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## Strengthening the Evidence Base for Telehealth for Abortion Service Delivery

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## COMMENTARY

# Strengthening the Evidence Base for Telehealth in Abortion Service Delivery

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**Abstract:** Telehealth uses information and communication technology to remotely deliver clinical services to patients, and it provides an opportunity to extend safe abortion services to women. A recent review article revealed that telehealth for abortion service delivery is acceptable, feasible, and safe when compared to inperson service delivery. Despite the promising findings, the evidence base can and should be strengthened to optimize the impact of such services for women. Areas for improvement include evaluating the efficacy and effectiveness of telehealth implementations in more remote settings and among women with different levels of technoliteracy, conducting costeffectiveness analyses, and articulating how data privacy and security are protected. Additionally, the Principles for Digital Development can be used as a guide to integrate and share best practices for enhancing the impact of telehealth in abortion service delivery.

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From 2010 to 2014, an estimated 55.9 million abortions were conducted globally each year,<sup>1</sup> and 8% to 11% of global maternal morbidity and mortality was directly attributed to unsafe abortions.<sup>1</sup> In settings with less restrictive legislation regarding abortion, there is a marked reduction in unsafe abortions.<sup>2</sup> Regardless of abortion laws, women living in more restrictive settings are as likely to seek abortion services as women living in less restrictive settings.<sup>2</sup> Therefore, extending safe abortion services to women reduces the number of women dying from unsafe practices.

One promising approach is to use information and communication technology (ICT) to provide women with safe abortion services at their home during the first trimester (defined in this article as telehealth for abortion service delivery not including postabortion care and followup) (Supplement). Unfortunately, countries around the globe are restricting women's access to abortion services, impacting telehealth for abortion service delivery. For example, in the

United States, 19 states have laws prohibiting the use of telehealth for abortion, requiring a physician to be physically present with the patient when prescribing medication.<sup>3</sup> This restriction directly opposes current trends in medicine in which ICT is increasingly welcomed and used to enhance care and management.<sup>4</sup>

A recent systematic review revealed that telehealth for abortion service delivery was acceptable to both women and providers, had success rates comparable to inperson service delivery (94%-96%), and had safety outcomes comparable to inperson care and management.<sup>5</sup> Building on these findings, we seek to identify possibilities for future research, share digital principles that can strengthen implementation and develop supportive telehealth policies, and present opportunities for further learning from related use cases.

## OPPORTUNITIES FOR FUTURE RESEARCH

To strengthen the evidence base, a few important topics must be addressed, including cost, pragmatic trials, and privacy (Table 1).

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**Table 1.** Summary Box

<p>What is already known about this subject?</p> <ul style="list-style-type: none"> <li>• Telehealth for abortion service delivery is acceptable to women and providers</li> <li>• Telehealth can help improve access to earlier abortion</li> <li>• Telehealth for abortion service delivery implementations have success rates and safety outcomes similar to in-person abortion care</li> </ul> <p>What are the new findings?</p> <ul style="list-style-type: none"> <li>• Pragmatic trials and studies that mirror 'real-world' hard-to-reach populations are still needed</li> <li>• Cost-effectiveness analyses are lacking</li> <li>• Data privacy and security need to be clearly outlined</li> </ul> <p>What are the recommendations for policy and practice?</p> <ul style="list-style-type: none"> <li>• Addressing research gaps can help strengthen implementations and knowledge exchange</li> <li>• The Principles for Digital Development can provide a framework to strengthen telehealth for abortion service delivery implementations and the evidence base</li> </ul>
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The review did not conduct a cost-effectiveness analyses, and only 2 studies briefly discussed (but did not assess) the cost of services and affordability.<sup>6-7</sup> Sharing cost information can help implementers design telehealth for abortion services and determine how telehealth for abortion can be used in the most cost-effective manner within the health system. Cost information may also help policy and decision makers to prioritize telehealth as a tool to extend abortion services. Furthermore, implementers and patients could use cost information to better strategize how to improve affordability across various modalities and geographies.

More studies are needed that evaluate telehealth for abortion service delivery in more remote and harder to reach populations, such as the implementation model described in Australia.<sup>8</sup> If designed with end users (women) and other key stakeholders, pragmatic trials could better identify how to optimize telehealth for abortions in rural health systems to provide greater accessibility, especially to women with variable exposure and access to technology and health services. For example, in the rural state of Maine, internet access and usage was among the highest in the United States (85.1%).<sup>9</sup> Notably, 31% of counties in Maine do not have abortion

services, yet they account for 24% of women of reproductive age.<sup>10</sup> Systems like MaineHealth already offer statewide telehealth services for other health issues, including prenatal consultations for highrisk obstetrics within and outside of the MaineHealth system.<sup>11</sup> Maine Family Planning also offers virtual visits, which could reveal how existing telehealth services can be expanded across the state and beyond.<sup>12</sup> Globally, there is an opportunity to identify and understand differences in protocols for managing incomplete abortions across settings, which can help to optimize the followup process.

Importantly, it was unclear what most studies had done to ensure patient privacy and security, as only 2 studies reported on the matter.<sup>13-14</sup> While authors of other studies could have omitted this information because it was not the focus of their research, patient privacy and security are important areas to report and further explore. Regulations vary across countries. Nevertheless, core tenets ensure that personal data is protected, especially in the context of ICT. Institutional review boards may be well versed in ensuring that researchers' implementations protect a patient's personal information in a database, but not all implementations will pass through an institutional review board or similar review process. Additionally, certain elements of ICT use warrant further assurance that an implementation meets international standards for data privacy, protection, and security.<sup>15</sup> Also, patient consent must include information on how their information will be protected and the risks they may incur through ICT use in this manner. As telemedicine becomes more widely used, ethical issues around privacy and security are being addressed. However, it will be important to be vigilant and transparent about identifying and addressing potential risks as regulations and standards have not kept pace with innovation and use.<sup>16</sup>

## USING THE PRINCIPLES FOR DIGITAL DEVELOPMENT TO STRENGTHEN IMPLEMENTATIONS

The Principles for Digital Development can be used to strengthen existing implementations of telehealth for abortion service delivery.<sup>17</sup> These principles include 9 living guidelines grounded in best practices for technology-enabled programs.<sup>17</sup> Implementation and research teams can use the Principles for Digital Development as a framework to share results. This framework could help enhance the exchange of information and advance best practices for telehealth. Additionally,

a learning network could be established to further promote the exchange and integration of best practices and encourage learning, collaboration, and coordination. For example, rather than develop a new implementation system, existing systems, platforms, and processes could be reused, modified, or expanded. Also, by designing with the end user, strategies to identify patientfriendly options for preabortion labs and medication procurement could be identified. This approach is in the context of studies that find it challenging to determine rhesus status, and, specifically, women in Australia who experience harassment when obtaining labs before their telehealth encounter for the abortion.<sup>7</sup>

## LEARNING FROM LITERATURE ON PRE AND POSTABORTION FOLLOWUP

We can learn from literature regarding pre and postabortion followup. There have been successful implementations of various ICT modalities (ie, SMS, phone) combined with labs and/or symptom questionnaires for managing postabortion followup.<sup>18-19</sup> Prerecorded video has also been used to help patients make decisions regarding their options for abortion and contraception.<sup>20</sup> These other modalities could be integrated into existing telehealth for abortion services. There may also be an opportunity to examine how other modalities can be best used to reach more women. In addition, supplements like help desks, hotlines, or prerecorded audio or video could be used for pre and postabortion counseling. This approach could enhance efficiency and reserve telehealth consultation time for more focused patient engagement (refer to Supplemental material for a futurescaping exercise).

## CONCLUSION

Despite the limitations, the strengths of the studies in the review suggest that telehealth is feasible, acceptable, and effective.<sup>5</sup> It is important to continue providing options to women and pursuing the best way to safely reach women in all settings. It is imperative that systems of engagement for telehealth abortion delivery are designed to improve safe abortion access to all women who desire services. We can do this only by continuing to share results and, with the Principles of Digital Development as a guide, better exchange learnings, conduct continuous quality assessments, and

integrate and adhere to best practices for telehealth in abortion delivery.

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