



# Telemedicine provision of medication abortion

## INTRODUCTION

Telemedicine, the provision of health care at a distance through technology, can expand access to high-quality care by increasing availability, reducing costs, and offering a patient-centered approach.<sup>1,2,3,4</sup> Many health care services, such as radiology, mental health care, and emergency medicine, have expanded their reach through telemedicine.<sup>5</sup>

For many people, abortion is inaccessible due to a number of factors, including a lack of providers, the need to travel long distances to reach care, inconvenient clinic hours or the inability to make appointments, the costs associated with both care and accessing care, and the level of satisfaction with services offered. Moreover, regulations—which vary greatly across states and countries—exacerbate these barriers by targeting when, where, and how abortion can be provided.<sup>3,6-16</sup> In an effort to address differing restrictions, expand access to abortion care, and better meet provider and patient needs, a variety of telemedicine models for administering medication abortion have been developed and used.<sup>17</sup>

In 2011, Ibis launched a program of work to evaluate the use and safety of telemedicine for medication abortion services. To date, this work has aimed to better understand the use of this emerging technology and its potential to transform abortion care. This brief describes findings regarding the safety, effectiveness, and satisfaction with telemedicine for medication abortion, as well as potential impacts of this model on abortion accessibility.

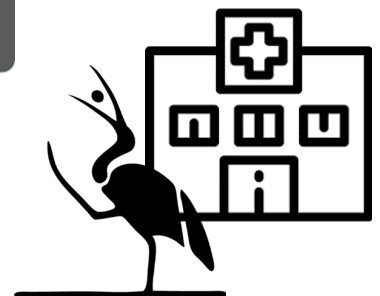
## BACKGROUND

In 2011, Ibis and Planned Parenthood of the Heartland in Iowa began to study the use of telemedicine to provide medication abortion compared to in-person medication abortion visits in Iowa. Since then, the

Planned Parenthood Federation of America has expanded telemedicine services to affiliate clinics across the country and partnered with Ibis to evaluate these programs through surveys with telemedicine and in-person medication abortion patients, in-depth interviews with patients and providers, and clinic service statistics for the time periods before and after telemedicine implementation. These data are then used to assess the impact of telemedicine in each of three domains: safety and effectiveness, satisfaction among patients and providers, and accessibility.

### *Medication abortion*

Medication abortion is the use of medications to induce an abortion without surgical techniques. The medication regimen used most commonly in the United States involves dispensing mifepristone—approved for termination of pregnancy by the US Food and Drug Administration in 2000—in a clinic or hospital setting followed by several doses of the medication misoprostol, which the patient may take at home or in another location of their choosing. While many US states have implemented regulations that influence how or by whom medication abortion is provided to a patient,<sup>2,0</sup> multiple studies have demonstrated that medication abortion for the early termination of pregnancy is safe and effective.<sup>18,19</sup>



## FINDINGS

### *Safety and effectiveness*

In two studies assessing the effectiveness and safety of telemedicine provision of abortion, we examined the incidence of adverse events and complications of in-person provision and telemedicine provision of medication abortion. The first study included all in-person and telemedicine patients who had an abortion at Iowa Planned Parenthood health centers in the two years before and after implementation of telemedicine. Here we found that effectiveness of telemedicine provision of medication abortion—determined by the proportion of patients needing vacuum aspiration following the administration of medication abortion—was similar across telemedicine and in-person visits: 99% of telemedicine patients had a successful abortion.<sup>1</sup> Additionally, selected adverse events—defined as ongoing pregnancy, emergency room treatment, hospitalization, blood transfusion, unrecognized ectopic pregnancy, allergic reaction, infection requiring intravenous treatment, and death<sup>1</sup>—were rare and equally common across telemedicine and in-person patients: fewer than one percent of patients in each group had one adverse event.<sup>1</sup>

A second, larger follow-up study that Ibis conducted with Advancing New Standards in Reproductive Health (ANSIRH) supported the safety findings of the first: adverse events—including hospital admission, surgery, blood transfusion, emergency department treatment, and death<sup>21</sup>—were rare for both telemedicine medication abortion and in-person patients, and telemedicine was not associated with increased rates of adverse events compared with in-person provision of medication abortion.<sup>21</sup> Across all studies, no patients died.

### *Satisfaction*

Telemedicine evaluations also assess the level of satisfaction with the service among patients and providers. In order to determine satisfaction among patients, we fielded surveys that asked about overall satisfaction with the service, ease of seeing and hearing the provider on the screen, and comfort with asking the provider questions through the screen, as well as whether the patient would recommend the service to a friend.<sup>1</sup> We also conducted in-depth interviews with providers to explore whether or not they found telemedicine for medication abortion satisfactory. In these interviews, we asked providers in Alaska about their experiences using telemedicine for medication abortion, including how the implementation of telemedicine affected their work flow.<sup>22</sup>

In Iowa, Ibis found that satisfaction was high among telemedicine patients; 91% of patients reported that they were “very satisfied” with their visit, 99% found that it was easy to hear and see the doctor, and 89% reported that they were comfortable asking the doctor questions during the video conference. Additionally, telemedicine patients were more likely to report that they would recommend the medication abortion service that they used to a friend compared with those who met with the provider in person.<sup>1</sup> In Alaska, results demonstrated that the telemedicine for medication abortion service was highly satisfactory among providers; providers said that telemedicine implementation resulted in increased flexibility and efficiency in their medical practice, including the ability to schedule work on an as-needed basis and to see patients from more than one health center in the same day.<sup>22</sup>

## Access

Evaluations of telemedicine services have also provided insight into the impact of the service on the accessibility of abortion services. Using Iowa service delivery statistics, Ibis evaluated the geographic accessibility of abortion before and after telemedicine introduction by assessing the distance patients travelled to the clinic and the likelihood that women who lived greater than 50 miles from a clinic obtained an abortion.<sup>3</sup> Findings from this study indicate that there is an association between the introduction of telemedicine provision of medication abortion and increased geographic access to abortion services, particularly for women living more than 50 miles from an abortion clinic. Furthermore, this analysis found that there was a reduction in second-trimester abortion rates after the introduction of telemedicine, indicating that the implementation of this service may increase access to abortion earlier in pregnancy.<sup>3</sup>

Additionally, patients and providers in Iowa and Alaska reported increased geographic accessibility with the introduction of telemedicine, citing advantages such as decreased travel for patients and physicians, and a greater number of clinic locations offering abortion and appointment times.<sup>22,23</sup> In Alaska, providers reported that increased telemedicine availability resulted in women accessing abortion services at earlier gestational ages when they were able to choose between medication and surgical abortion.<sup>22</sup> Because more women were able to access medication abortion, these providers reported an increase in their availability to perform surgical abortions. Additionally, providers in Alaska noted that telemedicine decreased the burden of traveling to remote clinics in adverse weather conditions.<sup>22</sup>

## CONCLUSION

Results from Ibis's telemedicine evaluations in Alaska and Iowa demonstrate that medication abortion provided via telemedicine in these settings is safe and effective, satisfactory, and accessible compared with in-person provision. These findings indicate that telemedicine provision of medication abortion can increase access by allowing people to obtain care at earlier gestational ages, when abortion is safer and less expensive. Additionally, providers reported that telemedicine allowed them greater flexibility and an increased ability to provide patient-centered care.

Despite these findings, there are many states that have attempted to eliminate access to telemedicine provision of medication abortion by instating legislative bans. Currently, 17 states have effectively banned the use of telemedicine for medication abortion by requiring that the clinician be physically present to administer the medication.<sup>20</sup> Other states have attempted to specifically ban telemedicine for medication abortion, but have been met by court challenges. For example, the Iowa Board of Medicine banned the use of telemedicine for medication abortion in 2013 due to concerns about patient safety; however, in June 2015 the Iowa Supreme Court overturned the ban. Research from Ibis's evaluation of Planned Parenthood of the Heartlands demonstrating that the introduction of telemedicine in Iowa was not associated with increased abortion rates or adverse events was essential in demonstrating to the court that the telemedicine provision of medication abortion is safe.<sup>24</sup>

Ibis, in partnership with abortion providers and other researchers, continues to evaluate the use of telemedicine for medication abortion in US states and other locations globally. The court case in Iowa, as well as the Supreme Court of the United States ruling in *Hellerstedt v. Whole Woman's Health*, demonstrate that research findings can play a critical role in challenging abortion restrictions. Current evaluations of telemedicine programs in 13 states will provide additional evidence about the safety and effectiveness, level of satisfaction, and accessibility of telemedicine provision of medication abortion as compared to in-person provision to improve existing services and support implementation worldwide.

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