Family Physicians’ Role in Simplifying Medication Abortion During the COVID-19 Pandemic and Beyond

Payal Patel, MD\textsuperscript{1}; Sumathi Narayana, MD, MS\textsuperscript{1}; Zoey Thill, MD, MPP, MPH\textsuperscript{1}; Marji Gold, MD\textsuperscript{1,2}; Allison Paul, MD, MPH\textsuperscript{1}

Author affiliations
1- Department of Family and Social Medicine, Albert Einstein College of Medicine/Montefiore Medical Center, Bronx, NY
2- RHEDI-Mainstreaming Abortion in Family Medicine, New York, NY

Email Addresses of the Authors:

snarayan@montefiore.org
paypatel@montefiore.org
zthill@montefiore.org
marji.gold@einsteinmed.org
alpau@montefiore.org

Address correspondence to Dr. Gold, Department of Family and Social Medicine, 3544 Jerome Avenue, Bronx NY 10467. 718 920-4678. Fax: 212-366-9321. marji.gold@einsteinmed.org.
Conflicting/Competing Interests: The authors have declared that no competing interests exist.

Funding Statement: The authors received no specific funding for this work.

Acknowledgements: We would like to thank Lars Peterson, MD, PhD and Zachary Morgan, MS from the American Board of Family Medicine in Lexington, KY for their assistance with data analysis and review of the manuscript.

Word Count: 1166
Abstract

Introduction: Despite first trimester abortion being common and safe, there are numerous restrictions that lead to barriers to seeking abortion care. The COVID-19 pandemic has only exacerbated these barriers, as many state legislators push to limit abortion access even further. During this pandemic, family physicians across the country have incorporated telemedicine into their practices to continue to meet patient needs. Medication abortion can be offered to patients by telemedicine in most states, and multiple studies have shown that labs, imaging, and physical exam are not medically necessary for the majority of cases. Furthermore, several studies have highlighted that medication abortion is safe and effective when offered in the family medicine setting.

Methods: Data from the 2018-2019 Family Medicine National Graduate Survey were analyzed to determine the proportion of respondents who indicated they were trained to provide pregnancy termination and were providing pregnancy termination upon graduation.

Results: Of the family medicine graduates three years out of residency, 3.7% of respondents reported providing pregnancy termination. However, 13.3% of respondents reported feeling prepared to provide pregnancy termination based on training during residency.

Conclusion: Family physicians are well-poised to incorporate medication abortion into their practices using approaches that limit the spread of the coronavirus, ultimately increasing access to abortion in these unprecedented times.
Family Physicians’ Role in Simplifying Medication Abortion During the COVID-19 Pandemic and Beyond
First trimester abortion is one of the most common outpatient medical procedures in the United States (US). It is extremely safe and represents over 90% of all abortions that occur in the US.\textsuperscript{1,2} Medication abortion (MAB), which involves taking the pills mifepristone and misoprostol to end a pregnancy, can entail minimal interaction between patients and clinicians. It is approved by the Food and Drug Administration (FDA) for use up to 10 weeks gestation. Since mifepristone’s introduction to the US market in 2000, MAB has become increasingly common and represents 39% of all abortions that occur in the US annually.\textsuperscript{3} Complications are rare, and completion rates are between 97-98%.\textsuperscript{4}

Even prior to the COVID-19 pandemic, patients seeking abortion care have faced decades of onerous legal barriers, institutional restrictions, and an inadequate distribution of abortion providers throughout the US. The most recent data on regional distribution of abortion facilities was published by The Guttmacher Institute and shows that 89% of US counties did not have a clinical facility that provides abortion in 2017. Furthermore, 38% of reproductive-aged women between the ages of 15 and 44 lived in counties without any abortion-providing facility in 2017.\textsuperscript{1} Many states’ governors have used their executive powers to limit or block abortion by deeming it non-essential, possibly employing this rhetoric to make these abortion restrictions last beyond the pandemic. With these limitations in abortion care and with workforce demands shifting outpatient clinicians into the hospital, the COVID-19 pandemic has exacerbated many of the oppressive barriers to abortion access that have existed for decades.

The consequences of the inability to access abortion have been well-demonstrated. Pregnant people who are unable to obtain a wanted abortion are four times more likely than people who
are able to obtain their abortion to live below the federal poverty level, are three times more likely to be unemployed, and are more likely to stay in contact with violent partners. They also experience more serious health problems.\textsuperscript{5,6}

Practice models are evolving rapidly to accommodate essential and time-sensitive healthcare services in light of the COVID-19 pandemic. First trimester abortion services are no exception. Abortion services have fundamentally changed in many clinical contexts in an effort to accommodate patients coping with quarantines, mandatory stay-at-home orders, limited transportation options, and changing work and family obligations. The goal of these changes is to safely limit the contact between patients and staff and ultimately limit the spread of the novel coronavirus. “No test” protocols provide recommendations for patient eligibility,\textsuperscript{7} evaluation of gestational age without clinical contact (e.g. omitting sonogram and pelvic exam),\textsuperscript{8-10} limited Rh testing,\textsuperscript{11-13} and modified follow-up via “videoconference, telephone, patient portal, email, text or other telemedicine modalities.”\textsuperscript{7,14-19} With screening and counseling done ahead of time, the “no test” protocol eliminates the majority of contact between patients and staff. However, unlike other telemedicine care, in which the physician can send a prescription to the pharmacy, the FDA still requires clinicians to dispense mifepristone directly to patients in person.

Increasingly, telemedicine is being employed to maintain and to improve critical access to essential services. As more primary care is being provided through telemedicine, family physicians are well-poised to fill gaps in abortion access via this delivery model. Moreover, according to a 2018 National Academies of Sciences, Engineering, and Medicine report about abortion care in the US, family physicians can provide abortions safely and effectively in the
outpatient primary care setting. MAB specifically draws upon existing clinical skills of family physicians including pregnancy diagnosis and obstetrics, patient-centered counseling, medication management, clinical follow-up, and more. It requires neither procedural training nor specialized equipment and aligns well with the types of care many family physicians are already providing, such as miscarriage management. In light of the COVID-19 pandemic, clinical sites across the country, ranging from large abortion clinics to community-based practices, are employing the “no test” protocol described above, making MAB counseling and follow-up ideal telemedicine visits.

A widespread adoption of MAB provision by family physicians using these simplified protocols could have a profound effect on access to abortion in the US. Historically, family physicians practice in underserved areas of the country and provide care that is difficult to access. There are roughly 200,000 practicing primary care physicians in the US, and workforce data show that family physicians are the most common specialty practicing in medically underserved areas of the US. These areas also happen to be regions with the largest barriers to abortion care. Providing MAB is well-aligned with the central tenets of family medicine, including the commitment to help reduce health care disparities. In addition, several studies have demonstrated the safety of MAB provision in the family medicine outpatient setting, showing MAB success rates of 96.5% and 99.2%. Continuing pregnancy and missed ectopic pregnancy, two outcomes deemed unsuccessful, were rare. Bennett et al found a continuing pregnancy rate of 1.5% and a missed ectopic pregnancy rate of 0.08%, and Prine et al showed a continuing pregnancy rate of 0.4%. Therefore, family physicians have the ability to provide
MAB safely, increasing access to abortion care, especially in parts of the US with numerous barriers to receiving this care.

Although family physicians are well poised to provide abortions, few do. Data from the 2018 and 2019 family medicine national graduate surveys of graduates three years out of residency showed that only 3.7% (172/4644) provided pregnancy terminations. Interestingly, of those who reported providing abortion care, almost half (40.7%) indicated that they did not provide uterine aspiration/D&C, likely signifying that they are only performing MAB (Table 1).

While only 3.7% of recently graduated family physicians provide abortions, 13.3% report feeling prepared to provide abortion care based on training obtained in residency (Table 1). This discrepancy suggests the barriers are not limited to lack of education or training. Indeed, administrative and systems-level barriers in integrating abortion care were most frequently mentioned as reasons why respondents who intended to provide abortion are not currently doing so.26 Other barriers to MAB provision include stringent FDA regulations that require providers to register with a central database in order to dispense mifepristone to patients, strict medication dispensing regulations that require a clinician to dispense the pills directly to the patient, concerns for safety of clinic staff and patients, personal beliefs, lack of insurance reimbursement, and lack of colleague support.20,27,28

[Insert Table 1]
These barriers, like other elements of care provision, are evolving in light of the current COVID-19 pandemic and may not be present to the same extent in the future with new healthcare delivery methods. This time of transition marks an auspicious time to increase MAB delivery within family medicine. One in four women will have an abortion in their lifetime, and nearly every family physician will care for patients who can become pregnant. Now more than ever, MAB services and education should be championed within family medicine. This expansion of care is especially pertinent now, in a time of markedly decreased access to care, but changes adopted should continue into the future to improve patient-centered outcomes in reproductive health and abortion care.
References

1. Jones RK, Witwer E, Jerman J. Abortion Incidence and Service Availability in the United States, 2017. New York: Guttmacher Institute;2019.
2. National Academies of Sciences Eg, and Medicine, Division HaM, Services BoHC, Practice BoPHaPH, U.S. CoRHSAtSaQoACit. The Safety and Quality of Abortion Care in the United States. In:2018.
3. Jones RK, Jerman J. Abortion Incidence and Service Availability In the United States, 2014. Perspect Sex Reprod Health. 2017;49(1):17-27.
4. Upadhyay UD, Desai S, Zlidar V, et al. Incidence of emergency department visits and complications after abortion. Obstet Gynecol. 2015;125(1):175-183.
5. Foster DG, Biggs MA, Ralph L, Gerds C, Roberts S, Glymour MM. Socioeconomic Outcomes of Women Who Receive and Women Who Are Denied Wanted Abortions in the United States. American Journal of Public Health. 2018;108(3):407-413.
6. Ralph LJ, Schwarz EB, Grossman D, Foster DG. Self-reported Physical Health of Women Who Did and Did Not Terminate Pregnancy After Seeking Abortion Services: A Cohort Study. Ann Intern Med. 2019.
7. Raymond EG, Grossman D, Mark A, et al. Commentary: No-test medication abortion: A sample protocol for increasing access during a pandemic and beyond. Contraception. 2020:S0010-7824(0020)30108-30106.
8. Bracken H, Clark W, Lichtenberg ES, et al. Alternatives to routine ultrasound for eligibility assessment prior to early termination of pregnancy with mifepristone–misoprostol. BJOG: An International Journal of Obstetrics & Gynaecology. 2011;118(1):17-23.
9. Constant D, Harries J, Moodley J, Myer L. Accuracy of gestational age estimation from last menstrual period among women seeking abortion in South Africa, with a view to task sharing: a mixed methods study. Reproductive health. 2017;14(1):100-100.
10. Raymond EG, Bracken H. Early medical abortion without prior ultrasound. Contraception. 2015;92(3):212-214.
11. Hollenbach SJ, Cochran M, Harrington A. "Provoked" feto-maternal hemorrhage may represent insensible cell exchange in pregnancies from 6 to 22 weeks gestational age. Contraception. 2019;100(2):142-146.
12. Horvath S, Tsao P, Huang ZY, et al. The concentration of fetal red blood cells in first-trimester pregnant women undergoing uterine aspiration is below the calculated threshold for Rh sensitization. Contraception. 2020.
13. Wiebe ER, Campbell M, Aiken ARA, Albert A. Can we safely stop testing for Rh status and immunizing Rh-negative women having early abortions? A comparison of Rh alloimmunization in Canada and the Netherlands. Contraception: X. 2019;1:100001.
14. Chen MJ, Rounds KM, Creinin MD, Cansino C, Hou MY. Comparing office and telephone follow-up after medical abortion. Contraception. 2016;94(2):122-126.
15. Clark W, Bracken H, Tanenhaus J, Schweikert S, Lichtenberg ES, Winikoff B. Alternatives to a routine follow-up visit for early medical abortion. Obstet Gynecol. 2010;115(2 Pt 1):264-272.
16. Endler M, Lavelanet A, Cleeve A, Ganatra B, Gomperts R, Gemzell-Danielsson K. Telemedicine for medical abortion: a systematic review. Bjog. 2019;126(9):1094-1102.
17. Jackson AV, Dayananda I, Fortin JM, Fitzmaurice G, Goldberg AB. Can women accurately assess the outcome of medical abortion based on symptoms alone? *Contraception.* 2012;85(2):192-197.
18. Perriera LK, Reeves MF, Chen BA, Hohmann HL, Hayes J, Creinin MD. Feasibility of telephone follow-up after medical abortion. *Contraception.* 2010;81(2):143-149.
19. Raymond EG, Tan YL, Grant M, et al. Self-assessment of medical abortion outcome using symptoms and home pregnancy testing. *Contraception.* 2018;97(4):324-328.
20. Beaman J, Schillinger D. Responding to Evolving Abortion Regulations — The Critical Role of Primary Care. *New England Journal of Medicine.* 2019;380(18):e30.
21. Fink KS, Phillips RL, Fryer GE, Koehn N. International medical graduates and the primary care workforce for rural underserved areas. *Health Aff (Millwood).* 2003;22(2):255-262.
22. Fryer GE, Green LA, Dovey SM, Phillips RI, Jr. The United States relies on family physicians unlike any other specialty. *Am Fam Physician.* 2001;63(9):1669.
23. Phillips R, Dodoo M, Petterson S, et al. *Specialty and Geography distribution of the physician workforce: what influences medical student and resident choices?* The Robert Graham Center: Policy Studies in Family Medicine and Primary Care;2009.
24. Bennett IM, Baylson M, Kalkstein K, Gillespie G, Bellamy SL, Fleischman J. Early abortion in family medicine: clinical outcomes. *Annals of family medicine.* 2009;7(6):527-533.
25. Prine L, Lesnewski R, Berley N, Gold M. Medical Abortion in Family Practice: A Case Series. *The Journal of the American Board of Family Practice.* 2003;16(4):290.
26. Srinivasulu S, Maldonado L, Prine L, Rubin SE. Intention to provide abortion upon completing family medicine residency and subsequent abortion provision: a 5-year follow-up survey. *Contraception.* 2019;100(3):188-192.
27. FDA. Risk Evaluation and Mitigation Strategy (REMS) for single shared system mifepristone 200 mg. In:2019.
28. Greenberg M, Herbitter C, Gawinski BA, Fletcher J, Gold M. Barriers and enablers to becoming abortion providers: the reproductive health program. *Fam Med.* 2012;44(7):493-500.
Table 1: Graduate Survey Data from Family Medicine Graduates 2018-2019, American Board of Family Medicine.

| Prepared for Pregnancy Termination Upon Graduation from Residency | Provides Pregnancy Termination | P value |
|---------------------------------------------------------------|-------------------------------|---------|
|                                                               | Yes N=(172)                  | No N=(4,472) | Total N=4,644 |
| Yes                                                          | 130 (75.6%)                  | 489 (10.9%)  | 619 (13.3%)   | <.001 |
| No                                                           | 42 (24.4%)                   | 3,983 (89.1%)| 4,025 (86.7%)|
| Provides Uterine Aspiration/D&C                               | Yes (N=173)                  | No (N=4,472) | Total (n=4,645) |
| Yes                                                          | 102 (59.0%)                  | 121 (2.7%)   | 223 (4.8%)    | <.001 |
| No                                                           | 71 (41.0%)                   | 4,351 (97.3%)| 4,422 (95.2%) |