

# Remote Options for Medication Abortion: Improving Patient Care During and After the Covid-19 Crisis

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## Abstract

The COVID-19 pandemic has shifted primary care and other practices towards remote care and telemedicine options to minimize viral exposure. Although in-person visits are sometimes indispensable, research shows that telemedicine can expand access to vital services without sacrificing patient-centered care.

Medication abortion is an essential, time-sensitive service that is particularly well-suited to telemedicine provision, including in primary care settings. Decades of clinical research and practice guidelines from core medical societies affirm the safety and efficacy of providing medication abortion remotely. Neither FDA nor professional guidelines require sonography for medication abortion, and research shows that necessary clinical assessments can be achieved without ultrasound. New practice guidelines recommend against Rh testing for abortions under 8 weeks of pregnancy and rely on patient history for those provided from 8 to 11 weeks.

As primary care providers, we can and should provide high-quality, low-risk abortion care for patients without point-of-care exams and labs. This discussion includes a detailed checklist for

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providing such remote-care medication abortion in a variety of settings. Such strategies will allow more clinicians to offer this essential care both during and after the Covid-19 crisis.

Medical systems across the US are adjusting their protocols in response to the Covid-19 pandemic with an increasing reliance on telemedicine to manage chronic and non-urgent conditions. These shifts conserve scarce resources, ensure we can provide care for critically ill patients, and minimize viral exposure for patients and health care workers. This change in practice has also revealed the extent to which our medical system has traditionally been rooted in a model of in-person visits. While an in-person encounter can foster connection between patient and provider, convey essential information, and provide comfort during times of suffering, in many cases telemedicine can improve access as well as reduce financial and logistical burdens. Such benefits have already been demonstrated for remote monitoring of many chronic diseases, including hypertension<sup>1</sup> and diabetes,<sup>2</sup> as well as urgent care visits.<sup>3</sup> During the Covid-19 crisis, remote care options are critical for maintaining essential services, particularly when data shows that point-of-care assessments are not necessary to ensure patient safety.

Abortion care is a key example where remote care can be integrated without compromising patient safety. As primary care providers and educators, we concur with the assessment of key professional organizations and a [recent NEJM Perspective essay](#),<sup>4</sup> that abortion care is a time-sensitive and essential component of health care provision in a pandemic.<sup>5</sup> Delays in abortion care, resulting from Covid-19 and new state policies, increase the risk to individuals and make abortion inaccessible for some. Delays of days or weeks can also change the type of abortion that individuals are allowed to have. Depending on the state, 10 or 11 weeks gestation is the

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last opportunity to choose between a medication abortion (MAB) or a procedural abortion (also known as a manual or electric vacuum aspiration procedure). Both methods are safe and effective, but after 10 or 11 weeks, a procedure is the only legal option. In contrast to an procedural abortion, MAB can be provided with minimal physical interaction with medical facilities, which can be beneficial for patients during the pandemic.

Research has demonstrated that telemedicine can be used to safely expand access to MAB.<sup>6,7</sup> The feasibility of integrating medication abortion into practices that do not currently offer procedural abortion has been demonstrated<sup>8</sup> and primary care physicians have expressed willingness to provide this care.<sup>9</sup> In 2017, 60% of individuals eligible for MAB chose this method and various studies have shown that many patients prefer to receive abortion services in primary care settings.<sup>10,11,12,13</sup>

Primary care providers can play a vital role in meeting the need for abortion access, which has been subject to increased restrictions before and during the pandemic.<sup>14</sup> However, many providers have had limited ability to eliminate some unnecessary but traditional MAB steps due to restrictive legislation or institutional policies that require in-person contact with patients. Medication abortion protocols often include an ultrasound to help estimate gestational age (EGA) and rule out an ectopic pregnancy, a blood type to determine patients' Rh status and need for RhoGAM, and in some cases screening labs for anemia. However, many leaders in family planning research and clinical guidance, such as the National Abortion Federation (NAF), Society of Family Planning (SFP), and American College of Obstetricians and Gynecologists (ACOG), have published guidelines that demonstrate the safety and efficacy of providing MAB without many of these point-of-care tests.

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For example, sonography is not required for MAB by the NAF's clinical guidelines<sup>15</sup> nor by FDA guidelines for mifepristone,<sup>16</sup> and there is strong evidence that the necessary clinical assessments can be achieved without ultrasound.<sup>17</sup> While sonography remains a standard method for assessing gestational age, several studies evaluating the accuracy of pregnancy dating by patients' last menstrual period (LMP) concluded that such dating is comparable to ultrasound and highly accurate for individuals with regular periods and no consistent hormonal contraception use in the month prior to pregnancy.<sup>18,19,20,21,22,23</sup>

Furthermore, ultrasound confirmation of intrauterine pregnancy location is not necessary. Ectopic pregnancy risk can be accurately assessed through history and exam, and patients can be referred for an ultrasound if found to be at risk.<sup>22</sup> In several studies, individuals who did not get an ultrasound before MAB had no higher rates of adverse events related to ectopic pregnancy.<sup>24,25</sup> The vast majority of pregnancies are intrauterine, and there is evidence that ultrasound screening for ectopic pregnancy among symptom-free patients has a high false-positive rate and limited medical benefit.<sup>26</sup> Given that professional guidelines for routine prenatal care do not mandate ultrasound screening before 11 weeks EGA for asymptomatic patients who wish to carry their pregnancies to term,<sup>27</sup> there is no clear clinical justification for routinely screening pregnant patients under 11 weeks EGA who are choosing medication abortion.

Based on clinical studies demonstrating a low volume of fetal blood cells in maternal circulation and a low risk of sensitization in patients who do not receive anti-D immune globulin in early pregnancy, NAF guidelines recommend against Rh testing for all abortions at less than 8 weeks EGA.<sup>28,29</sup> For patients between 8 and 11 weeks EGA, providers can screen for history of Rh testing in previous pregnancies and only schedule in-person visits for individuals with no previous testing or unknown status. Hemoglobin testing to screen for anemia has not been

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shown to improve outcomes and is recommended only when there is a high suspicion of anemia.<sup>30</sup>

Some protocols and practices use ultrasound to confirm an abortion is complete. However, there are several other accurate modalities to assess abortion completion, including patient history obtained remotely or in-person, urine HCG testing, or a combination of these methods.<sup>31,32,33,34,35</sup> All of these are supported by evidence and comparable to ultrasound in confirming MAB completion or identifying patients at risk of ongoing pregnancy. By eliminating the patient examination, ultrasound, and lab testing from the MAB process, and by offering phone or telemedicine follow-up, we can care for patients while minimizing physical contact and lowering risk of viral transmission.

Qualitative studies affirm that many abortion patients prefer the privacy, lower clinical volumes, and geographic proximity of primary care offices,<sup>36</sup> and these features also allow patients to minimize exposure risk when seeking timely and essential abortion services. The FDA labeling for mifepristone, one of two medications needed for MAB, requires that it be dispensed in-person to patients. By streamlining protocols, however, we can minimize exposure risk and reduce the time patients must spend in health care facilities both during and after the pandemic. An example of a checklist that clearly outlines steps to minimize physical contact while providing safe and effective care can be found [here](#).

It is important for all people to have timely access to abortion care. As the Covid-19 crisis forces the medical community to develop new practices to ensure patient safety, abortion must be included in these discussions, to ensure optimal experiences for individuals and access to the care they need. Remote options for medication abortion allow clinicians to offer essential, patient-centered care while limiting the need for in-person visits and reducing the risk of

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nosocomial infections. It is important to collect outcome data on the safety of MAB during this period, since this data may encourage primary care clinicians to offer this vital service to their patients even after the pandemic has resolved.

## Conflict of Interest Disclosure

The authors have no conflicts of interest to report.

## Acknowledgments

We gratefully acknowledge the assistance of Payal Patel, MD, Fellow in Family Planning at Albert Einstein College of Medicine, who assisted in the creation of the RHEDI Checklist for Medication Abortion with Minimal Contact and Aleza Summit, MPH, Evaluation and Research Projects Manager at Reproductive Health Education in Family Medicine/Montefiore Medical Center for her review and editorial guidance.

## References

- <sup>1</sup> Omboni, S et al. [The Role of Telemedicine in Hypertension Management: Focus on Blood Pressure Telemonitoring](#). *Curr Hypertens Rep*, Mar 2015; 17; 21.
- <sup>2</sup> Xu T et al. [Telemedicine in the Management of Type 1 Diabetes](#). *Preventing Chronic Disease*. *Preventing Chronic Disease*. Jan 2018; 15:170168
- <sup>3</sup> McConnochie KM et al. [Acute Illness Care Patterns Change with Use of Telemedicine](#). *Pediatrics*, June 2009; 123 (6) e989-e995.
- <sup>4</sup> Bayefsky MJ et al. [Abortion during the Covid-19 Pandemic — Ensuring Access to an Essential Health Service](#). *NEJM*. Epub April 9, 2020.
- <sup>5</sup> American College of Obstetricians and Gynecologists et al., [Joint Statement on Abortion Access During the COVID-19 Outbreak](#), ACOG Website, March 18, 2020.
- <sup>6</sup> Endler M et al. [Telemedicine for medical abortion: a systematic review](#). *BJOG*. 2019 Aug;126(9):1094-1102.
- <sup>7</sup> Aiken ARA et al. [Demand for Self-Managed Medication Abortion Through an Online Telemedicine Service in the United States](#). *Am J Public Health*. 2020 Jan;110(1):90-97.
- <sup>8</sup> Leeman et al. [Can mifepristone medication abortion be successfully integrated into medical practices that do not offer surgical abortion?](#) *Contraception*. 2007 Aug; 76(2):96-100.
- <sup>9</sup> Schwartz EB et al. [Willing and able? Provision of medication for abortion by future internists](#). *Women's Health Issues*. 2005; 15: 39-44.
- <sup>10</sup> Jones R, Witwer E, Jerman J. [Abortion Incidence and Service Availability in the United States, 2017](#). Guttmacher Institute, New York: Sept 2019
- <sup>11</sup> Godfrey EM, Rubin SE, Khare MM, Gold M. [Women's preference for receiving abortion in primary care settings](#). *J Womens Health*. 2010;19(3):547-53.
- <sup>12</sup> Page C, Stumbar S, Gold M. [Attitudes and preferences toward the provision of medication abortion in an urban academic internal medicine practice](#). *J Gen Intern Med*. 2012;27(6):647-52.
- <sup>13</sup> Summit AK et al. ["I don't want to go anywhere else": patient experiences of abortion in family medicine](#). *Fam Med*. 2015;48(1):30-4.

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- <sup>14</sup> Beaman J et al. [Responding to Evolving Abortion Regulations – The Critical Role of Primary Care](#). *NEJM*. May 2019; 380:e30.
- <sup>15</sup> National Abortion Federation (NAF), [Clinical Policy Guidelines for Abortion Care](#). Washington, DC: 2020.
- <sup>16</sup> Mifeprex (mifepristone) [[package insert](#)]. New York, NY: Danco Laboratories, LLC; 2019.
- <sup>17</sup> Clark WH et al. [Can mifepristone medical abortion be simplified? A review of the evidence and questions for future research](#). *Contraception*. 2007 Apr;75(4):245-250.
- <sup>18</sup> Schonberg D et al. [The accuracy of using last menstrual period to determine gestational age for first trimester medication abortion: a systematic review](#). *Contraception*. 2014 Nov;90(5):480-7.
- <sup>19</sup> Raymond EG, Bracken H. [Early medical abortion without prior ultrasound](#). *Contraception*. 2015 Sep; 92:212-4.
- <sup>20</sup> Momberg M, Harries J, Constant D. [Self-assessment of eligibility for early medical abortion using m-Health to calculate gestational age in Cape Town, South Africa: a feasibility pilot study](#). *Reprod Health*. 2016;13(1):40.
- <sup>21</sup> Averbach S, Puri M, Blum M, Rocca C. [Gestational dating using last menstrual period and bimanual exam for medication abortion in pharmacies and health centers in Nepal](#). *Contraception*. 2018 Oct;98(4):296-300.
- <sup>22</sup> Bracken H et al. [Alternatives to routine ultrasound for eligibility assessment prior to early termination of pregnancy with mifepristone-misoprostol](#). *BJOG*. 2011 Jan; 118(1):17-23.
- <sup>23</sup> Raymond E et al. [Simplified medical abortion screening: a demonstration project](#). *Contraception*. Apr;97(4):292-296.
- <sup>24</sup> Kaneshiro B et al. [Expanding medical abortion: can medical abortion be effectively provided without the routine use of ultrasound?](#) *Contraception*. 2011 Mar;83(3):194-201.
- <sup>25</sup> Shannon et al. [Ectopic pregnancy and medical abortion](#). *Obstet Gynecol*. 2004 Jul;104(1):161-7.
- <sup>26</sup> Mol BW, van der Veen F, Bossuyt P. [Symptom-free women at increased risk of ectopic: should we screen?](#) *Acta Obstet Gynecol Scand*. 2002 Jul;81(7):661-72.
- <sup>27</sup> [Ultrasound in pregnancy. Practice Bulletin No. 175. American College of Obstetricians and Gynecologists](#). *Obstet Gynecol*. 2016;128:e241-56.
- <sup>28</sup> Mark, Alice et al. [Foregoing Rh testing and anti-D immunoglobulin for women presenting for early abortion: a recommendation from the National Abortion Federation’s Clinical Policies Committee](#). *Contraception*, Volume 99, Issue 5, 265-266.
- <sup>29</sup> Hollenbach, S.J., M. Cochran, and A. Harrington. [“Provoked” fetomaternal hemorrhage may represent insensible cell exchange in pregnancies from 6 to 22 weeks gestational age](#). *Contraception*. 2019 Aug;100(2):142-146.
- <sup>30</sup> American College of Obstetricians and Gynecologists. [Medical Management of first-trimester abortion](#). Practice Bulletin No. 143. *Obstet Gynecol* 2014;123:676-92.
- <sup>31</sup> Perriera LK et al. [Feasibility of telephone follow-up after medical abortion](#). *Contraception*. 2010 Feb; 81(2):143-149.
- <sup>32</sup> Chen MJ et al. [Comparing office and telephone follow-up after medical abortion](#). *Contraception*. 2016 Aug; 94(2):122-126
- <sup>33</sup> Blum J et al. [Randomized trial assessing home use of two pregnancy tests for determining early medical abortion outcomes at 3, 7 and 14 days after mifepristone](#). *Contraception*. 2016 Aug;94(2):115-21.
- <sup>34</sup> Raymond E et al. [Serial multilevel urine pregnancy testing to assess medical abortion outcome: a meta-analysis](#). *Contraception*. 2017 May;95(5):442-8.
- <sup>35</sup> Raymond E et al. [Low-sensitivity urine pregnancy testing to assess medical abortion outcome: A systematic review](#). *Contraception*. 2018 Jul;98(1):30-35.
- <sup>36</sup> Summit AK et al. [“I Don’t Want to Go Anywhere Else”: Patient Experiences of Abortion in Family Medicine](#). *Fam Med*. 2016 Jan;48(1):30-4.

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