



Commentary

Adolescent Medicine Providers: A Critical Extension of the Abortion Service Network

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Access to safe abortion is a critical element of reproductive freedom as per the World Health Organization [1]. However, following the United States Supreme Court's ruling in *Dobbs v. Jackson Women's Health Organization* which overturned *Roe v. Wade* and vacated the constitutional right to abortion, 26 states are expected to heavily restrict or ban abortions [2]. While the policy environment surrounding abortion continues to change rapidly, the ensuing geographic shift in both patients and service provision will eliminate or delay access to this time-sensitive medical procedure and disproportionately impact adolescents and young adults (AYAs), especially those already experiencing health disparities stemming from systemic racism and bias [3]. For example, Black and Latinx people are more likely to seek an abortion but have more limited access to healthcare and face more structural barriers (travel, childcare, and funding) when accessing abortion [4]. Black and Indigenous people are also at a 3 to 4 times greater risk for maternal mortality, which will likely increase in the face of unplanned pregnancies [4, 5].

As of 2019, AYAs aged 20–24 years had the highest abortion rates among all age groups (19.0 abortions per 1,000 women) accounting for 27.6% of all abortions. AYAs aged 15–19 years

obtained 8.6% of US abortions (6.0 abortions per 1,000 women). Overall, 77% of AYA abortions occur at ≤ 9 weeks gestation, with older AYAs more likely than younger teens to get abortions at ≤ 9 weeks gestation [6].

At this turning point, it is incumbent on Adolescent Medicine clinicians to provide abortion care where it is legal to do so. As clinicians who specialize in AYA reproductive healthcare, including office gynecology and long-acting reversible contraception procedures, we are well-poised to integrate medical abortion (MA) into our scope of practice. By providing MAs, Adolescent Medicine clinicians can facilitate timely access to care when our patients will be facing overwhelming structural barriers to abortion including cost, transportation, parental notification requirements, confidentiality concerns, and a rapidly changing legal landscape. Because so many AYA abortions occur at ≤ 9 gestation [6], the majority of AYA patients are candidates for MA, which can be safely managed by Adolescent Medicine clinicians.

MA is the most common form of abortion in the United States [7]. MA regimens typically consist of mifepristone, a progesterone receptor modulator that acts as an antiprogesterin, and misoprostol, a prostaglandin analogue [8]. Mifepristone was approved for pregnancy termination in the United States in 2000 and is used in more than 60 countries. Mifepristone–misoprostol regimens are more effective and are preferred over misoprostol-only regimens. Historically, the Food and Drug Administration's risk evaluation and mitigation strategy program restricted

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Box 1. Medication abortion: steps and considerations in implementation^a

- **Learn about MA.**
 - Kaiser Family Foundation MA Policy Brief: <https://www.kff.org/policy-watch/medication-abortion-telemedicine-innovations-and-barriers-during-the-covid-19-emergency/>
 - Outcomes and Safety of History-Based Screening for Medication Abortion: <https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2790319%20/>
- **Understand what is legal in your state.**
 - Kaiser Family Foundation Abortion in the US Dashboard: <https://www.kff.org/womens-health-policy/dashboard/abortion-in-the-u-s-dashboard/>
 - Center for Reproductive Rights: www.reproductiverights.org
 - State parental consent/notification laws, waiting periods, and gestational age restrictions.
 - Guttmacher Institute: www.guttmacher.org/united-states/abortion/state-policies-abortion
- **Identify MA training opportunities and evidence-based curricula.**
 - Training in Early Abortion for Comprehensive Healthcare.
 - Online continuing medical education: <https://www.teachtraining.org/>
 - Curricular tools: <https://www.teachtraining.org/training-tools/create/>
 - Reproductive Health Education in Family Medicine: <https://rhedi.org/>
 - Ryan program: <https://ryanprogram.org/home/overview/>
 - National Abortion Federation: <https://prochoice.org/providers/continuing-medical-education/>
- **Develop relationships with other clinicians who provide abortions. Share best practices in your state. Build on established protocols where available.**
 - Reproductive Health Access Project: <https://www.reproductiveaccess.org/abortion/>
 - Example protocols and teaching manuals.
 - Toolkit for integrating abortion into primary care: <https://www.reproductiveaccess.org/resource/toolkit-integrating-abortion-primary-care/>
- **Partner with local Gynecology, Family Medicine, and Emergency Medicine clinicians who will accept referrals.**
 - MA is not suitable or desirable for all patients and rare complications occur.
 - Identify where patients can obtain ultrasounds and/or surgical procedures, if needed.
- **Identify credentialing and malpractice needs with institutional leadership.**
- **Become a certified prescriber.**
 - <https://www.earlyoptionpill.com/for-health-professionals/>
 - <https://genbiopro.com/prescribing/>
- **Involve nursing, social work, and clinical support staff in creating protocols that promote reproductive rights and reduce stigma and judgment.**
 - Create clinic protocols for eligibility and medication handling (e.g., directly observed therapy and/or partnerships with local pharmacies).
 - Create triage protocols for patient questions/calls.
 - Refine protocols based on quality-improvement principles.
- **Identify mail order pharmacies if you will be providing telemedicine MAs.**
 - Honeybee Health: <https://honeybeehealth.com/conditions/medication-abortion>
- **Create and refine tools in your electronic medical records.**
 - Create note templates to facilitate screening for MA eligibility.
 - Consider medical-legal implications of documentation in your state (e.g., related to ages, SMAs, etc.).
 - Protect confidentiality for those aged 12–17 years, where allowed.
 - Refine tools based on quality-improvement principles and changing laws.

^aReferences current as of this publication.

mifepristone access by requiring “in-person dispensing” at clinics, medical offices, or hospitals, by certified prescribers. These restrictions were not evidence-based, decreased access to care, and did not increase safety. During the COVID-19 pandemic, the in-person requirement was not enforced. In December 2021, after data review, the Food and Drug Administration permanently removed the in-person dispensing requirement, expanding access through the option of mailed prescriptions from certified pharmacies and prescribers [9].

Traditionally MA has involved a visit to a clinician for an ultrasound, pelvic examination, and/or blood tests, directly

observed mifepristone ingestion and follow-up 1–2 weeks later to ensure abortion completion. In 2020, as access to abortion was limited by the COVID pandemic, a “no-test” protocol was proposed for patients with gestational ages (GAs) up to 77 days, wherein clinicians could evaluate patients remotely for medical eligibility based on history and without reliance on ultrasound, blood tests (Rh, Hemoglobin), and pelvic examination, for those deemed eligible [10]. The American College of Obstetricians and Gynecologists guidance specifies a definite last menstrual period date of up to 56 days prior for a no-test approach and 70 days prior for all MAs [7]. Notably, recent data from 14 US

Box 2. Resources for providers in low-abortion access settings^a

- Familiarize yourself with resources covering travel expenses for patients who need abortion services in a different state.
 - Apiary: <https://apiaryps.org/pso-list>
 - National Network of Abortion Funds: <https://abortionfunds.org/need-abortion/#funds-list>
 - National Abortion Federation.
 - Funding Assistance Hotline: 1-800-772-9100
 - Abortion Provider Referral Line: 1-877-257-0012
- **Educate yourself about self-sourced/self-managed abortions.**
 - Innovating Education in Reproductive Health: <https://www.innovating-education.org/course/when-abortion-is-not-available/>
 - Bixby Center for Global Reproductive Health (UCSF): <https://bixbycenter.ucsf.edu/sites/bixbycenter.ucsf.edu/files/Self-managed%20abortion-what%20healthcare%20workers%20need%20to%20know.pdf>
 - Peer reviewed literature.
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7749440/>
 - <https://pubmed.ncbi.nlm.nih.gov/32160664/>
 - <https://pubmed.ncbi.nlm.nih.gov/31693568/>
- **Remain aware of the changing legal landscape in your state.**
 - Center for Reproductive Rights: www.reproductiverights.org
 - State parental consent/notification laws, waiting periods, and gestational age restrictions.
 - Guttmacher Institute: www.guttmacher.org/united-states/abortion/state-policies-abortion
 - If When How: <https://judicialbypasswiki.ifwhenhow.org/>
 - Judicial Bypass Information for Minors.
- **Offer telemedicine abortions with remote prescribing for MA eligible patients were legal.**
 - Honey Bee Health is a mail order pharmacy that dispenses mifepristone and misoprostol: <https://honeybeehealth.com/conditions/medication-abortion>
- **Provide resources for patients to make informed decisions about abortion options.**
 - Hey Jane: <https://www.heyjane.co/>
 - Provides telehealth MAs in states where it is legal.
 - If When How: <https://www.ifwhenhow.org/repro-legal-helpline/>
 - Questions related to reproductive legal rights including SMA.
 - I need an A: <https://www.ineedana.com/>
 - State and age-specific abortion resources.
 - All-Options Talkline: <https://www.all-options.org/find-support/talkline/>
 - Peer-based counselling and support for past or current pregnancy experience with abortion, adoption, parenting, infertility, or pregnancy loss.

^aReferences current as of this publication.

sites using a no-test protocol up to 70 days or 77 days showed rare (<1%) complications at rates comparable to a more traditional testing approach [11], which is consistent with prior international studies [12]. In addition, in states where telemedicine abortion is legal, these protocols allow remote, timely MA for patients unable to travel to clinic, although reimbursement for these services needs to be maintained in a postpandemic era. The evidence supporting these more flexible protocols brings an era of opportunity for new clinicians to join the MA service field.

Given the data supporting the safety of MA and “no-test” MA for medically eligible patients, MA training should be incorporated into all Adolescent Medicine training programs, including those for medical, nursing, and physician assistant trainees. Of the 30 Adolescent Medicine fellowship programs on the Society for Adolescent Health and Medicine’s website, 20 programs are in states that are likely to protect abortion access post-Roe. However, eight programs are in states with near total abortion bans, including pre-Roe bans (Michigan, Wisconsin), laws that challenged Roe v. Wade (Alabama, Oklahoma, two programs in Texas), and restrictive trigger laws that are expected to take effect (Indiana, Florida) [2]. The two programs in Ohio will also be

impacted with a 6-week abortion ban. In addition to the grave impact on patients, trainees across all disciplines will not receive abortion training in these restrictive states, translating into a grave reduction in our future workforce. Approximately 44% of gynecological residents will be training in states where abortion is illegal [2]. Thus, training programs in states without abortion restrictions/bans must maximize access for trainees from other institutions through sharing of curricula, opening online trainings for outside learners, and facilitating travel for away electives. Training should include AYA physicians and AYA allies from Pediatrics, Family Medicine, Internal Medicine, Emergency Medicine, and advanced practice nurses and physicians assistants as legally permitted. Educational opportunities can be leveraged across disciplines to train residents, fellows, and clinicians in practice (Box 1). Expanding MA clinicians will be particularly critical in states with abortion restrictions based on weeks of pregnancy.

In addition to expanding training in states where abortion rights will be maintained, Adolescent Medicine clinicians will need to create and enhance partnerships with other specialties to maximize MA access. Collaborations with Gynecology, Family Medicine, and Emergency Medicine must be established for

patients who are not candidates for MA. Nurses, Physician Assistants, Social workers, and Pharmacists all play critical roles in expanding MA access within health systems (Box 1). Clinicians in states with policies hostile to abortion services can support their patients by connecting them with reliable resources (Box 2). Providers across the country can also provide anticipatory options counseling as a part of routine well visits and contraceptive counseling where they are legally allowed to do so. In addition, clinicians everywhere should expect to see an increase in self-managed or self-sourced abortions (SMAs) obtained outside the formal healthcare system, most commonly with mifepristone and misoprostol obtained online. Approximately 7% of pregnant people have sought SMAs and data support the safety and efficacy of SMA for patients who can estimate their GA based on last menstrual period [13,14]. Clinicians will need skills in addressing patient concerns about SMA, and most importantly, refrain from criminalizing patients who pursue SMAs regardless of state residence [13]. Collectively these practices could help alleviate the pressure that will be placed on dedicated abortion clinics. Through the direct provision of services, Adolescent Medicine clinicians have an opportunity to provide evidence-based reproductive health services now, when our patients need them the most.

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References

- [1] Abortion care Guidelines. World Health Organization. 2022. Available at: <https://www.who.int/publications/i/item/9789240039483>. Accessed June 1, 2022.
- [2] Vinekar K, Karlapudi A, Nathan L, et al. Projected Implications of overturning Roe v wade on abortion training in U.S. Obstetrics and gynecology residency programs. *Obstet Gynecol* 2022;140:146–9.
- [3] Goyal V, McLoughlin Brooks IH, Powers DA. Differences in abortion rates by race-ethnicity after implementation of a restrictive Texas law. *Contraception* 2020;102:109–14.
- [4] Artiga S, Follow HL, Ranji U, et al. What are the Implications of the overturning of Roe v. Wade for racial disparities? Kaiser Family Foundation. Published July 15, 2022. Available at: <https://www.kff.org/racial-equity-and-health-policy/issue-brief/what-are-the-implications-of-the-overturning-of-roe-v-wade-for-racial-disparities/>. Accessed August 5, 2022.
- [5] Kozhimannil KB, Interrante JD, Tofte AN, Admon LK. Severe maternal morbidity and mortality among indigenous women in the United States. *Obstet Gynecol* 2020;135:294–300.
- [6] Kortsmit K. Abortion surveillance — United States, 2019. *MMWR Surveill Summ* 2021;70:1–29.
- [7] Medication abortion now Accounts for more than Half of all US abortions. Guttmacher Institute. Published February 22, 2022. Available at: <https://www.guttmacher.org/article/2022/02/medication-abortion-now-accounts-more-half-all-us-abortions>. Accessed July 4, 2022.
- [8] American College of Obstetricians and Gynecologists' Committee on Practice Bulletins—Gynecology, Society of Family Planning. Medication abortion up to 70 Days of gestation: ACOG practice Bulletin, Number 225. *Obstet Gynecol* 2020;136:e31–47.
- [9] Schneider ME. FDA removes in-person dispensing requirement for abortion medication. *Regulatory Focus*. Published December 17, 2021. Available at: <https://www.raps.org/news-and-articles/news-articles/2021/12/fda-removes-in-person-dispensing-requirement-for-a>. Accessed August 5, 2022.
- [10] Raymond E, Grossman D, Mark A, et al. Commentary: No-test medication abortion: A sample protocol for increasing access during a pandemic and beyond. *Contraception* 2020;101:361–6.
- [11] Upadhyay UD, Raymond EG, Koenig LR, et al. Outcomes and safety of history-based Screening for medication abortion: A Retrospective Multi-center Cohort Study. *JAMA Intern Med* 2022;182:482–91.
- [12] Karlin J, Perritt J. It is time to change the standard of medication abortion. *JAMA Intern Med* 2022;182:491–3.
- [13] Harris LH, Grossman D. Complications of unsafe and self-managed abortion. *N Engl J Med* 2020;382:1029–40.
- [14] Aiken ARA, Romanova EP, Morber JR, Gomperts R. Safety and effectiveness of self-managed medication abortion provided using online telemedicine in the United States: A population based study. *Lancet Reg Health Am* 2022;10:100200.