

# At-home telemedicine for medical abortion in Australia: a qualitative study of patient experiences and recommendations

Laura Fix <sup>1</sup>, Jane W Seymour,<sup>1</sup> Monisha Vaid Sandhu,<sup>2</sup> Catriona Melville,<sup>2</sup> Danielle Mazza,<sup>3</sup> Terri-Ann Thompson<sup>1</sup>

<sup>1</sup>Ibis Reproductive Health, Cambridge, Massachusetts, United States

<sup>2</sup>Marie Stopes Australia, Melbourne, Victoria, Australia

<sup>3</sup>Department of General Practice, Monash University, Notting Hill, Victoria, Australia

## Correspondence to

Laura Fix, Ibis Reproductive Health, Cambridge, MA 02140, USA; lfix@ibisreproductivehealth.org

Received 10 February 2020

Revised 13 May 2020

Accepted 14 May 2020



► <http://dx.doi.org/10.1136/bmj.srh-2020-200703>



© Author(s) (or their employer(s)) 2020. No commercial re-use. See rights and permissions. Published by BMJ.

**To cite:** Fix L, Seymour JW, Sandhu MV, et al. *BMJ Sex Reprod Health* 2020;**46**:172–176.

## ABSTRACT

**Introduction** This study aimed to explore patient experiences obtaining a medical abortion using an at-home telemedicine service operated by Marie Stopes Australia.

**Methods** From July to October 2017, we conducted semistructured in-depth telephone interviews with a convenience sample of medical abortion patients from Marie Stopes Australia. We analysed interview data for themes relating to patient experiences prior to service initiation, during an at-home telemedicine medical abortion visit, and after completing the medical abortion.

**Results** We interviewed 24 patients who obtained care via the at-home telemedicine medical abortion service. Patients selected at-home telemedicine due to convenience, ability to remain at home and manage personal responsibilities, and desires for privacy. A few telemedicine patients reported that a lack of general practitioner knowledge of abortion services impeded their access to care. Most telemedicine patients felt at-home telemedicine was of equal or superior privacy to in-person care and nearly all felt comfortable during the telemedicine visit. Most were satisfied with the home delivery of the abortion medications and would recommend the service.

**Conclusion** Patient reports suggest that an at-home telemedicine model for medical abortion is a convenient and acceptable mode of service delivery that may reduce patient travel and out-of-pocket costs. Additional provider education about this model may be necessary in order to improve continuity of patient care. Further study of the impacts of this model on patients is needed to inform patient care and determine whether such a model is appropriate for similar geographical and legal contexts.

## Key messages

- Delivery of medical abortion using telemedicine at-home is convenient and acceptable to patients.
- At-home telemedicine may improve access to medical abortion in settings where travel distance and travel costs impede patient access to services.
- Additional provider education about medical abortion, and the use of at-home telemedicine for its delivery, can help support patient access to care.

## BACKGROUND

The Australian Therapeutic Goods Administration approved a mifepristone and misoprostol combination pack for termination of pregnancy up to 63 days gestation in 2014.<sup>1</sup> Approval of this regimen and its subsequent availability on the Pharmaceutical Benefits Scheme, a Department of Health programme subsidising medication costs for eligible residents, has increased access to early medical abortion in Australia.<sup>2</sup> However, access remains limited, particularly for those in rural Australia who face logistical barriers to abortion care, including difficulty obtaining information about abortion, high procedure and ancillary costs, and long travel distances to a provider.<sup>3</sup> Although general practitioners (GPs) in Australia can legally provide medical abortion, they may have concerns about stigma, scope of practice or may personally oppose the practice.<sup>4</sup> Some medical abortion patients in Australia have encountered stigma or received inadequate information about abortion methods and services from a GP; such experiences may

limit or delay abortion access even in cases where financial or geographic barriers are not present.<sup>5</sup>

Clinic-to-clinic telemedicine to deliver medical abortion, where patients at one site meet via video with physicians at another site, has been shown to improve access to abortion in the US.<sup>6,7</sup> An evaluation of an Australian direct-to-patient telephone-based telemedicine model for medical abortion found it to be acceptable to patients; many who used the service resided outside of major urban areas and accessed the service via a referral from another healthcare provider.<sup>8</sup>

In 2015, Marie Stopes Australia (MSA) launched an at-home telemedicine for medical abortion service. Patients are eligible for this service if they reside in an Australian territory where abortion via telemedicine is legal, are 16 years of age or older, reside within a 2-hour drive of emergency care and can read and understand English. Eligible patients obtain a referral, ultrasound and lab testing through a GP. Patients then meet remotely via secure videoconference or telephone call with the treating MSA clinician, have abortion medications delivered to their home for self-administration, obtain follow-up beta human chorionic gonadotropin (bHCG) testing at a local laboratory and have a final telephone follow-up with MSA nursing staff within 2 weeks of self-administration to confirm termination of pregnancy. All patients have access to a 24-hour helpline. In 2017, videoconference consults were discontinued due to the technology and internet being inaccessible for some patients, and are instead conducted by phone.

The aim of this study was to explore the experiences of patients who obtained a medical abortion using MSA's at-home telemedicine service, and gain a nuanced understanding of the barriers and facilitators of accessing care through this model.

## METHODS

Between July and October 2017, we conducted semistructured in-depth telephone interviews with a convenience sample of MSA medical abortion patients. These interviews comprise the qualitative component of a multimethods study. Participants were recruited from a group of MSA medical abortion patients who had opted to enrol in the study and completed an online survey about their abortion experience; these survey data will be reported separately. Patients were eligible to participate in the study if they had obtained a medical abortion from MSA via the at-home telemedicine service, and had already completed the online English language self-administered survey. On completing the survey, respondents were invited to provide their contact information in an online form, delinked from their survey responses, if interested in being contacted by a study coordinator for an interview.

An Australian-based study coordinator (MVS) trained in human subjects research obtained verbal informed

**Table 1** Respondent characteristics

Characteristics	(n=24)
Age, mean (range)	28 (20–43)
Children at home	
0	12
1–2	7
≥3	5
Marital status	
Single	16
Married/de facto	7
Separated	1
Education	
≤High school	9
≥Some college	15

consent before conducting each interview. The interview guide included questions about participant reproductive history, discovery of the index pregnancy, abortion decision making, abortion information sources, experience locating a provider, service experience including wait times and medication delivery, follow-up experiences and recommendations. All interviews were audio recorded and transcribed verbatim. On interview completion, participants were eligible to receive an \$A50 emailed gift card. The study team developed a priori codes and refined the codebook iteratively as themes emerged. Two researchers (JWS and LF) trained in qualitative research independently coded each interview. The study team then conducted a thematic analysis to identify top-level themes across interviews.

## RESULTS

### Demographics

We interviewed 24 MSA patients who had a medical abortion via the at-home telemedicine model. Participant age ranged from 20 to 43 years old, half had no children, most were single and most had some college or postsecondary education (table 1).

### Experiences prior to service initiation

#### Source of information

Participants learnt where they could obtain abortion care from a variety of sources, with some consulting multiple sources (table 2). Most participants learnt where they could obtain abortion care from a GP or other doctor. Some found information through online searches and one from the Children by Choice website. Others learnt about abortion services at MSA from a friend.

Participants learnt about the at-home telemedicine service from different sources. Most first learnt about it on speaking with MSA staff, many from the MSA website, and a few from a GP. One heard about the telemedicine service from a friend, and another from MSA staff when she attended a clinic appointment for an assessment.

**Table 2** Patient experiences throughout the care timeline

Theme	Illustrative quote
Abortion information	My doctor gave me a referral. And then, I called the call center and just said, hey. My doctor's given me a referral, basically. And then, I asked about the options, and they explained the difference between a medical abortion and a surgical abortion... So then, I asked them because I was like, I had a look on your website. And it was like, the telemedicine one is cheaper. And they said, oh, yeah. That can be done over the phone. You need to get your scans and stuff done by a GP first. The scans and the blood work. And, at that point in time, I already had done my scans and blood work, or I had done all my blood work. And I was already booked in for a scan. So, yes. It was a cheaper option. Because I wanted to do the tele-abortion. The reason I went with telemedicine was because it was cheaper. (Participant 28)
Decision making	The option was to either go into the clinic, and if the times worked out to use the medication or if it was too late to do surgical. But when I found out it was—the clinic was in Midland, so it's probably an hour away from where I was. And obviously, you can't bring children. Yeah. I threw that out the window, because I don't—my mother was away on holiday, so I couldn't get her to watch the kids. And it would have, yeah, been a little bit hard to get there, and to wait as well. So it seemed a lot more convenient to do it from home. (Participant 14)
Referral experience	Well, when I first went in I went in with my partner, and the doctor had a big cross around her neck. So I was thinking, oh goodness, here we go. I thought she was gonna give me a hard time. And she was as much as she could she was putting the hard word on me not to go through with it, but in a very loving and respectful way. I never felt that she was putting her beliefs there, although she was letting me know what her beliefs were. She kept on saying even at the last minute, even if you've got the pills, you don't need to take it. You do have a choice. You're not too old. You can do it. I was like thank you. But I've already made up my mind. (Participant 21)
Medical abortion appointment experience	I thought it was great, because—well, especially for someone like myself living three-and-a-half hours away. And to be honest, I didn't want to go into a clinic. I didn't want to have that. It was nice to be able to do it from my house and not have to actually go in there and sit in the waiting room with other people and that sort of thing. So it was very comforting to be able to do it in your own house. (Participant 16)
Follow-up experience	We went through my hormone levels to make sure that they had dropped. They did, which was great. She was just making sure that me, myself was okay. (Participant 13)

Those who were informed about the telemedicine service by MSA's national support centre recalled being told that there was little difference between the on-site clinic and telemedicine process, that telemedicine was faster or cheaper and was safe.

#### Decision making

Participants selected the at-home telemedicine model due to convenience, absence of travel, and minimisation of interruption in responsibilities like childcare and work. One participant (Participant 15) shared: 'It was predominately location for me, the fact that I could do it at home. I didn't have to travel. I didn't have to rearrange my kids. And I suppose—for want of a better word—it was convenient to access my medical care that way.' Some selected telemedicine because it was the next available appointment type or because it was recommended to them by the national support centre; a few believed it to be the only option. Confidentiality and privacy were also cited as factors, with some participants reporting a greater sense of comfort being in their own home during the abortion. One participant (Participant 01) explained, 'I think that being at home made it a lot easier and just being able to talk to her over the phone on video chat.' Another participant specifically noted that she chose to have a phone rather than a video appointment, due to her own privacy concerns. Several chose telemedicine because of the perceived lower cost as compared with standard on-site visits.

#### Referral experience

At-home telemedicine patients were asked about their experiences obtaining a referral from their GP. All

respondents reported satisfaction with the privacy in their interactions with the referring GP. A majority reported that they saw a GP in under a week, the GP care was high quality, and they were comfortable in the GP clinic; many noted short wait times during the GP appointment. One participant reportedly would have felt more comfortable had a female GP been available, and another, who reported care of variable quality, felt that her complications had not been dealt with thoroughly by the multiple providers she saw at the GP clinic.

A few participants were delayed in obtaining abortion due to GPs who refused to provide a referral. One additional participant felt judged by staff at the GP office. One participant whose GP refused to refer explained:

The first doctor I went to see refused to do the referral for me because he didn't believe in abortion. So two days later I booked it again and the second doctor did the same thing to me. And then I pretty much had a breakdown in the hospital, a bit of a—I mean, in the doctor's and another doctor in there who was willing to do it did it all for me that day. (Participant 23)

Others reported that a lack of GP knowledge about abortion options or the referral process resulted in unnecessary delays in obtaining care. Additionally, some participants were surprised by the GP or GP's office staff making assumptions about their pregnancy intention or sharing personal beliefs about abortion.

Respondents encountered some challenges in the referral process, including a missing referral for a

blood test, conflicting instructions about medication administration, dissatisfaction with obtaining an anti-D immunoglobulin injection via emergency department, or the length of time required to get an appointment. One such respondent waited 4 weeks between seeing her GP and taking her abortion medication due to a lack of communication between the GP and the telemedicine service regarding documentation required to verify the patient's blood type.

#### Medical abortion appointment experiences

Most participants were satisfied with their medical abortion visit, felt they received clear information, and had positive experiences with their abortion provider.

Most at-home telemedicine participants responded positively upon learning about the service and felt they received clear information about the process of obtaining care via telemedicine. Most participants felt comfortable during the provider interaction and perceived the level of privacy in a telemedicine visit to be equal to or better than if they were to have an in-person visit.

Some participants identified room for improvement. One reported that her provider called her 30 min late. A few recommended that MSA provide more clarity and detail about whether the telemedicine visit would take place via phone or videoconference, and the potential side effects of medical abortion, such as pain or adverse events. A few had some difficulty using the videoconference platform for the first time, and others reported that they were surprised to receive an audio rather than a video call.

Nearly all participants received their medications in less than 5 days from the telemedicine visit, with most receiving them in 1–4 days. Many participants, including one whose medication arrived in 7 days, specifically reported satisfaction with the timing of home delivery for their medications.

#### Follow-up experiences

Most participants had completed standard postabortion follow-up calls at the time of the interview; a few had not yet scheduled or did not expect additional follow-up; one had not yet received a planned follow-up call at the time of the interview. Of those who had undergone follow-up, nearly all reported positive experiences, in which they received confirmation that they were no longer pregnant, discussed contraception, their experience with medical abortion, or were offered information about available counselling services.

Subsequent to speaking with clinical staff via the helpline, three patients noted they received care at their local emergency room and thus did not receive subsequent follow-up calls. Of these, one was found to have retained products of conception and another reported obtaining care due to haemorrhage; the third participant who reported continued bleeding and pain

to the follow-up staff via phone was initially deemed not to need in-person follow-up care, but ultimately sought it and was found to be anaemic and have blood clots in her uterus.

#### Recommendation to a friend or family member

Most participants would recommend the service due to convenience, speed, comfort, privacy or positive experiences with the service. Of these, some would recommend the service conditionally based on a friend/family member's preferences or circumstances. Several indicated this would depend on that person's preference for medical or surgical abortion.

Four participants would not recommend the service because of negative experiences with medical abortion, but not due to the telemedicine service itself; one felt that more support or information might be provided during an on-site rather than a telemedicine visit.

## DISCUSSION

Findings from this study are consistent with research on telemedicine for medical abortion in similar direct-to-patient models, and strengthen the evidence base demonstrating patient satisfaction with telemedicine and self-administration as a means of accessing medical abortion.<sup>8–10</sup> Consistent with studies of telemedicine and patient experiences in other high-income countries, respondents associated at-home telemedicine with greater convenience and privacy, earlier appointment availability, less travel and lower out-of-pocket costs when compared with on-site medical abortion services.<sup>6,7</sup>

Respondent recommendations to share more information in advance about potential side effects and symptoms, and to better manage expectations of pain during the medical abortion process, highlight the need to improve patient education on common symptoms or side effects of medical abortion. Findings from medical abortion studies in other countries also suggest a need for additional research on experiences of pain during medical abortion.<sup>11,12</sup> Additionally, some respondents reported confusion about whether the MSA provider would meet with them via videoconference or telephone. This confusion, however, may have stemmed from a November 2017 change at MSA from videoconference to telephone consultations.

Limitations in GP knowledge about abortion highlighted by some respondents also align with challenges obtaining information about abortion reported by patients in Australia and other countries.<sup>3,13</sup> Some respondents in this study faced delays in care due to gaps in GP knowledge about medical abortion and the referral process, suggesting a need to improve education about abortion care and its delivery via telemedicine, particularly among clinicians who provide general healthcare; these providers may be the primary point of patient engagement with healthcare services. Notably, as of October 2017, MSA ceased requiring

a GP referral for at-home telemedicine patients, except as required by law in Western Australia. MSA's medical abortion via telemedicine service has undergone a number of additional changes subsequent to the study period including removing the need for anti-D administration for Rh negative patients and moving to a quantitative urine test for follow-up in order to remove the need for patients to travel for a follow-up blood test. Such changes may address concerns raised by participants in this study, and the impacts of streamlining testing and follow-up on the patient experience of the at-home telemedicine model are deserving of further inquiry.

### Limitations

This study has several limitations. This research is qualitative and thus not designed to be generalisable. Participants with unique experiences may have been more likely to participate, given that this was a convenience sample. Participant reports may be subject to recall error given that study participation could occur weeks after completing their abortion. Respondent race and ethnicity were not reported across all participants and, as interpretation services are not available for the at-home telemedicine service, only English-speaking participants were eligible to participate, thus aspects of patient experience may be missing or lacking in context.

### CONCLUSIONS

Our study highlights that at-home telemedicine for medical abortion is a convenient and satisfactory option for patients that reduces travel time and costs. Experiences reported by participants suggest that at-home medical abortion via telemedicine could be an important service for other women in similar settings in which low population density, few providers, or limited ability to travel may negatively impact abortion access. Findings also suggest a need for additional provider education about medical abortion service delivery and a need for large-scale research on the impacts of the at-home telemedicine model on abortion patients.

**Contributors** T-AT, CM and DM are responsible for conceptualisation and design of the study. MVS and JWS coordinated data collection. MVS conducted the in-depth interviews. LF and JWS analysed the data. LF, JWS and T-AT interpreted the data and drafted the manuscript. All authors have reviewed and approved the manuscript.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Disclaimer** This work was supported by an anonymous donor that had no role in study design, data collection, analysis or interpretation.

**Competing interests** None declared.

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

**Ethics approval** The study was registered with the Monash University Human Research Ethics Committee (8295) and

ethical approval was granted by the Marie Stopes International Ethics Review Committee (020-16).

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** No data are available. Participants completed informed consent documents prior to participating in the study with the understanding that any and all identifying information would remain confidential, including in the context of publication. Publishing the complete dataset would infringe on the confidentiality agreement we have made with the participants in our study. Beyond the relevant data included in the manuscript, we are willing to share the research instrument upon request.

### ORCID iD

Laura Fix <http://orcid.org/0000-0001-5655-086X>

### REFERENCES

- 1 Baird B. Medical abortion in Australia: a short history. *Reprod Health Matters* 2015;23:169-76.
- 2 Grossman D, Goldstone P. Mifepristone by prescription: a dream in the United States but reality in Australia. *Contraception* 2015;92:186-9.
- 3 Doran FM, Hornibrook J. Barriers around access to abortion experienced by rural women in New South Wales, Australia. *Rural Remote Health* 2016;16:3538.
- 4 Dawson AJ, Nicolls R, Bateson D, *et al*. Medical termination of pregnancy in general practice in Australia: a descriptive-interpretive qualitative study. *Reprod Health* 2017;14:39.
- 5 LaRoche KJ, Wynn LL, Foster AM. "We've got rights and yet we don't have access": Exploring patient experiences accessing medication abortion in Australia. *Contraception* 2020;101:256-60.
- 6 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.
- 7 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.
- 8 Hyland P, Raymond EG, Chong E. A direct-to-patient telemedicine abortion service in Australia: retrospective analysis of the first 18 months. *Aust N Z J Obstet Gynaecol* 2018;58:335-40.
- 9 Eandler M, Lavelanet A, Cleeve A, *et al*. Telemedicine for medical abortion: a systematic review. *BJOG* 2019;126:1094-102.
- 10 Raymond E, Chong E, Winikoff B, *et al*. TelAbortion: evaluation of a direct to patient telemedicine abortion service in the United States. *Contraception* 2019;100:173-7.
- 11 Cavet S, Fiala C, Scemama A, *et al*. Assessment of pain during medical abortion with home use of misoprostol. *Eur J Contracept Reprod Health Care* 2017;22:207-11.
- 12 Fiala C, Agostini A, Bombas T, *et al*. Management of pain associated with up-to-9-weeks medical termination of pregnancy (MToP) using mifepristone-misoprostol regimens: expert consensus based on a systematic literature review. *J Obstet Gynaecol* 2019;62:1-11.
- 13 Jerman J, Frohwirth L, Kavanaugh ML, *et al*. Barriers to abortion care and their consequences for patients traveling for services: qualitative findings from two states. *Perspect Sex Reprod Health* 2017;49:95-102.