collection, management, analysis and interpretation of the data; the preparation, review or approval of the manuscript, or the decision to submit the manuscript for publication.

Competing interests MG is the Chief Operations Officer of Carafem. No other authors have a conflict of interest.

Patient and public involvement Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and was approved by the Western Institutional Review Board (WIRB)-Copernicus Group, IRIS protocol number 20212841. Participants gave informed consent to participate in the study before taking part.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available on reasonable request.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iDs
Dana Johnson http://orcid.org/0000-0001-5512-7947
Terri-Ann Thompson http://orcid.org/0000-0002-3570-6500
Laura Fix http://orcid.org/0000-0001-5655-086X

REFERENCES

1 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.
2 Seymour JW, Melville C, Thompson T-A, *et al*. Effectiveness and safety of a direct-to-patient telehealth service providing medication abortion targeted at rural and remote populations: Cross-sectional findings from Marie Stopes Australia. *Contraception* 2022;115:67–8.
3 Upadhyay UD, Raymond EG, Koenig LR, *et al*. Outcomes and Safety of History-Based Screening for Medication Abortion: A Retrospective Multicenter Cohort Study. *JAMA Intern Med* 2022;182:482–91.
4 Johnson DM, Michels-Gualtieri M, Gomperts R, *et al*. Safety and effectiveness of self-managed abortion using misoprostol alone acquired from an online telemedicine service in the United States. *Perspect Sex Reprod Health* 2023;55:4–11.
5 Raymond EG, Weaver MA, Shochet T, *et al*. Clinical outcomes of medication abortion using misoprostol-only: A retrospective chart review at an abortion provider organization in the United States. *Contraception* 2023;126.
6 RHITES. Medication abortion spectrum of care. n.d. Available: https://static1.squarespace.com/static/637e5bcdbfee712c3baf45b8/t/6614ba6486c9d30d6e8ae48a/1712634468546/RHITES_MedicationAbortionSpectrumofCareChart.pdf
7 Society of Family Planning. #WeCount report: April 2022 to December 2023. 2024. Available: https://doi.org/10.46621/970371hxrbsk
8 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.
9 Grossman D. Telemedicine Provision of Medication Abortion. *Am J Public Health* 2022;112:1282–3.
10 Koenig L, Ko J, Valladares E, *et al*. Patient Acceptability of Asynchronous vs Synchronous Telehealth Abortion Care: A Cohort Study of Telehealth Abortion Care Provided by Virtual Clinics in the United States. *Contraception* 2023;121:110018.
11 Aiken A, Lohr P, Lord J, *et al*. Effectiveness, safety and acceptability of no-test medical abortion (termination of pregnancy) provided via telemedicine: a national cohort study. *BJOG* 2021;128:1464–74.
12 Madera M, Johnson DM, Broussard K, *et al*. Experiences seeking, sourcing, and using abortion pills at home in the United States through an online telemedicine service. *SSM Qual Res Health* 2022;2:100075.
13 Kerestes C, Delafield R, Elia J, *et al*. “It was close enough, but it wasn’t close enough”: A qualitative exploration of the impact of direct-to-patient telemedicine abortion on access to abortion care. *Contraception* 2021;104:67–72.
14 Thompson T, Seymour JW, Melville C, *et al*. An observational study of patient experiences with a direct-to-patient telehealth abortion model in Australia. *BMJ Sex Reprod Health* 2022;48:103–9.
15 Fix L, Seymour JW, Sandhu MV, *et al*. At-home telemedicine for medical abortion in Australia: a qualitative study of patient experiences and recommendations. *BMJ Sex Reprod Health* 2020;46:172–6.
16 Johnson DM, Ramaswamy S, Gomperts R. Experiences with misoprostol-only used for self-managed abortion and acquired from an online or retail pharmacy in the United States. *Contraception* 2024;131:110345.
17 Moseson H, Lunn MR, Katz A, *et al*. Development of an affirming and customizable electronic survey of sexual and reproductive health experiences for transgender and gender nonbinary people. *PLoS ONE* 2020;15:e0232154.
18 Grossman D, Grindlay K, Buchacker T, *et al*. Effectiveness and Acceptability of Medical Abortion Provided Through Telemedicine. *Obstet Gynecol* 2011;118:296–303.
19 Center for Disease Control National Center for Health Statistics. Health measures in the 1977 redesigned National Health Interview Survey (NHIS), 2015. Available: https://www.cdc.gov/nchs/nhis/nhis_redesign.htm
20 Levesque J-F, Harris MF, Russell G. Patient-centred access to health care: conceptualising access at the interface of health systems and populations. *Int J Equity Health* 2013;12:18.
21 Elo S, Kääriäinen M, Kanste O, *et al*. Qualitative Content Analysis: A Focus on Trustworthiness. *Sage Open* 2014;4:215824401452263.
22 Kyngäs H, Elo S, Pölkki TM, *et al*. Three Approaches to Qualitative Content Analysis. *Hoitotiede* 2011;23:138–48.
23 Boyatzis RE. *Transforming Qualitative Information: Thematic Analysis and Code Development*. SAGE, 1998.
24 Koenig LR, Ko J, Valladares ES, *et al*. Patient Acceptability of Telehealth Medication Abortion Care in the United States, 2021–2022: A Cohort Study. *Am J Public Health* 2024;114:241–50.
25 Rodriguez MI, Seuc A, Kapp N, *et al*. Acceptability of misoprostol-only medical termination of pregnancy compared with vacuum aspiration: an international, multicentre trial. *BJOG* 2012;119:817–23.

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.

26 Johnson D, Ramaswamy S, Gomperts R, *et al*. P012Acceptability of self-managed medication abortion using misoprostol-alone provided via a hybrid telemedicine and pharmacy pick-up model in the US. *Contraception* 2022;116:76.
27 Seymour JW, Thompson T-A, Milechin D, *et al*. Potential Impact of Telemedicine for Medication Abortion Policy and Programming Changes on Abortion Accessibility in the United States. *Am J Public Health* 2022;112:1202–11.
28 Aiken AR, Upadhyay UD. The future of medication abortion in a post-Roe world. *BMJ* 2022;377:1393.
29 Koenig LR, Becker A, Ko J, *et al*. The Role of Telehealth in Promoting Equitable Abortion Access in the United States: Spatial Analysis. *JMIR Public Health Surveill* 2023;9:e45671.
30 Pew Research. 21 million americans still lack broadband connectivity. 2019. Available: https://pew.org/2LeE309
31 CNET. The broadband gap's dirty secret: redlining still exists in digital form. 2023. Available: https://www.cnet.com/home/internet/features/the-broadband-gaps-dirty-secret-redlining-still-exists-in-digital-form/
32 Thompson T-A, 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.

BMJ Public Health: first published as 10.1136/bmjph-2023-000808 on 26 October 2024. Downloaded from https://bmjpublichealth.bmj.com on 9 November 2024 by guest. Protected by copyright.