Research Square

Preprints are preliminary reports that have not undergone peer review.
They should not be considered conclusive, used to inform clinical practice,
or referenced by the media as validated information.

A Pre-Post Study Evaluating a Novel Abortion Training Program for Physicians and Advanced Practice Clinicians

Jessica Lee

jklee@som.umaryland.edu

University of Maryland School of Medicine

David Bunnell

University of Maryland School of Graduate Studies

Jaylynn Johnstone

University of Maryland Baltimore

Allison Howard

University of Maryland Baltimore

Mary Jo Bondy

University of Maryland School of Graduate Studies

Research Article

Keywords: Abortion training, standardized patients, medication abortion

Posted Date: November 11th, 2026

DOI: https://doi.org/10.21203/rs.3.rs-11142542/v1

License: This work is licensed under a Creative Commons Attribution 4.0 International License.
Read Full License

Additional Declarations: No competing interests reported.

Abstract

A Pre-Post Study Evaluating a Novel Abortion Training Program for Physicians and Advanced Practice Clinicians

Background: The University of Maryland Baltimore (UMB) Maryland Abortion Reproductive Clinical Health (MARCH) abortion training program is one of few interdisciplinary abortion training programs in the United States aimed at increasing clinician abortion provision preparedness, with a focus on advanced practice clinicians and primary care providers. The goal of our study was to assess MARCH program clinician fellows' confidence and competence in providing high-quality, patient centered reproductive healthcare before and after our training program.

Methods: We conducted a pre-, post-educational evaluation program from August 2024-March 2026 to assess changes in learner self-reported confidence and competence related to abortion care. We electronically surveyed participantspre-training, and immediately post-training and 6 months post training. We used descriptive statistics to summarize participant characteristics and survey responses. We compared confidence and competence scores using the Mann-Whitney U test as the dependent variables were nonparametric. We set statistical significance at $p < 0.05$.

Results: We enrolled 94 participants across 10 training cohorts into the MARCH Program, with 71 participants who consented to research. APCs comprised 94% (n = 67) of participants, including Certified Nurse Midwives, Nurse Practitioners, and Physician Associates. Physicians represented 6% (n = 4) of the sample. Immediately post-training, we found statistically significant improvements in learner confidence and competence across all domains central to patient care, communication, and ethical practice following participation in the MARCH program ($p<0.01$). We found learner self-reported improvements were sustained at 6-months post training.

Conclusions: Our abortion training program resulted in statistically significant improvement in all domains relating to participant self-reported confidence and competence and clinical skills to deliver high-quality abortion and comprehensive reproductive health care.

Background

Recent federal and state policy changes have reshaped the national abortion landscape, positioning Maryland as an important access point for abortion care. At the same time, the state faces a shortage of trained providers, increasing the need for comprehensive abortion training programs. Maryland has 1.4 million people of reproductive age that could potentially become pregnant. [1] As of 2020, approximately two-thirds of Maryland counties did not have an abortion provider. [2] Abortion care access is particularly needed in suburban and rural counties where physicians and advanced practice clinicians (APCs) are vital parts of community health care and primary care settings. In one survey, a majority of people reported preferring to receive their abortion in a primary care setting. [3]Unfortunately, there is still a significant unmet demand for training and resource provision to integrate abortion into primary care. [4,5]

In 2022, Maryland enacted the Abortion Care Access Act which expanded access to abortion in Maryland by removing Maryland's physician only law and allowing other qualified APCs including nurse practitioners (NPs), physician assistant/associates (PAs), certified nurse midwives (CNMs), and licensed certified midwives to provide abortion care. APCs have long been recognized to provide safe and quality abortion care.[6,7] The Act also set aside funding for an abortion training program to expand and diversify the types of providers trained in abortion care.[8] APCs currently provide abortion care in 23 states.[9]

To expand the abortion provider workforce considering the new ability for APCs to provide care, our program sought to develop an interdisciplinary, trauma informed, multi-modal approach to abortion training. Led by a diverse education team comprised of both advanced practice clinician and physician educators, the MARCH Program developed an abortion training curriculum for APCs and physicians focused on improving competence and confidence in high-quality patient-centered reproductive healthcare, with a focus on medication abortion.

The MARCH Program's educational initiative is one of few in the United States aiming to improve and expand training in abortion care. Clinical Abortion Training Centers (CATC) program, University of Washington, Rutgers University, University of Chicago, University of California San Francisco, University of Illinois and California's Reproductive Health Service Corps all have launched abortion training programs.[10] The University of Illinois' RADIANT Fellowship provides training for physicians and APCs to manage abortion care with a program including asynchronous online and in-person skills and standardized patient encounters developed in collaboration with MARCH.[11]University of Chicago's ExPAND Mifepristone Learning Collaborative was developed to support evidence-based use of mifepristone for early pregnancy loss (EPL) and abortion in primary care settings through several modalities including hands-on training. Early cohorts that trained with ExPAND affirmed that mifepristone provision in primary care was an important service and ExPAND helped achieve that goal.[12] Data from the CATC program focused on procedural abortion care provision outcomes citing how many participants were providing abortion care regularly over time.[13] Most data from training outcomes focuses on procedural abortion care outcomes with ob/gyn or family medicine residents specifically.[14,15] There is no data currently on how interdisciplinary training programs impact learner confidence and competence in abortion skills after a training intervention.

The tools used for MARCH program assessments include both faculty competency assessments and self-reported surveys which are widely used for assessment in nursing and medical education. The literature shows that self-efficacy and confidence in knowledge and skills are critical to providing medical and healthcare services in practice following training. Prior experts have reported that to focus solely on competency is detrimental; proportional confidence is integral in providing safe and professional practice.[16]

The goal of our study was to assess MARCH program clinician fellows' confidence and competence in providing high-quality, patient-centered reproductive healthcare before and after our training program. Outcomes data from training programs, coupled with coordinated curriculum development, are essential

to supporting sustainable and reproducible abortion training in the post–*Dobbs v. Jackson Women's Health Organization* landscape.

Methods

We conducted a pre-, post-educational evaluation to assess changes in learner self-reported confidence and competence related to abortion care following participation in a comprehensive abortion training program. Participants underwent informed consent and agreed to participate in the study upon enrollment into the UMB MARCH program. Participants included physician and APCs living and practicing in Maryland who were seeking abortion training and took part in the MARCH program from August 2024-March 2026. Participation in the research evaluations was voluntary and responses were collected anonymously. This research was determined to be exempt by the University of Maryland Baltimore Institutional Review Board (HP-00111040).

When constructing our surveys, we noted a dearth of medical provider self-assessment tapping into confidence and self-efficacy for providing patient-centered reproductive healthcare;[17] therefore, our study included items and an examination beyond just competency, including confidence assessment gathered from various validated measures, all grounded at the theoretical intersection of reproductive justice and patient-centered care.[18–20]

Prior to beginning the training program (pre-training), participants completed an online survey assessing their confidence in 1) Relational, Ethical, and Reproductive-Justice and 2) Clinical Competence and Care Delivery developed by the MARCH educational team and informed by core abortion training competencies. Learners rated confidence on a 0–4 scale (0 = no confidence, 4 = high confidence). Learners rated agreement on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree).

Participants then completed the MARCH training program within two months, which integrates online didactic content, applied learning, and high fidelity and standardized patient simulation-based skills workshops and assessment and includes:

1. Completion of the Training in Early Abortion for Comprehensive Healthcare (TEACH) curriculum [21]with Maryland -specific content authored by MARCH faculty [22]and a summative assessment multiple-choice test generated by our faculty members (asynchronous)
2. Completion of National Abortion Federation (NAF) ultrasound modules [23]
3. Viewing a demonstration video of medication abortion encounter[24]
4. Participation in two-day in-person immersion training event including:

1. Didactic lectures on 1) Medication Abortion Basics 2) Complex Medication Abortion Scenarios and 3) Ultrasound in Early Pregnancy 4) Medical Abortion Practice Implementation based on NAF and TEACH resources
2. Simulation-based skills workshops for pelvic ultrasound, intrauterine device insertion, and procedural abortion
3. Assessment and experience through 3 standardized patient encounters involving medication abortion: 1) in-office medication abortion 2) telemedicine medication abortion 3) medication abortion follow up.

*Faculty trained in Debriefing with Good Judgement[25] feedback techniques provided participant feedback after all simulation exercises and standardized patient encounters.

1. Community of Practice during and after training including:

    1. Monthly webinars on abortion and reproductive health topics with time for Q&A about cases from fellows was provided
    2. Ongoing mentorship with MARCH program faculty with an assigned mentor for each participant
    3. Quarterly newsletters on pertinent abortion updates and community support

Following the training, participants completed an immediate post-training survey (responses allowed up to a week after) and 6-month post-training survey similar to their pre-training survey.

Survey responses were collected anonymously and could not be linked at the individual participant level across timepoints. One survey respondent rated all items the lowest score and was removed as an outlier. Pre-training, post-training, and 6-month post-training responses were therefore analyzed as independent samples. Given the ordinal nature and nonparametric distribution of the survey data, Mann-Whitney U tests were used to compare responses across timepoints. Statistical significance was set at $p < .05$. All statistical analyses were conducted using IBM SPSS Statistics for Windows, Version 29.0.

Results

Ninety-four MARCH fellows were invited to participate in the study, with 71 agreeing to have their program evaluation data included in this research (Table 1). We obtained data from 45 participants for the 6-month post-training timepoint (cohorts 2–9), with data collection ongoing for the last cohort. At baseline (pre-training) timepoint, advanced practice clinicians comprised 94% (n = 67) of respondents, including Certified Nurse Midwives, Nurse Practitioners, and Physician Associates. Physicians represented 6% (n = 4) of the sample. Race was reported as White (69%, n = 49), Black/African American (17%, n = 12), Asian/Asian American (3%, n = 2), and Multiracial or Self-described (11%, n = 8). Ethnicity was reported as Hispanic/Latinx (6%, n = 4), Non-Hispanic (90%, n = 64), and 4% (n = 3) as Missing or Not Reported. We obtained pre-training, post-training, and 6-month post-training responses from 71, 67 (RR = 81%), and 45 (RR = 63%) participants respectively.

Relational, Ethical, and Reproductive-Justice Confidence

We found statistically significant improvements in learner confidence and competence across all domains central to relational, ethical, and reproductive-justice practice following participation in the MARCH program. The results demonstrate consistent and significant improvements from pre-test to post-test across all measured domains as detailed in Table 1.

The largest confidence gain was observed in understanding legislation relevant to contraception and abortion care, with mean confidence increasing from 1.8 to 3.3 ($\Delta = 1.5$, $p < .001$,). This represents a substantial shift in a domain with low baseline familiarity and reflects the targeted impact of the curriculum in addressing knowledge gaps. More moderate but consistent improvements were observed across interpersonal and clinical domains, including confidence in supporting patient well-being and recognizing and responding to patient distress. Learners also reported increased confidence in advocacy, partnership with patients and families, and enabling patient decision-making. These findings suggest steady development across reproductive health domains that require both clinical awareness and interpersonal engagement. Another confidence gain was noted in the domain as acting as change agents and providing leadership to enhance patient's well-being, increasing from 2.7 to 3.4 ($\Delta = 0.7$, $p < .001$). This suggests that the training program resulted in growth in areas that extend beyond direct patient interaction and into systems-level thinking. (Table 1)

At six months post training, we found confidence gains were largely sustained with mean scores remaining stable or showing slight improvement across domains. These findings suggest that the program supports both immediate and durable development of learner confidence, particularly in areas related to systems knowledge, ethical practice, and patient-centered care. (Table 1)

Clinical Competence and Care Delivery Confidence

We evaluated changes in learners' self-reported agreement with statements reflecting their perceived ability and confidence to perform key clinical and care delivery tasks following participation in the MARCH program. (Table 2)

Across all domains, learners reported statistically significant increases in agreement from pre-test to post-test ($p < .001$ for all items), with effect sizes ranging from moderate to large. The most substantial gains were observed in areas requiring complex and sensitive abortion care communication. Confidence in discussing the risks and benefits of abortion care increased from 3.3 to 4.7 ($\Delta = 1.4$), and confidence in providing abortion counseling increased from 3.5 to 4.7 ($\Delta = 1.2$). Moderate improvements were observed in domains related to reproductive health assessment and contraceptive counseling. Confidence in conducting a reproductive health assessment increased from 3.9 to 4.7, and counseling on family planning and contraceptive options increased from 3.9 to 4.7. These findings indicate a meaningful shift in learners' perceived ability to engage and deliver abortion care in clinical practice. (Table 2)

Six-month follow-up data, although limited by a smaller sample size, show these improvements were sustained. We found that mean scores remained high across all domains, generally ranging from 4.8 to 4.9, with minimal change from post-test values. (Table 2)

Clinical Practice Outcomes

At six months, we found that 42% (19/45) of participants were providing medication abortion services. Among these participants, 17 were newly providing medication abortion services after completing the MARCH training program. Additionally, 62% of participants (28/45) reported newly incorporating advanced family planning and abortion counseling into their clinical practice. We found the most cited barriers to practicing were employment status due to job finding difficulties or retirement, facing institutional barriers, or working at a religiously affiliated health systems where incorporation of abortion care may not be permitted. Participants most requested support items from the training program were job placement and networking as well as peer support and continued professional development

Discussion

The MARCH educational initiative successfully trained 94 clinicians in 20 months. This effort expanded the distribution of trained clinicians in Maryland. We were able to address a previously unmet need for abortion training in Maryland, with a particular focus on APC training after state legislation enabled abortion care provision by APCs. We were able to gather data before and after a training program from a majority of participants, a unique feat of any educational program. Our pre-, post- data suggest that our short-term training including online didactic content, applied learning, and simulation-based skills workshops and standardized patient assessment resulted in statistically significant improvement in all domains relating to participant self-reported confidence and competence and clinical skills to deliver high-quality abortion and comprehensive reproductive health care. At the 6 months post training time point, we found that 42% of participants reported providing medication abortion, indicating the program has long term impact on practice and care provision.

Early cohorts that trained with the ExPAND Mifepristone program (1 year program) showed improvement in knowledge measures in follow up surveys.[26]. Our study demonstrated self-reported improvement in abortion legislative knowledge and clinical skills with a shorter training program intervention. Abortion training has the ability to increase experience and provision of care with multiple types of learners. Data from Family Medicine resident abortion training programs have indicated increased experience in procedural and medication abortion with resident abortion provision increasing from 15 to 79% during training. Residents also self-rated increased abortion competency.[14]

Our study is limited by our response rate 6 months post training with current collection of data ongoing for more recent cohorts. Self-reporting bias could be present given participants rating themselves and the effect of an intervention. Parts of our training program may not be reproducible in other environments; our study took place where state legislation and the educational environment made

executing the training program possible. Our study's strengths include a greater than 80% response rate for our post-training assessment. Another strength is that our training program utilized simulation and could be a model of training for places where direct patient abortion care is restricted or training opportunities with pregnant patients are limited.

Post *Dobbs v. Jackson Women's Health Organization*, interdisciplinary abortion care and access to abortion training are more necessary than ever in settings where abortion is legal as abortion rates continue to rise in the United States.[27] In environments where abortion care is restricted, abortion training with simulation and patient encounters may be the only feasible way to improve confidence and competence with clinicians and learners. We present our training program as a potential model and template for abortion care with demonstrated and sustained participant impact.

Conclusions

The MARCH abortion training program produced meaningful and sustained gains in learner confidence and competence immediately and 6 months post training. Our program may serve as a model for abortion training nationwide as demand for sustainable, reproducible abortion training increases post Dobbs.

Table 1

Self-rated MARCH Learner Confidence in Relational, Ethical and Reproductive Justice-Oriented Competencies at Pre and Post Training

Total population of learners - N = 94 **Cohorts 1–10**	**Pre-Test mean (SD)** **Cohorts 2–10**	**Post-Test mean (SD)** **Cohorts 2–10**	**Change**	**Mann-Whitney U**	**6-Month Post mean (SD)** **Cohorts 2–9**	**6-month change**
	***n* = 71** **RR = 75.5%**	***n* = 67** **RR = 71.3%**		**alpha = 0.05**	***n* = 45** **RR = 47.9%**	
Understand the legislation relevant to the provision of contraception and abortion care in Maryland.	1.8 (1)	3.3 (0.6)	1.5	**p < 0.001**	3.3 (0.7)	0
Support and promote the health, well-being, rights, and dignity of patients.	3.4 (0.7)	3.8 (0.4)	0.4	**p = 0.001**	3.9 (0.3)	0.1
Advocate on behalf of patients, recognizing and managing any ethical challenges presented.	3.1 (0.8)	3.6 (0.6)	0.5	**p < 0.001**	3.8 (0.4)	0.2
Work in partnership with service users, caregivers, and families.	3.1 (0.8)	3.6 (0.6)	0.5	**p < 0.001**	3.6 (0.6)	0
Build partnerships and therapeutic relationships with patients.	3.5 (0.7)	3.7 (0.5)	0.2	**p = 0.03**	3.8 (0.4)	0.1
Enable patients to make their own decisions and choices.	3.5 (0.6)	3.9 (0.3)	0.4	**p < 0.001**	3.9 (0.3)	0
Recognize when patients are anxious or in distress and respond effectively.	3.3 (0.6)	3.7 (0.5)	0.4	**p < 0.001**	3.9 (0.3)	0.2

Note. Learners rated confidence on a 0–4 scale (0 = no confidence, 4 = high confidence) at pre-test, post-test, and 6 months. Six-month data were available for Cohorts 2–8. Mann–Whitney U tests were used for group comparisons (α = .05).

Total population of learners - N = 94 **Cohorts 1–10**	**Pre-Test mean (SD)** **Cohorts 2–10**	**Post-Test mean (SD)** **Cohorts 2–10**	**Change**	**Mann-Whitney U**	**6-Month Post mean (SD)** **Cohorts 2–9**	**6-month change**
	***n* = 71** **RR = 75.5%**	***n* = 67** **RR = 71.3%**		**alpha = 0.05**	***n* = 45** **RR = 47.9%**	
Act as change agents and provide leadership to enhance peoples' well-being.	2.7 (0.8)	3.4 (0.6)	0.7	**p < 0.001**	3.9 (0.3)	0.5
Be self-aware and recognize how values, principles, and assumptions affect practice.	3.2 (0.7)	3.6 (0.6)	0.4	**p < 0.001**	3.6 (0.6)	0

Note. Learners rated confidence on a 0–4 scale (0 = no confidence, 4 = high confidence) at pre-test, post-test, and 6 months. Six-month data were available for Cohorts 2–8. Mann–Whitney U tests were used for group comparisons (α = .05).

Table 2

Self-rated MARCH Learner Confidence in Clinical and Care Delivery Competencies at Pre and Post Training

Total population of learners **N = 94** **Cohorts 1–10**	**Pre-Test mean (SD)** **Cohorts** **2–10**	**Post-Test mean (SD)** **Cohorts** **2–10**	**Change**	**Mann-Whitney U for non-parametric data**	**6-month Post mean (SD)** **Cohorts** **2–9**	**6-month change**
	n = 71 **RR = 75.5%**	**n = 67** **RR = 71.3%**		**alpha = 0.05**	***n* = 45** **RR = 47.9%**	
I feel confident in my ability to communicate with patients respecting diversity of beliefs and lived experience.	4.4 (0.7)	4.8 (0.4)	0.4	**p < 0.001**	4.9 (0.3)	0.1
I feel confident in my ability to conduct a reproductive health assessment, identifying clinical and non-clinical risks.	3.9 (0.1)	4.7 (0.5)	0.8	**p < 0.001**	4.8 (0.4)	0.1
I feel confident in my ability to counsel a patient regarding advanced family planning and contraceptive options.	3.9 (1)	4.7 (0.5)	0.8	**p < 0.001**	4.9 (0.3)	0.2
I feel confident in my ability to provide patients with bias-free counseling when discussing pregnancy options.	4.3 (0.7)	4.8 (0.4)	0.5	**p < 0.001**	4.9 (0.3)	0.1
I feel confident in my ability to provide counseling regarding abortion care options.	3.5 (1.1)	4.7 (0.5)	1.2	**p < 0.001**	4.8 (0.5)	0.1
I feel confident in my ability to discuss the risks and benefits of abortion care options.	3.3 (1.1)	4.7 (0.5)	1.4	**p < 0.001**	4.8 (0.5)	0.1

Note. Learners rated agreement on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) at pre-test, post-test, and 6 months. Six-month data are preliminary and available for Cohorts 2–8 only. Mann–Whitney U tests were used (α = .05).

Total population of learners N = 94 Cohorts 1–10	Pre-Test mean (SD) Cohorts 2–10	Post-Test mean (SD) Cohorts 2–10	Change	Mann-Whitney U for non-parametric data	6-month Post mean (SD) Cohorts 2–9	6-month change
	n = 71 RR = 75.5%	n = 67 RR = 71.3%		alpha = 0.05	*n* = 45 RR = 47.9%	
I feel confident in my ability to discuss the risks and benefits of various contraceptive methods.	4.1 (0.9)	4.8 (0.4)	0.7	**p < 0.001**	4.8 (0.4)	0

Note. Learners rated agreement on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) at pre-test, post-test, and 6 months. Six-month data are preliminary and available for Cohorts 2–8 only. Mann–Whitney U tests were used (α = .05).

Abbreviations

APC

Advanced practice clinician

CATC

Clinical Abortion Training Centers

CNM

Certified nurse midwife

EPL

Early pregnancy loss

MARCH

Maryland Abortion and Clinical Reproductive Health

NAF

National Abortion Federation

NP

Nurse practitioner

PA

Physician assistant/associate

RR

Response rate

SPSS

Statistical Package for the Social Sciences

TEACH

Training in Early Abortion for Comprehensive Healthcare

Declarations

Ethics approval:

• This study was approved by the University of Maryland, Baltimore Institutional Review Board in accordance with the Declaration of Helsinki.

Consent for publication:

• Not applicable as we have not included any identifying images or details of participants.

Funding:

Funding for the MARCH program is through the Maryland Department of Health. The Maryland Department of Health reviewed this manuscript prior to publication.

Author Contribution

AH, MJ, JL and JJ developed the research question and conceived the study design. AH and JJ led participant data collection. DB analyzed and interpreted the participant data. JL and DB were major contributors in writing the manuscript. AH died unexpectantly during the study period. All living authors read and approved the final manuscript.

Acknowledgement

Funding for this work was provided by the Maryland Department of Health through the Maryland Abortion and Reproductive Clinical Health (MARCH) Program. The content is solely the responsibility of the authors and does not necessarily represent the official views of the Maryland Department of Health. The authors thank the Maryland Department of Health for its ongoing partnership in advancing abortion education in Maryland. Our team would like to acknowledge the work of our standardized patients, MARCH educational team members (Erika Bramlette, Andrea Desai Jenifer Fahey, Margo Gill, Malissa da Graca, Matthew Grant, Gracie Nichols, Lisa Spencer) and the MARCH program management team (Shelley Bacchus, Nadia Karber, Jordan Carter).

Data Availability

The datasets generated during the current study are not publicly available due the sensitive nature of the abortion training program and legislation to protect participant information but are available from the corresponding author on reasonable request.

References

1. Interactive Map: US Abortion Policies and Access After Roe | Guttmacher Institute. Accessed April 25. 2026. https://states.guttmacher.org/policies/maryland/abortion-policies
2. Jones RK, Kirstein M, Philbin J. Abortion incidence and service availability in the United States, 2020. Perspect Sex Reprod Health. 2022;54(4):128–41. 10.1363/PSRH.12215.
3. Godfrey EM, Rubin SE, Smith EJ, Khare MM, Gold M. Women's preference for receiving abortion in primary care settings. J Womens Health (Larchmt). 2010;19(3):547–53. 10.1089/JWH.2009.1454.
4. Shireman H, McHugh A, Connelly R, et al. Demand for abortion training and technical assistance in primary care: Unmet need and programmatic interventions. Contraception. 2024;136. 10.1016/j.contraception.2024.110487.
5. Lee CM, Johns SL, Stulberg DB, Allen RH, Janiak E. Barriers to abortion provision in primary care in New England, 2019–2020: A qualitative study. Contraception. 2023;117:39–44. 10.1016/j.contraception.2022.08.001.
6. Abortion Care Guideline. Accessed April 28. 2026. World Health Organization. Abortion Care Guideline. World Health Organization; 2022.
7. The Safety and Quality of Abortion Care in the United States. The Safety and Quality of Abortion Care in the United States. Published online May. 2018;24. 10.17226/24950.
8. Senate A. 2021. https://mgaleg.maryland.gov/2021RS/fnotes/bil_0003/sb0923.pdf
9. State Abortion Laws and their Relationship to Scope of Practice - AP Toolkit. Accessed April 28. 2026. https://aptoolkit.org/advancing-scope-of-practice-to-include-abortion-care/state-abortion-laws-and-their-relationship-to-scope-of-practice/
10. Quinones N, Auerbach S, Lanshaw N, et al. Educating Midwives as Abortion Providers: Implementing Innovative Models for Standardized Training in Abortion Care. J Midwifery Womens Health. 2025;71(2):255. 10.1111/JMWH.70043.
11. RADIANT Fellowship | University of Illinois Chicago. Accessed April 28. 2026. https://radiant.uic.edu/
12. Sakthivel M, Wolff H, Monast K, McHugh A, Stulberg D, Janiak E. Mifepristone implementation in primary care: Clinician and staff insights from a pilot learning collaborative. Contraception. 2024;130. 10.1016/j.contraception.2023.110280.
13. Predmore Z, Org Z, Rollison J et al. Outcomes from a procedural abortion training program for providers in underserved areas: findings from a four-year evaluation. *BMC Medical Education 2026 26:1*. 2026;26(1):214-. 10.1186/S12909-025-08416-9

14. Summit AK, Gold M. The effects of abortion training on family medicine residents' clinical experience. Fam Med. 2017;49(1):22–7.
15. Landy U, Turk JK, Simonson K, Koenemann K, Steinauer J. Twenty Years of the Ryan Residency Training Program in Abortion and Family Planning. Contraception. 2021;103(5):305–9. 10.1016/j.contraception.2020.12.009.
16. Gottlieb M, Chan TM, Zaver F, Ellaway R. Confidence-competence alignment and the role of self-confidence in medical education: A conceptual review. Med Educ. 2022;56(1):37–47. 10.1111/MEDU.14592.
17. Afulani PA, Nakphong MK, Sudhinaraset M. Person-centred sexual and reproductive health: A call for standardized measurement. Health Expect. 2023;26(4):1384–90. 10.1111/HEX.13781.
18. Brandi K, Fuentes L. The history of tiered-effectiveness contraceptive counseling and the importance of patient-centered family planning care. Am J Obstet Gynecol. 2020;222(4):S873–7. 10.1016/j.ajog.2019.11.1271.
19. Carvajal DN, Klyushnenkova E, Barnet B. Latina contraceptive decision-making and use: The importance of provider communication and shared decision-making for patient-centered care. Patient Educ Couns. 2021;104(9):2159–64. 10.1016/j.pec.2021.03.006.
20. Rodriguez-Osorio CA, Dominguez-Cherit G. Medical decision making: paternalism versus patient-centered (autonomous) care. Curr Opin Crit Care. 2008;14(6):708–13. 10.1097/MCC.0B013E328315A611.
21. TEACH: Training in Early Abortion for Comprehensive Healthcare. Accessed June 2. 2026. https://teachtraining.org/
22. Roberts-Lieb S. Maryland Abortion and Reproductive Clinical Health Training Program. Preprint posted online May 1, 2024. Accessed June 2, 2026. https://umaryland.pressbooks.pub/march/
23. Continuing Medical Education - National Abortion Federation. Accessed June 2. 2026. https://nationalabortionfederation.org/continuing-medical-education/
24. Medication Abortion Initial Clinic Visit: A Demo - YouTube. Accessed June 2. 2026. https://www.youtube.com/watch?v=TgopvZ8HYKM
25. Rudolph JW, Simon R, Rivard P, Dufresne RL, Raemer DB. Debriefing with good judgment: combining rigorous feedback with genuine inquiry. Anesthesiol Clin. 2007;25(2):361–76. 10.1016/J.ANCLIN.2007.03.007.
26. Wu L, Nutting K, Harriett L, McHugh A, Janiak E, Stulberg DB. ExPAND Mifepristone: Medical Management of Miscarriage and Abortion in FQHCs. Ann Fam Med. 2023;21(5):468. 10.1370/AFM.3006.
27. Society of Family Planning. #WeCount Report April 2022 through December 2024. Accessed May 18. 2026. https://societyfp.org/wp-content/uploads/2025/06/WeCount-Report-9-December-2024-data.pdf