Impact of State Abortion Policies on Family Medicine Practice and Training After *Dobbs v Jackson Women's Health Organization*

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VISUAL ABSTRACT

Conflicts of interest: authors report none.

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ABSTRACT

PURPOSE The *Dobbs v Jackson Women's Health Organization* (Dobbs) Supreme Court decision revoked the constitutional right to abortion. Now, restrictive state abortion laws may contribute to the shortage and strain already felt in primary care practice, especially related to the provision of reproductive health care. The purpose of this study is to evaluate perceived impacts of state abortion legislation on family medicine clinicians' practice and medical education regarding reproductive health care.

METHODS Ten questions were added to the 2022 Council of Academic Family Medicine Educational Research Alliance general membership survey to evaluate impact on relevant themes in reproductive health care and training after the Dobbs decision. Responses were categorized by severity of restriction of state abortion policies.

RESULTS Of 1,196 respondents, 49.7% reported employment in states with very restrictive or restrictive abortion policies. The 991 respondents with clinical responsibilities reported significant ($P < .05$) changes in their counseling practices, clinical decision making, worry of legal risks, and trust in patients' self-reported reproductive medical history, compared with peers in protective states. Perceived patient trust toward clinicians remained unchanged. Almost one-half of clinical respondents reported an absence of reproductive health care guidance or recommendations. Restrictive abortion policies significantly ($P < .05$) reduced the desirability and confidence in resident training programs.

CONCLUSIONS Reported changes to clinical activities and training, coming early after the Dobbs decision, affect our current and future workforce and therefore, our patients. Future studies are needed to document continued impact of state restrictions and inform policy to support family medicine clinicians in reproductive health practice and education.

Ann Fam Med 2024;22:492-501. https://doi.org/10.1370/afm.3183

INTRODUCTION

The June 24, 2022, *Dobbs v Jackson Women's Heatlh Organization*[1] (Dobbs) decision by the Supreme Court of the United States to overturn 50-year precedent set by *Roe v Wade*[2] and *Planned Parenthood v Casey*[3] has allowed states to act autonomously in drafting their own abortion laws. Without constitutional protection, the policies that govern the allowance of abortion for those providing or seeking them are, at the time of this writing, in a legal quagmire of cases and pending litigation. The impacts of the changing legal landscape on health care practice and education are only beginning to be explored and documented[4] outside of shared opinion pieces and personal accounts, with early examples following highly restrictive pre-Dobbs legislation in Texas.[5] The consequence of such restrictions after the passage of Texas' State Bill 8 are evident, given reports of a 24% increase in the state's maternal morbidity rate,[6] and an 11.5%[7] to 12.9%[8] increase in Texas' infant and perinatal mortality rate, compared with rates before the Dobbs decision, when fewer pregnancies occurred overall.

Family medicine clinicians (FMCs)—physicians, advanced-practice registered nurses, and physician assistants—faced significant barriers to providing abortion care before the Dobbs ruling,[9] and are now among those who will be increasingly obligated to respond to the health care needs of pregnant patients, regardless of whether the patient undergoes an abortion. Many patients present with chronic medical conditions that amplify their risk for an adverse pregnancy outcome,[10,11] and they have an increased need for reproductive health care integration by FMCs. As the first point of health care contact for many patients, it is important to

characterize areas where FMCs may feel the impact of the Dobbs decision as a means of supporting their work and providing safe access to care for their patients.

Using a national survey of FMCs, we explore several current and foreseeable concerns that state-mandated changes in laws regarding reproductive health care (ie, contraception, sterilization, and abortion services) portend for FMCs. At present, no national study of physicians or other medical professionals with reproductive health care responsibilities has explored if these clinicians have received new guidelines or recommendations from their institutions or organizations about providing such care, or if post-Dobbs state abortion policies result in changes to clinical decision making, patient counseling, or trusted patient relationships. Anticipated impacts of the Dobbs decision on medical training and education have been described within other disciplines,[12,13] but the influence on medical training in family medicine is only just beginning to be explored.[14] As we continue to navigate the shifting legal landscape promulgated by the Dobbs decision, it is crucial to characterize and measure influences on family medicine practice and education according to state-level restrictions.

Therefore, the purpose of this study is to evaluate perceived impacts of state abortion legislation on clinical practice and medical education regarding reproductive health care within the discipline of family medicine.

METHODS

The Council of Academic Family Medicine (CAFM) is a joint initiative of 4 major academic family medicine organizations to support the leadership, research, and education of the discipline: Society of Teachers of Family Medicine, North American Primary Care Research Group, Association of Departments of Family Medicine, and Association of Family Medicine Residency Directors. CAFM's Educational Research Alliance (CERA) collects demographic and organizational data from annual surveys, with proposals for supplemental survey modules (limited to approximately 10 questions) submitted by CAFM members. The methodology of the CERA survey has been described elsewhere.[15,16] The study's proposal was approved for the 2022 CERA general membership survey; the proposed questions included themes of clinical practice, worry, trust, and educational training in reproductive health care (specifically contraception, sterilization, and abortion services). Survey questions for this study's module were drafted by the authors under the guidance of a CERA-assigned research mentor, evaluated by the CERA steering committee, and modified following pilot testing for flow, timing, and readability by family medicine educators (not included in the sampling frame). The Supplemental Appendix shows the final 10 questions in the Family Medicine After Dobbs Ruling survey set. The CERA general membership survey was approved by the American Academy of Family Physicians Institutional Review Board in December 2022.

Study Sample

Those with a membership to 1 of the 4 CAFM organizations and with an address in the United States were invited to participate in the 2022 CERA general membership survey. Membership includes, but is not limited to, family medicine clinicians, researchers, nonclinical faculty, department chairs, administrators/managers, pharmacists, and directors. Residents and students are excluded. Invitations to participate in the study were sent via e-mail on January 11, 2023, and included a link to the survey which was conducted online through SurveyMonkey (Symphony Technology Group). Four automated reminders to complete the survey were sent to non-respondents; the last reminder was 1 day before the survey closed on February 12, 2023. The survey link went to 5,161 members who met the selection criteria; however, 210 had undeliverable e-mail addresses and 80 had previously opted out of receiving surveys from SurveyMonkey. The survey was successfully delivered to 4,871 members of the CAFM organizations.

Guttmacher Institute

The Guttmacher Institute is a 501(c)(3) nonprofit organization that monitors and analyzes legislative, judicial, and executive actions on sexual and reproductive health and rights in the United States and worldwide.[17] To assess the impact of the Dobbs ruling on family medicine, we utilized the Guttmacher Institute's policy tracking interactive map (US Abortion Policies and Access After Roe)[17] to determine the restrictions and protections impacting reproductive health care in each state. A state's level of restriction or protection is scored by Guttmacher's policy experts based on 20 types of restrictive abortion policies (eg, policies on gestational duration bans, insurance coverage, etc) and 10 types of protective abortion policies (eg, funding opportunities, insurance coverages, clinical staff protections, etc).[18] The Guttmacher Institute's classification of abortion policies by state used for this study (February 2022) is shown in Figure 1. The authors requested from the CERA data committee that an additional variable be included post-survey, which classified the respondents' state on severity of abortion policies into 5 categories; this categorization was approved and provided. No information about respondent's state is distributed by the CERA committee to maintain anonymity.

Statistical Analysis

Respondents' demographic and occupational information was summarized using counts and percentages for categorical variables, and means and SD for continuous variables. Respondents' perceptions of family medicine practice post-Dobbs ruling were compared by their state's abortion care and access status using X^2 or Fisher's exact tests, as appropriate. For variables with low expected cell counts, Fisher's exact test using Monte Carlo–simulated P values with 10,000 iterations were computed.[19] All statistical analyses were performed using R version 4.2.1 (R Project for Statistical Computing)[20] with 2-sided tests and statistical significance considered at $P \leq .05$.

RESULTS

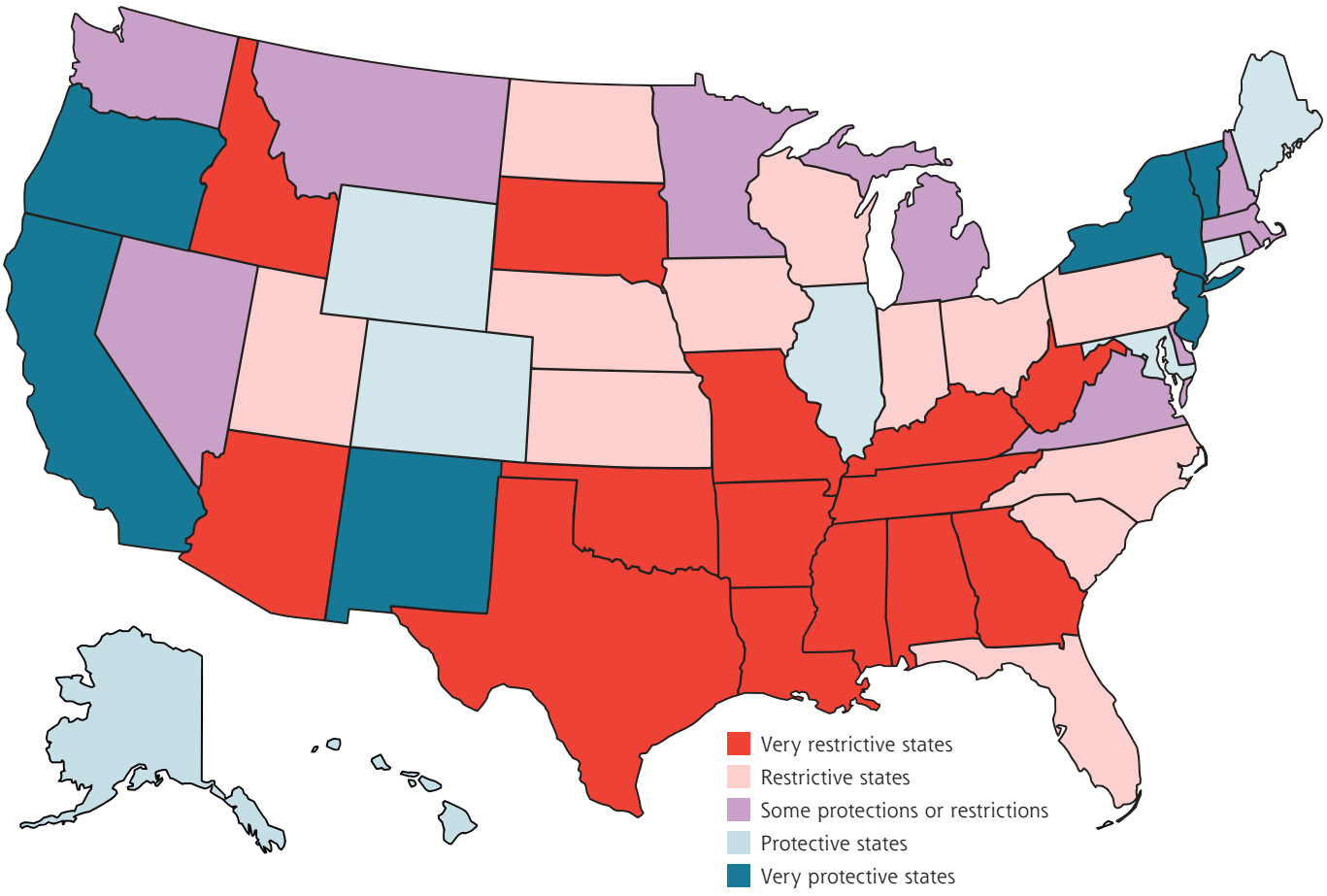
Characteristics of the Sample

Of those who received the 2022 CERA general membership survey, 1,216 out of 4,871 (25.0%) responded. Respondent demographic and occupational information are provided in Table 1. Respondents had a mean age of 48.3 years (SD = 12.3 years), and the majority identified as female (62.4%) and White (75.2%). Almost one-half of respondents held faculty positions (45.6%), and most institutions had multiple residency programs, including family medicine (70.1%). The largest proportions of respondents' locations were in 3 US regions; East North Central (18.8%), South Atlantic (16.8%), and Pacific (15.0%). Additionally, 28.1% of respondents identified as providing care in an underserved area.

Twenty respondents lacked their state of employment data, resulting in an analytical data set of 1,196 respondents with a Guttmacher Institute classification. The categorization resulted in the following: 49.7% of respondents employed in 14 very restrictive (n = 228) or 12 restrictive (n = 366) states; 36.8% of respondents employed in 6 very protective (n = 189) or 9 protective (n = 251) states; and 13.3% of respondents employed in 10 states with some restrictions or protections (n = 162). When asked if reproductive health care is more limited in their state since the Dobbs ruling, 166 (72.8%) respondents in very restrictive states and 180 (49.2%) in restrictive states answered "Yes," significantly more often than respondents in very protective (n = 9, 4.8%) and protective (n = 10, 4.0%) states (P <.001; Table 2). Respondents in states with some restrictions or protections reported no change to limits in reproductive health care (89.5%; Table 2). Further interpretations focus on the comparisons between states with restrictions to states with protections; however, results for states with a combination of both (ie, some restriction or protections) are provided in Table 2 and Table 3.

Of the 1,196 respondents, 205 indicated "I do not see patients in a clinical setting," and 17 others did not answer this question. This left 974 (81.4%) clinical respondents to answer questions about clinical practice, institutional or organizational recommendations, worry about legal risk if providing reproductive health care, and clinicians' perceived trust between them and their patients. These 4 clinical themes are presented in Table 3.

Figure 1. States' abortion access classification.



Note: Rankings at end date of survey administration (February 2022). Source. The Guttmacher Institute. https://states.guttmacher.org/policies/methodology.html

Table 1. Study Participant Characteristics (N = 1,216)

Characteristics	Values	Characteristics	Values
Age, mean (SD), y	48.3 (12.3)	Guttmacher Institute Classifications on abortion access, No. (%)[b]	
Missing, No. (%)	110 (9.0)	Very restrictive	228 (18.8)
Gender, No. (%)		Restrictive	366 (30.1)
Female	759 (62.4)	Some restrictions/protections	162 (13.3)
Male	435 (35.8)	Protective	251 (20.6)
Gender non-conforming	4 (0.3)	Very Protective	189 (15.5)
Non-binary	2 (0.2)	Not grouped[c]	3 (0.2)
Chose not to disclose	12 (1.0)	Missing	17 (1.4)
Missing	4 (0.3)	Institution type, No. (%)	
Race, No. (%)		Allopathic medical school	644 (53.0)
American Indian or Alaska Native	3 (0.2)	Osteopathic medical school	59 (4.9)
Asian	112 (9.2)	Not at a medical school	506 (41.6)
Black or African American	58 (4.8)	Missing	7 (0.6)
Middle Eastern or North African	7 (0.6)	Institution residency program, No. (%)	
Native Hawaiian or Pacific Islander	1 (0.1)	Multiple residencies including family medicine	853 (70.1)
White	915 (75.2)	Multiple residencies not including family medicine	18 (1.5)
Chose not to disclose	33 (2.7)	Only a family medicine residency	278 (22.9)
Missing	87 (7.2)	No residency education	58 (4.8)
Ethnicity, No. (%)		Missing	9 (0.7)
Non-Hispanic	1144 (94.1)	Practice population density, No. (%)	
Hispanic	72 (5.9)	Urban	641 (52.7)
Missing	0 (0.0)	Suburban	382 (31.4)
Degree earned, No. (%)		Rural	185 (15.2)
EdD	11 (0.9)	Missing	8 (0.7)
DNP	0 (0.0)	Underserved area, No. (%)	
DO	115 (9.5)	Yes	342 (28.1)
MD	793 (65.2)	No	752 (61.8)
MD/PhD or DO/PhD	51 (4.2)	Unsure	105 (8.6)
PhD	132 (10.9)	Missing	17 (1.4)
Other doctoral level	33 (2.7)	Role, No. (%)	
Other nursing degree	0 (0.0)	Administrator or manager	44 (3.6)
Masters	60 (4.9)	Behavioral or social science specialist	75 (6.2)
Bachelors	15 (1.2)	Chair or vice chair	64 (5.3)
Missing	6 (0.5)	Clerkship director	24 (2.0)
Year graduated, median (IQR)	2005 (1994-2013)	Coordinator	16 (1.3)
Missing, No. (%)	11 (0.9)	Faculty	555 (45.6)
Region (states), No. (%)		Fellow	13 (1.1)
New England (NH, MA, ME, VT, RI, CT)	76 (6.3)	Nurse	1 (0.1)
Middle Atlantic (NY, PA, NJ)	134 (11.0)	Pharmacist	14 (1.2)
South Atlantic (PR, FL, GA, SC, NC, VA, DC, WV, DE, MD)	204 (16.8)	Practicing physician	80 (6.6)
East South Central (KY, TN, MS, AL)	42 (3.5)	Researcher	59 (4.9)
East North Central (WI, MI, OH, IN, IL)	229 (18.8)	Residency director or associate director	207 (17.0)
West South Central (OK, AR, LA, TX)	86 (7.1)	Other	61 (5.0)
West North Central (ND, MN, SD, IA, NE, KS, MO)	139 (11.4)	Missing	3 (0.2)
Mountain (MT, ID, WY, NV, UT, AZ, CO, NM)	106 (8.7)		
Pacific (WA, OR, CA, AK, HI)	182 (15.0)		
Missing[a]	18 (1.5)		

DNP = doctor of nursing practice; DO = doctor of osteopathy; EdD = doctor of education; IQR = interquartile range; MD = doctor of medicine; PhD = doctor of philosophy

[a] Includes responses from outside of the United States.
[b] Using Guttmacher Institute's Ranking as of February 2023.
[c] Includes responses from Puerto Rico and responses from outside of the United States.

Clinical Practice and Recommendations

Changes in respondents' patient counseling practices and clinical decision-making since the Dobbs ruling are significantly associated with state abortion access status, for those in very restrictive and restrictive states (Table 3). Respondents in very restrictive and restrictive states were also more likely to report receiving new recommendations or guidance from their professional organization, institution, or health care system, compared with those in protective or very protective states (Table 3). However, the response to this question also demonstrated that almost one-half (49.4%, n= 555) of clinicians have not received any new guidelines or recommendations (Table 3).

Worry of Legal Risk

Worry of legal risk if providing reproductive health care was significantly associated with the abortion policies in the respondent's state, with those in very restrictive states reporting more responses to "a lot more worried" (Table 3). Further, 407 (34%) of all respondents reported an increase in worry, regardless of state abortion policies (Table 3).

Patient-Clinician Trust

Patient-clinician trust was assessed with 2 questions that measured, (1) respondents' trust in a patient's self-reported reproductive history, and (2) respondents' perceptions of their patients' trust toward them (the clinician) when self-reporting their reproductive history. Respondents' trust in patients' self-reported reproductive medical history was significantly associated with a state's abortion policies, with a notable decrease in trust for those practicing in very restrictive states (Table 3). However, there was no significant difference in states' abortion policies and clinicians' perceptions of patients' trust toward them when reporting reproductive history (Table 3).

Impact on Medical Education

Since the Dobbs ruling, confidence that respondents' programs could appropriately train medical students and residents in providing reproductive health care significantly differed based on states' abortion policies (Table 2). One-third of respondents in very restrictive states reported being "a lot less confident" in their programs' reproductive health care training. Expected program desirability for residency applicants showed similar results, with programs in states with very restrictive and restrictive abortions policies expecting a decrease in program desirability while those in very protective and protective states reported an anticipated increase in program desirability (Table 2).

DISCUSSION

In states restricting abortion post-Dobbs, FMCs and educators have changed many aspects of their patient care practices and their outlook on training residents. While most feel that their patients' trust of them has been maintained regardless of state policies, on every other indicator of clinical and educational impact, respondents in states with restrictive policies are more likely to report change in clinical practice and educational opportunity compared with states having policies that protect abortion access. Approximately one-half (49.7%) of our sample comprises FMCs who report practicing in very restrictive or restrictive states; of these, approximately one-third report they have changed how they counsel patients and make clinical decisions. This finding may reflect ongoing ethical dilemmas due to the wide-ranging differences in state laws and penalties for providing abortion services, including revocation of medical licenses, fines, and incarceration.

Within the first year of the Dobbs ruling, over 75 medical societies released a joint statement on the difficulties in interpreting and following these laws and the consequences to patient health,[21] with the American Medical Association calling the Dobbs decision a "direct attack on the practice of medicine and the patient-physician relationship."[22] Case reports[4] and legal cases[23] document examples of how clinicians' counseling and clinical decisions—even for patients with life-saving needs (eg, preterm labor and hemorrhage, ectopic pregnancy, severe fetal anomalies, early miscarriage)—have deviated from the medical standard of care since the Dobbs decision. As similar outcomes come to light, it is increasingly recognized that the Dobbs decision impinges on all who offer and provide training for needed support services for reproductive health, irrespective of medical specialty.[24,25]

These changes in care are not always from restrictions in the law, but may be a result of ambiguity in the law and fear of percieved consequences of violating state law.[26] Just under one-third of all survey respondents reported being at least a little more worried about legal risk post-Dobbs. In the most restrictive states, only 1 respondent reported a decrease in worry, while over 21% indicated increased fear over legal risk. Such worry is especially troublesome and likely to persist, as nearly one-half of all respondents, and over 40% of those in states with greater restrictions, have been left without clear guidelines for providing reproductive health care. Moreover, the situation is consistent with what has been found in the obstetrics/gynecology (OB/GYN) specialty: one poll reports that less than 50% of OB/GYN clinicians practicing in restrictive states understand the circumstances in which abortion is legal.[27] This is compared with 79% of clinicians understanding their state's abortion laws in fully protective states and 68% understanding in states with complete abortion bans.[27] The uncertainty and ambiguity surrounding state laws leaves medical professionals in a precarious position.

There is limited information on how (or if) hospitals, medical systems, and medical oversight agencies are developing guidelines and best practice definitions of, for example, what precisely defines lifesaving regarding risk to the patient's life,[28] or the allowable conditions to induce abortion or feticide with the diagnosis of severe fetal anomalies.[29] Confusion about what limits have been imposed on the ability to counsel

patients—especially the sharing of information about out-of-state abortion services—has also been reported in an early Texas (post-State Bill 8) study.[30]

This survey highlights the urgent need for recommendations and guidelines to be developed at the institutional, organizational, and state levels.[31] There are several examples in which updated recommendations are necessary, and we highlight scenarios where guidance would significantly improve care to patients, supported from cases seen in a post-Dobbs world. In a 2016 estimate, 18.5% of hospital systems in the United States had religious affiliations or ownership and may follow their own ethical and religious restrictions,[32] thus institutional guidelines are particularly necessary. Guidelines provide reassurance that clinicians are complying with state laws and institutional directives and will receive full legal support from their institution when they adhere to the guidelines.

One clinical scenario where institutional guidelines would be particularly beneficial is in the management of ectopic pregnancies which are never viable.[33] Before the Dobbs decision, the standard of care was to promptly triage patients for methotrexate treatment or surgery to prevent life-threatening complications. After Dobbs, however, some clinicians are hesitant to expedite treatment due to the presence of fetal cardiac activity in ectopic pregnancies, fearing that life-saving interventions might be misclassified as abortions. This hesitation can lead to delays or avoidance of treatment until the patient's life is in imminent danger.[4,34] Clear institutional guidelines stating that all ectopic pregnancies are exempt from legal restrictions on abortion due to their non-viability can provide crucial reassurance.

Another area where institutional guidelines would be beneficial is in pregnancy options counseling and abortion referrals. While some states impose restrictions on abortion procedures, the legality of providing abortion counseling or referrals may be unclear.[31,35] This ambiguity threatens Title X funding for federal support of family planning and preventive health services, as seen in the *Ohio v Becerra* ruling which granted Ohio the preliminary injunction to halt abortion counseling and referrals (even at patient request) when using Title X family planning funds.[36] Clinicians working in the field of reproductive health care should be granted assurance that they are following state law and will receive full legal support from their home institution. Emergency department and OB/GYN specialties—responding to higher post-Dobbs

Table 2. Responses to Nonclinical Questions

Questions	No. of Responses	Very Restrictive (n = 228) No. (%)	Restrictive (n = 366) No. (%)	Some Restrictions or Protections (n = 162) No. (%)	Protective (n = 251) No. (%)	Very Protective (n = 189) No. (%)	Overall[a] (n = 1,196) No. (%)	*P* Value[b]
Reproductive health care more limited?	1,134							< .001
Yes		166 (72.8)	180 (49.2)	11 (6.8)	10 (4.8)	9 (4.0)	376 (31.4)	
No		42 (18.4)	172 (47.0)	145 (89.5)	230 (91.6)	169 (89.4)	758 (63.4)	
Missing		12 (6.7)	4 (1.4)	6 (4.3)	6 (3.0)	4 (2.5)	32 (3.3)	
Confidence in training residents	1,130							< .001
A lot less confident		75 (32.9)	77 (21.0)	11 (6.8)	8 (3.2)	6 (3.2)	177 (14.8)	
A little less confident		66 (28.9)	141 (38.5)	38 (23.5)	61 (24.3)	37 (19.6)	343 (28.7)	
No change		63 (27.6)	121 (33.1)	79 (48.8)	140 (55.8)	103 (54.5)	506 (42.3)	
A little more confident		2 (0.9)	7 (1.9)	22 (13.6)	24 (9.6)	26 (13.8)	81 (6.8)	
A lot more confident		1 (0.4)	4 (1.1)	4 (2.5)	6 (2.4)	8 (4.2)	23 (1.9)	
Missing		11 (6.1)	4 (1.4)	6 (4.3)	7 (3.5)	3 (1.9)	31 (3.2)	
Change in program desirability	1,125							< .001
I anticipate programs in my state will become less desirable to applicants		105 (46.1)	115 (31.4)	10 (6.2)	3 (1.2)	3 (1.6)	236 (19.7)	
I do not anticipate a change in the desirability of programs in my state to applicants		99 (43.4)	204 (55.7)	89 (54.9)	110 (43.8)	71 (37.6)	573 (47.9)	
I anticipate programs in my state will become more desirable to applicants		3 (1.3)	29 (7.9)	55 (34.0)	126 (50.2)	103 (54.5)	316 (26.4)	
Missing		11 (6.1)	5 (1.7)	6 (4.3)	7 (3.5)	6 (3.7)	35 (3.6)	

[a] From Guttmacher Institute's ranking as of February 2023. Respondents without state identification were excluded (n = 20).
[b] *P* values < 0.05 considered significant.

Table 3. Responses to Clinical Questions

Questions	No. of Responses	Very Restrictive (n = 228) No. (%)	Restrictive (n = 366) No. (%)	Some Restrictions or Protections (n = 162) No. (%)	Protective (n = 251) No. (%)	Very Protective (n = 189) No. (%)	Overall[a] (n = 1,196) No. (%)	*P* Value[b]
Patients of childbearing age, %	1,179							.295
0 to 20		20 (8.8)	38 (10.4)	15 (9.3)	19 (7.6)	17 (9.0)	109 (9.1)	
21 to 40		70 (30.7)	98 (26.8)	50 (30.9)	62 (24.7)	53 (28.0)	333 (27.8)	
41 to 60		66 (28.9)	106 (29.0)	59 (36.4)	79 (31.5)	55 (29.1)	365 (30.5)	
61 to 80		19 (8.3)	45 (12.3)	15 (9.3)	33 (13.1)	29 (15.3)	141 (11.8)	
81 to 100		4 (1.8)	8 (2.2)	0 (0.0)	7 (2.8)	7 (3.7)	26 (2.2)	
Does not see patients in a clinical setting[c]		46 (20.2)	63 (17.2)	23 (14.2)	49 (19.5)	24 (12.7)	205 (17.1)	
Missing[c]		3 (1.3)	8 (2.2)	0 (0.0)	2 (0.8)	4 (2.1)	17 (1.4)	
Received new recommendations	948							.003
Yes		80 (35.1)	141 (38.5)	52 (32.1)	65 (25.9)	55 (29.1)	393 (32.9)	
No		92 (40.4)	150 (41.0)	82 (50.6)	127 (50.6)	104 (55.0)	555 (46.4)	
Missing		7 (3.9)	5 (1.7)	5 (3.6)	8 (4.0)	2 (1.2)	27 (2.8)	
Change in patient counseling	946							< .001
Yes		86 (37.7)	106 (29.0)	28 (17.3)	23 (9.2)	18 (9.5)	261 (21.8)	
No		85 (37.3)	182 (49.7)	106 (65.4)	171 (68.1)	141 (74.6)	685 (57.3)	
Missing		8 (4.5)	8 (2.7)	5 (3.6)	6 (3.0)	2 (1.2)	29 (3.0)	
Change in clinical decision making	946							< .001
Yes		53 (23.2)	71 (19.4)	19 (11.7)	29 (11.6)	18 (9.5)	190 (15.9)	
No		118 (51.8)	217 (59.3)	115 (71.0)	165 (65.7)	141 (74.6)	756 (63.2)	
Missing		8 (4.5)	8 (2.7)	5 (3.6)	6 (3.0)	2 (1.2)	29 (3.0)	
Trust in patient self-reported history[d]	947							.029
My level of trust has decreased		18 (7.9)	24 (6.6)	7 (4.3)	8 (3.2)	12 (6.3)	69 (5.8)	
No change		153 (67.1)	260 (71.0)	127 (78.4)	185 (73.7)	142 (75.1)	867 (72.5)	
My level of trust has increased		0 (0.0)	5 (1.4)	0 (0.0)	1 (0.4)	5 (2.6)	11 (0.9)	
Missing		8 (4.5)	7 (2.4)	5 (3.6)	6 (3.0)	2 (1.2)	28 (2.9)	
Change in patient trust toward physicians	945							.172
I perceive that patients are less trusting		29 (12.7)	35 (9.6)	12 (7.4)	17 (6.8)	17 (9.0)	110 (9.2)	
No change		139 (61.0)	243 (66.4)	118 (72.8)	171 (68.1)	138 (73.0)	809 (67.6)	
I perceive that patients are more trusting		1 (0.4)	11 (3.0)	4 (2.5)	6 (2.4)	4 (2.1)	26 (2.2)	
Missing		10 (5.6)	7 (2.4)	5 (3.6)	6 (3.0)	2 (1.2)	30 (3.1)	
Worry of legal risk[d]	946							< .001
A lot more worried		27 (11.8)	31 (8.5)	7 (4.3)	11 (4.4)	6 (3.2)	82 (6.9)	
A little more worried		71 (31.1)	104 (28.4)	49 (30.2)	61 (24.3)	40 (21.2)	325 (27.2)	
No change		72 (31.6)	149 (40.7)	75 (46.3)	120 (47.8)	107 (56.6)	523 (43.7)	
A little less worried		1 (0.4)	3 (0.8)	1 (0.6)	1 (0.4)	3 (1.6)	9 (0.8)	
A lot less worried		0 (0.0)	2 (0.5)	2 (1.2)	1 (0.4)	2 (1.1)	7 (0.6)	
Missing		8 (4.5)	7 (2.4)	5 (3.6)	6 (3.0)	3 (1.9)	29 (3.0)	

[a] From Guttmacher Institute's ranking as of February 2023. Respondents without state identification were excluded (n = 20).
[b] *P* values < 0.05 considered significant.
[c] Respondents who selected "I do not see patients in a clinical setting" or who did not answer the question (Missing) were excluded from answering the remaining questions in this Table.
[d] *P* value was computed with Monte Carlo simulations (10,000 iterations) of Fisher's exact estimates.

rates of pregnancy-related emergency visits for failed terminations and complications following induced termination—have been swifter to enact policies, protocols, and legal review boards to ensure compliance with the new laws.[34] Family medicine departments would serve their workforce best by, at minimum, specifying if and how clinicians can provide abortion counseling and referral services.

As of 2022, enrollment figures estimate 71% of US medical students will have their training in reproductive services minimized post-Dobbs due to state bans or restrictions.[37] This is occuring at a time when the number of health care professionals able to care for pregnant patients is already at a record low.[38] Worry over the training of future clinicians was also evident, with one-third of respondents in very restrictive states expressing "a lot less" confidence that medical students and residents in their state can be properly trained in providing reproductive health care. For FMCs, this will likely add to current scarcity of necessary reproductive health care training in the profession overall. Further, a 2021 CERA survey of family medicine clerkship directors found that 47% reported no contraceptive curricula; 82% reported no abortion curricula; and only 44% reported any abortion training in their whole program curricula.[39]

An initial reaction would be to assume that states with better access and resources to abortion would be able to provide better reproductive health care training—particularly with abortion content and experiences—for local and out-of-state students and residents. Indeed, respondents from schools in the US West, US Northeast, and Canada were more likely to report curricula inclusive of abortion teaching in the 2021 CERA study.[39] Our data suggests this is not true, however, as the minority of respondents from protective or very protective states reported an increase in confidence that they would be able to appropriately train learners in reproductive health care (12% were "a little more" confident, and only 3% were "a lot more" confident); in fact, 22% reported that they are "a little less" confident. This finding portends that already inconsistent, limited training and educational opportunities for providing abortions in medical programs and departments[40,41] across the country may worsen, even while program directors report that such opportunities improve program appeal to prospective trainees.[42]

Despite uncertainty over their capacity to offer such training, over one-half of all respondents in protective or very protective states expressed that their program or other programs in their state will become more attractive to residency applicants. The results could potentially mirror what has already been trending in OB/GYN applicants; program decreases are highest in states with complete bans (down 10.5%) and lowest (down 5.3%) in states without restrictions.[12] Requests from primary care clinicians, programs, and trainees seeking training or technical assistance on abortion and early pregnancy loss care have already exceeded available programming after the Dobbs decision.[14] Expanding on our recommendation for clinical practice, guidelines are also needed for educators at the institutional level for allowable training experiences and curricula, taking into consideration state law, institutional requirements or restrictions, and the need to provide comprehensive reproductive health education.

Given the considerations for ethical ambiguity and legal worry, centered in a climate where Americans' confidence in medical professionals has declined across longitudinal surveys of both patients and their physicians,[43] we anticipated that trust and communication between patients and clinicians would be reported to have changed since the Dobbs ruling. Specifically, trust in gaining reliable patient obstetric and contraceptive histories has not been previously explored, while evidence for a declining trust of professionals involved in patient's reproductive health care, including abortion services, appears largely in anecdotal reports and in some[44] but not all qualitative studies.[45] Although we found reduced trust in patients' self-reported reproductive medical history for those practicing in very restrictive states, one highlight in our analyses was that perceptions of patient trust in their physician's care remained unchanged. Legislation that further maintains patient trust when discussing needs or disclosing reproductive health care status is critical, although some safeguard to patient health information and private medical records exists through the recent Final Rule issued by the US Health and Human Services. This ruling modifies Health Insurance Portability and Accountability Act law to prohibit access to and use of information related to reproductive health care as a basis for legal liability, provided the care is either federally protected or lawful in the state in which it is provided.[46]

Limitations and Conclusions

Many FMCs offer reproductive health care including fertility care,[47] contraception,[48] and, increasingly, comprehensive care for miscarriage management, pregnancy complications, and medication abortions.[49,50] Further, their work is critical to meeting patients' preference[51,52] and a growing need to obtain these services within primary care, especially in rural areas.[53] Still, limitations to the applicability of our data are possible given the population and sampling method utilized. First, 9% of the FMCs in this sample reported that <20% of their patient population were persons of childbearing age, and only 2% reported this age group to be their majority (>80%) patient demographic. While we have attempted to separate responses from clinicians from the total population of CERA survey respondents, it should be recognized that 58% of the sample reported being employed at an academic institution. Further, most respondents identified as White (75%) and were more likely to identify as female (62.4%). As such, the responses of this sample may not be generalizable to other clinicians or other primary care settings. Additionally, respondents who opted to participate in the survey may have brought prior interest in or experiences with the topic that could limit interpretation of our findings. Some background knowledge was necessary, as the survey title indicated questions would be about the Dobbs decision, but the initial

header (see Supplemental Appendix) did not provide further information other than the date of the Supreme Court ruling. Finally, just as we found that perceived legal risks were high for the responding clinicians, some may have been less truthful in their responses or declined participation due to perceived fears involving the survey itself.

Regarding the survey's content, a deeper understanding of clinician's perceptions, especially on the topic of trust, was difficult to accomplish given the question limit for CERA surveys. Our framing included several clinical elements (ie, menstrual, obstetric, and contraceptive history), which may each elicit different levels of trust for patient's reporting; thus, our findings when regarding the totality of these reproductive health care services may be very different than if each service had been asked about separately. Moreover, trust is a value-laden concept that is hard to measure and is a limited proxy for the full experience of what occurs in a patient-physician dyad, especially given the unequal power dynamic. Deeper examination of trust between patient and clinician is warranted, particularly regarding patient sentiments during self-reports of reproductive history, as there may be more distrust than FMCs realize.

Descriptive comparisons evaluated proportions from each of the 5 Guttmacher-defined categories, but responses from residents of 10 states categorized as having some restrictions or protections did not factor into our primary interpretations (Figure 1). The Guttmacher ranking methodology describes these states as having either fewer or a more nuanced combination of restrictive or protective policies; hence, their responses could not be easily characterized or described. Most of the respondents in this group, however, did not report any changes to reproductive health care in their state.

Given fear of legal reprisal, a lack of clear guidelines, and a bleak outlook on future training possibilities, these findings serve as a warning to states with abortion restrictions that availability of reproductive care services may become further limited. Our study offers a baseline on how restrictions to reproductive health care have, even early after the Dobbs ruling, impacted health care professionals and medical educators in family medicine. Future studies are essential for building a professional response for creating guidelines and resources in reproductive health practice and advancing teaching opportunities.

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Key words: abortions, induced; education; family practice; health services accessibility; pregnancy; primary health care; reproductive health; trust; United States

Submitted March 2, 2024; submitted, revised, August 19, 2024; accepted August 20, 2024.

Financial support: No financial disclosures were reported by the authors of this paper. The authors received no financial support for authorship of this article. Publication fees were provided by the Department of Family and Community Medicine, University of Kentucky.

Previous presentations: Roper K, Day P, Robbins SJ, Shih G, Kale N. Family medicine after Dobbs ruling: a CERA study of impacts to practice, education and patient-physician trust, (https://doi.org/10.1370/afm.22.s1.5165) presented at NAPCRG 51st annual meeting; November 1, 2023; San Francisco, California.

Acknowledgments: The authors thank Tony Mangino for statistical support, Steve Claas for editorial feedback, and Courtney Ortz for manuscript preparation assistance. As well, the authors gratefully acknowledge Ray Biggs and the Council of Academic Family Medicine for the opportunity to submit survey questions and data assistance.

Supplemental materials

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