A qualitative study of abortion care providers’ perspectives on telemedicine medical abortion provision in the context of COVID-19

John Joseph Reynolds-Wright, Nicola Boydell, Sharon Cameron, Jeni Harden

ABSTRACT

Background Telemedicine for medical abortion care was rapidly introduced in Great Britain in response to the COVID-19 pandemic. A growing body of literature demonstrates that telemedicine abortion care is safe, effective and highly acceptable to patients. Less is known about the perspectives of abortion care providers (ACPs).

Methods Qualitative research within the telemedicine abortion service in Lothian (Edinburgh and surrounding region), UK. We conducted qualitative in-depth interviews with ACPs between May and July 2020 (doctors, n=6; nurses, n=10) and analysed the data thematically.

Results We present three themes from our qualitative analysis: (1) Selective use of ultrasound – the move away from routine ultrasound for determination of gestational age was generally viewed positively. Initial anxiety about non-detection of ectopic pregnancy and later gestations was expressed by some ACPs, but concerns were addressed through clinical practice and support structures within the clinic. (2) Identifying safeguarding issues – in the absence of visual cues some ACPs reported concerns about their ability to identify safeguarding issues, specifically domestic violence. Conversely it was acknowledged that teleconsultations may improve detection of this in some situations. (3) Provision of information during the consultation – telephone consultations were considered more focused than in-person consultations and formed only part of the overall ‘package’ of information provided to patients, supplemented by online and written information.

Conclusions ACPs providing telemedicine abortion care value this option for patients and believe it should remain beyond the COVID-19 pandemic. Safeguarding patients and the selective use of ultrasound can be initially challenging; however, with experience, staff confidence improves.

Key messages

► Abortion care providers (ACPs) viewed the selective use of ultrasound, based on clinical indication rather than routine use, as a positive change in the telemedicine service.
► Support from clinical leaders and regular training help ACPs to feel confident in their ability to conduct safeguarding assessments during telephone consultations.
► ACPs emphasised the importance of supplementary written and audiovisual information in supporting patients to self-administer medications at home.

INTRODUCTION

Prior to the COVID-19 pandemic, abortion care in Great Britain necessitated an in-person visit, usually involving an ultrasound scan to confirm gestation. Mifepristone was administered by an abortion care provider (ACP) (Box 1) in clinic and misoprostol was self-administered at home.1,2 In response to COVID-19, legislation was introduced across Great Britain allowing patients to self-administer mifepristone in their place of residence, in addition to misoprostol.3-6 Clinical guidance from the Royal College of Obstetricians & Gynaecologists’ further encouraged remote consultations and advised ultrasound only if gestation could not be assessed accurately using last menstrual period (LMP) or if there was concern regarding ectopic pregnancy.8

One of Scotland’s largest abortion services is in Lothian (Edinburgh and surrounding region, providing around 2600 abortions per year) and is provided by the National Health Service (NHS)
Box 1 Terminology

Abortion care provider (ACP): We use this term throughout the article to include medical, nursing and midwifery staff working in the abortion service and delivering abortion care to patients.

Patient(s): We refer to patient(s) throughout the article as it is a gender-neutral term referring to a person(s) receiving medical care. In the excerpts from the interviews with ACPs, they refer to both ‘women’ and ‘patients’. The overwhelming majority of people receiving abortion care are (cisgender) women but we recognise that other people receive abortion care too and ‘patient(s)’ is an accurate, clear and concise term that encompasses both groups.

Safe word: When patients self-refer to the clinic they are told the ‘safe word’ by administrative staff and are instructed to use it during their telephone consultation if they feel they cannot talk freely or are experiencing any abuse at home. If the patient uses the safe word, clinical staff will arrange for an in-person appointment to be made so that they can be seen alone.

Telemedicine medical abortion: This term encompasses telephone consultations for abortion assessment, follow-up and support, plus the home use of mifepristone and misoprostol. We did not use video consultations as this facility was not available in this setting or prior to the pandemic, though it is now used variably across Scotland and the UK in the National Health Service (NHS). For several years prior to the introduction of telemedicine, outcome of abortion was determined by self-performed, low-sensitivity pregnancy tests conducted by the patient at home. This practice continued following the introduction of telemedicine.

METHODS

Between May and July 2020 we recruited ACPs (nurses, midwives and doctors) from the NHS Lothian telemedicine abortion service to participate in a qualitative study. Our only inclusion criterion was being an ACP in the service. We purposively sampled to provide representation across occupational groups and level of experience in abortion care provision, but did not predetermine participant numbers within each category of the sampling frame. ACPs were provided with information on the study and invited to contact the researcher if they were willing to participate in an interview. Consent for study participation was obtained prior to interview.

JRW and NB conducted the interviews using a topic guide (online supplemental table 2) which covered: introduction of the telemedicine service during COVID-19; staff experiences of abortion teleconsultations; views on provision of abortion information and support; practical dimensions of service provision (including ultrasound scanning and provision of medications); and views on the future of telemedicine medical abortion. Interviews were conducted in person in the participant’s workplace (n=13) or by telephone (n=3), were digitally recorded, and lasted between 43 and 70 min (mean duration 54 min). Interviews were transcribed verbatim by a university-approved General Data Protection Regulation (GDPR)-compliant external transcription service.

Interview data were analysed thematically by JRW, NB and JH. NVivo Qualitative Data Analysis Software (Version 12, 2018, QSR International Pty Ltd) was used for data coding and management. Transcripts were read and discussed by the research team. A coding framework, which captured both the original research questions and emergent issues, was developed and applied to the interview data. The coding scheme was revised and refined as analysis progressed, through research team discussions. Recurrent themes were identified through a process of cross-comparison. The research team met regularly to compare analytic interpretations; the composition of the team allowed discussion of the data from different disciplinary perspectives. JRW is a clinician working within the NHS Lothian telemedicine service. NB and JH are social scientists with experience of conducting qualitative research in sexual and reproductive health (SRH).

The project received approval from the NHS Lothian SRH Service Quality Improvement Team. The study was reviewed, and received favourable ethical opinion, by the Usher Research Ethics Group at the University of Edinburgh (Application 2020; 4 May 2020). Participants were not paid for their participation.

Patient and public involvement

Patients and members of the public were not involved in the design of this study.

without patient costs. NHS Lothian moved to telemedicine provision of abortion care on 1 April 2020 (model described in detail elsewhere). Details of the treatment regimen are given in online supplemental table 1. An overview of the patient pathway is presented in figure 1.

There is a growing body of literature on the safety and acceptability of telemedicine abortion care in settings where abortion is legal and relatively unrestricted; and where it is illegal and/or there are greater restrictions on access. ACP perspectives on provision of telemedicine abortion are less well researched, although recent studies have identified perceived benefits related to ACPs’ work, service delivery and patient experiences. However, there are no data on the perspective of ACPs in the UK context.

The aim of this study was to explore views and experiences of ACPs involved in the provision of telemedicine medical abortion during COVID-19 to inform future telemedicine abortion practice.
RESULTS

Of the approximately 25 ACPs in the service, the final sample comprised 16 ACPs involved in the provision of telemedicine medical abortion (10 nurses/midwives and 6 SRH doctors) with a variety of experience and skill levels. We present three thematic areas from our qualitative analysis: (1) Selective use of ultrasound, (2) Identifying safeguarding issues and (3) Provision of information during the consultation.

Selective use of ultrasound

Transition from routine to selective use of ultrasound, based on clinical history and symptoms, was generally viewed positively by participants. Initial anxieties regarding the potential for ectopic pregnancies or those at later gestations to be ‘missed’ were reported by some participants. Confidence in clinical protocols that minimised these risks grew among ACPs as telemedicine provision became more established. This was aided by senior nursing leadership, medical support, and clear pathways for seeking help and advice within the clinic.

I suppose now I’ve done enough that I’ve had a few different examples so I’ve had someone who wasn’t sure of their dates and I’ve just arranged for them to come in for a scan. I’ve had someone who had pain and some bleeding and arranged for her to come in for a scan ... I’ve just sort of realised that actually we do ask the right questions and I’ve felt more confident. [P12, Nurse]

Reliance on routine ultrasound was acknowledged as a relatively recent development in abortion service provision. ACPs with longstanding experience of abortion care suggested that removal of routine ultrasound could encourage more rigorous and detailed clinical assessment among ACPs, possibly improving their clinical acumen.

Remember I’m old so ... back in the day when we didn’t scan everyone, ... you know, they would get maybe one dating scan at 20 weeks for abnormality, some services didn’t routinely date pregnancies by scan. [P3, Doctor]

Ultrasound was widely recognised by ACPs as emotionally challenging for those seeking abortion because it is often associated with continuing pregnancies, acting as a reminder of previous desired pregnancies for parous women.

I think [ultrasound scanning] can be a trigger for some women in terms of evoking emotion and sort...
of guilt and doubt, even women that go on, as they do, most women still to have the termination after the scan. [P1, Nurse]

Identifying safeguarding issues

The absence of visual cues during telemedicine consultations was discussed with reference to identifying safeguarding issues, specifically coercive control and domestic violence. Non-verbal cues (as part of in-person appointments) were described by some ACPs as enabling a more holistic assessment, enhancing their ability to identify safeguarding issues.

[During in-person consultations] you can ask them, you see them on their own so you know that they’re alone and you ask them directly … you do ask them on the phone ‘Are you safe at home?’ but I suspect if they’ve got somebody with them who is abusing them … they are going to say yes they’re safe, whereas if they’re on their own face-to-face they might feel more able to be honest. [P9, Nurse]

However, it was widely acknowledged that the ability to detect domestic violence during in-person consultations was imperfect.

I wonder how good we are at doing it in face-to-face consultations anyway because it’s not something that somebody would disclose necessarily unless you directly ask them, and I suppose we are directly asking them on the phone, we should be directly asking them face-to-face as well … I don’t know if we’re missing it more. [P6, Doctor]

Moreover, many ACPs reported being confident in their ability to detect subtle changes in tone, language and manner on the telephone, prompting further safeguarding questioning.

You might miss the cues but … I think if you had a really significant issue and you weren’t expecting the question and somebody asked you that, I don’t think even a good actor would be able to completely hide that, unless they were very adept at hiding and had been asked over and over again and had to hide it, but I think we could probably pick it up … [P7, Doctor]

Tools such as the clinic ‘safe word’, which patients could use to indicate they were not able to speak freely, were seen as important safeguarding components and valued aspects of the design of the telemedicine service. Some ACPs suggested that telephone consultations could potentially enable patients to disclose experiences of domestic violence. The greater privacy offered by telephone consultations meant that there was less risk of disclosure to a potential abuser, and the remoteness of the consultation may make patients feel less pressured to conceal the abuse from ACPs.

I think because you’re on the phone … the women are more likely to tell you than coming in here face-to-face, because they might say ‘Well if I open that can of worms in the hospital here who else are they going to bring in to see me? What’s going to happen, is it going to escalate or whatever?’ [P11, Nurse]

Although not used, the potential for video consultations to provide visual cues, and support safeguarding assessments, was discussed by ACPs. However, the ‘artificial’ nature of video consultations was considered a barrier to identification of visual/non-verbal cues, and ACPs strongly suggested that this risked sacrificing the simplicity, convenience and privacy afforded by telephone consultations.

I don’t feel the wish to go to video consultation. I’m not sure what extra the video would give me and I think it might create an extra possible anxiety for the patient if we’re seeing them and their setting … we’re invading their space much more if we can see where they are and I think that’s part of the comfort they’re getting from doing a phone consultation is that they can be a little more anonymous and I think that’s partly why … the telephone works well. [P3, Doctor]

Moreover, there was consensus among ACPs that these positive dimensions of telephone consultations suggested that telemedicine provision should continue beyond the pandemic.

Provision of information during the consultation

Teleconsultations were described as offering more opportunities to tailor discussion around contraception or other concerns for women, especially where they had ‘read up’ on the abortion process online and/or watched the online clinic videos beforehand. Patients were directed to these materials when self-referring and some clinicians asked patients if they had watched the videos and used this as a starting point for the consultation.

If they’ve read it and understood it or listened to it and understood it already before they come to the conversation with me, the conversation will take a slightly different journey … If I know they haven’t read it then I will endeavour to make sure they understand that information during the conversation … [P3, Doctor]

Improvements to information provision about abortion care treatment during teleconsultations were reported; specifically, ACPs reported patients listening intently during calls and taking notes about the abortion process. ACPs reported intensifying efforts to ensure that patients had a thorough understanding of their abortion treatment in a way that they perhaps would not in an in-person setting.

The patient is so much more relaxed when they’re at home, so they’re maybe listening, they’re maybe writing it down. I’ve never seen a patient write anything down in clinic ever, but I’d say five patients so far have said ‘Oh yes, yes I’m just taking notes, I’m just taking notes’, so they’re writing it down as you go … my feeling is that patients will come out of it with possibly more,
as much if not more knowledge of what we've been talking about. [P7, Doctor]

Challenges in the provision of information for patients whose first language was not English, and who required an interpreter, were identified. Participants described the use of telephone interpreters as a necessity during COVID-19, but suggested this was inferior to an in-person consultation where non-verbal cues between clinician, patient and interpreter were important and easier to interpret.

I do think [people who require interpreters] would benefit from ... you learn so much more from a face-to-face ... you can trigger ... pick up uncertainty, even sometimes for the poor interpreters there’s not always words in their language ..., or they’re not familiar with, that we’re trying to think of alternatives in English for them to translate and that can be a major faff on the phone. [P8, Nurse]

DISCUSSION
To our knowledge this is the first study to explore ACP perspectives of abortion care provision via telemedicine in the UK medicolegal context during COVID-19. There have been few other studies23 24 27 exploring ACP perspectives on the provision of telemedicine abortion care – two in the USA, both of which were prior to COVID-19, and one in Belgium during the COVID-19 pandemic. The telemedicine models and medicolegal contexts in these studies are different from the current UK setting.

There was unanimity among ACPs that telemedicine abortion care provision should continue beyond the pandemic, reflecting the sentiments of patients interviewed at a similar time in this clinic15 and providers in other settings.23 24 27

We found that participants reported increasing confidence in ultrasound decision-making, in line with increasing experience of delivering abortion care via telemedicine. Similarly, as participants gained experience, they became more confident in their ability to safeguard patients by identifying those who were experiencing coercive control or domestic violence. The importance of experience in mitigating concerns among ACPs was a finding of the Belgian study27; participants initially expressed concern that a reduction in in-person contact would be emotionally detrimental for patients; however, they reported that their ability to conduct telephone consultations improved as they gained experience. The NHS Lothian clinic leadership structures, including clear routes to accessing senior nursing and medical advice to support these decisions, were also identified as facilitators of safe telemedicine abortion care.

ACPs viewed the telephone consultation as only part of the package of information delivery to patients, and emphasised the importance of the supplemental audiovisual information available online28 and written information in the treatment packs. Many ACPs described the greater attention paid by patients during the telephone consultations and acknowledged that they themselves provided more detailed and consistent information verbally. It is possible that this approach may lead to better understanding of the abortion process and therefore more effective shared decision-making and better-informed consent than previously.

Limitations
The study was constrained by time and funding and so recruitment was only from a single region with a predominately urban population and a large abortion service. As such, the findings may not be transferable to areas where the abortion services are smaller, have a greater rural population, or had experienced challenges in delivery of comprehensive telemedicine abortion services.

CONCLUSIONS
ACPs value the provision of telemedicine abortion care for patients and believe it should remain beyond the COVID-19 pandemic. Confidence in identifying safeguarding issues and the selective use of ultrasound can be initially challenging; however, with experience, confidence improves.

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Contributors The original idea and overall study design were conceived by JH, NB, SC and JJRW. Qualitative study design, data collection and analysis were conducted by JH, NB and JJRW. JJRW prepared the initial manuscript with contributions from, and edits by, JH, NB and SC. All authors jointly approved the version to be published and are accountable for the accuracy and integrity of the work.

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Competing interests None declared.

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.

Provenance and peer review Not commissioned; externally peer reviewed.

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REFERENCES
27 De Kort L, Wouters E, Van de Velde S. Obstacles and opportunities: a qualitative study of the experiences of abortion centre staff with abortion care during the first COVID-19 lockdown in Flanders, Belgium. Sex Reprod Health Matters 2021;29:1921901.
**Supplementary Table S1.** Medication pack for medical abortion at home.

*FSRH = Faculty of Sexual and Reproductive Healthcare UK.*

<table>
<thead>
<tr>
<th>Abortion medications</th>
<th>Mifepristone 200mg Oral</th>
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<tbody>
<tr>
<td></td>
<td>24-48 hours later</td>
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<tr>
<td></td>
<td>Misoprostol 800 micrograms sublingual/vaginal/buccal (per patient preference)</td>
</tr>
<tr>
<td></td>
<td>Plus a further 1 x 400 micrograms of misoprostol if no bleeding within 4 hours of first dose</td>
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<tr>
<td></td>
<td>For 10-11+6 weeks only: a further 400 micrograms of misoprostol if not passed pregnancy by 4 hours of last dose</td>
</tr>
<tr>
<td></td>
<td>&lt;10 weeks provided 1200 mcg misoprostol total and 10-11+6 weeks provided 1600 mcg misoprostol total</td>
</tr>
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</table>

| Analgesia             | Dihydrocodeine 30mg         |
|                       | Women advised to purchase their own supply of paracetamol and ibuprofen. |

| Antibiotics           | Doxycycline 100mg twice daily for 7 days |
|                       | Cyclizine 50mg oral             |

| Antiemetic (if required) | Cyclizine 50mg oral |

| Confirmation of abortion | Low Sensitivity Urine Pregnancy Test 1000iu at 14 days |

| Contraception | Pills, patches, rings and condoms supplied in pack. Combined hormonal methods issued in accordance with FSRH* advice. Long acting reversible contraceptives provided at rapid access clinic and bridging method offered. |

| Information | Detailed step-by-step information provided as written leaflet included in pack. |
Supplementary Table S2. Topic Guide

<table>
<thead>
<tr>
<th>Topics</th>
<th>Focus/Prompts: indicative questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductions</td>
<td>• Researcher to reiterate the study aims</td>
</tr>
<tr>
<td></td>
<td>• Researcher to explain that the interview will start with some general questions about the participant, then begin the actual interview - explain that the sorts of things we will cover in the interview</td>
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<tr>
<td></td>
<td>• Researcher to explain that they are happy for the participant to decide what they talk about, and emphasise that they don’t need to talk about anything they don’t want to. Remind the participant that they are free to refuse to answer any questions, or to withdraw at any time during the interview, without giving an explanation.</td>
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<td></td>
<td>• Researcher to explain that they will check in every so often to make sure that the participant is happy to carry on.</td>
</tr>
<tr>
<td></td>
<td>• Researcher to reiterate that what the participant tells them is confidential and their name will be removed from transcripts and any details that might identify them will not be included in the final transcripts or any of the reports/papers that are written.</td>
</tr>
<tr>
<td></td>
<td>• Researcher will invite the participant to ask any further questions before starting the interview.</td>
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<tr>
<td>Consent</td>
<td>The consent form will be read out and the participant will be asked to agree to each statement. This consent process will be audio recorded.</td>
</tr>
<tr>
<td></td>
<td>Sample script for consent in telephone interviews</td>
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<td></td>
<td>“As this interview is by phone I will read through the consent form with you and ask you to say if you agree to the statements. I will need to audio record your responses but if at the end of that or during those questions you decide not to take part in the research I will stop the recording and delete it. If you are happy to go ahead at this time I will now begin this part of the process”.</td>
</tr>
<tr>
<td></td>
<td>Researcher then reads aloud the consent form and ask for a response from the potential participant after each statement.</td>
</tr>
<tr>
<td>Role</td>
<td>What is your role as a healthcare professional? E.g. doctor/nurse?</td>
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<tr>
<td></td>
<td>How long have you been doctor/nurse?</td>
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<td></td>
<td>How long have you worked in abortion care? Lead into main Qs</td>
</tr>
<tr>
<td>Experience of Teleconsultation</td>
<td>Opening Can you tell me about your experience of delivering abortion care/the service using telephone consultations?</td>
</tr>
<tr>
<td></td>
<td>Information Able to provide all the information you want to patients via telephone?</td>
</tr>
<tr>
<td></td>
<td>Different to face to face experience – in providing the information?</td>
</tr>
<tr>
<td></td>
<td>What information sources do you direct them to? E.g. website/leaflet</td>
</tr>
</tbody>
</table>
| **Communication** | How does the telephone consultation compare to a face-to-face consultation?  
Do you feel like you and the patients understand each other clearly?  
How do you think the fact that there are no non-verbal cues affects the consultation? – communication, connection etc  
Do you think it changes ability to successfully screen for intimate partner violence?  
Different if video consultation rather than phone? |
|------------------|---------------------------------------------------------------------------------------------------------------|
| **Practicalities** | How did you prepare for your telephone consultation?  
How would you advise a member of staff to prepare for the telephone consultation?  
What impact do you think telephone consultations have on access to the service?  
Timing – during day. Would this work if women were at work? |
| **Ultrasound** | How do you feel about patients not having a scan? |
| **Contraception counselling** | Are you satisfied with the contraception counselling and provision you are able to offer? |
| **COVID-19** | Any issues for women that you became aware of that related to COVID-19 |
| **Support** | Pre/post treatment  
Do you feel that enough support is provided before and after the teleconsult?  
Should the website or information sheet be changed?  
Do you do Choices follow-up? Has it changed since starting telemedicine? |
| **Counselling** | Are you able to provide sufficient counselling to patients to help them make decisions? Should we offer more? |
| **Introduction of telemed** | How were told that the change to the telemed service would be implemented? Who, when...  
How was it explained to you?  
How did you feel when you first told? |
| **Training** | What training did you receive to do telephone consults?  
Did you find it useful?  
Is there anything you would have changed? |
<table>
<thead>
<tr>
<th>Topic</th>
<th>Questions</th>
</tr>
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</table>
| Have you identified further training needs? | Do you feel that your role has changed since telemed started?  
How has your workload changed since?  
Has it had any impact on how you feel about your work – rewarding, satisfaction, stress? |
| The Future            | If this was a telemedicine service without COVID-19 – do you think it would be different?  
Should we continue to deliver the abortion service via telephone? What would be good about doing this?  
What would you change about it if it was continued and why? |
| Close                 | Thanks  
Brief summary of interview discussion  
Ensure interviewee has opportunity to add comments/ask questions  
Seek feedback on the interview experience  
Check if participant want end of research summary and if so how this should be sent. |