

Original research article

Estimating abortion provision and abortion referrals among United States obstetrician-gynecologists in private practice^{☆,☆☆}

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Abstract

Objective: The objective was to examine the provision of abortion by obstetrician-gynecologists in private practice in the United States (U.S.) and their willingness to provide referrals for abortion services.

Study design: We conducted a cross-sectional national survey of 1961 U.S. obstetrician-gynecologists to estimate the frequency with which abortions and referrals for abortion care were provided in private practice settings. Key measures included whether respondents had provided any abortions in 2013 or 2014, type of abortions provided and willingness to provide abortion referrals. Facility location by region was the only measured correlate of abortion provision.

Results: We received a total of 988 surveys for a response rate of 65%. Sixty-seven (7%) obstetrician-gynecologists reported providing at least one abortion in 2013 or 2014, though this result ranged from 4% ($n=23$) to 13% ($n=44$) of obstetrician-gynecologists depending on survey response type. Among physicians practicing in the Northeast and West, 14% and 10%, respectively ($n=24$ in each region) were abortion providers compared to 4% ($n=9$) and 3% ($n=10$) of physicians in the Midwest and South, respectively. Twenty-three (42%) providers indicated only performing surgical abortions, 14 (25%) indicated only medication abortions, and 18 (33%) reported providing both. Among respondents who did not provide abortions, just over half ($n=415$, 54%) indicated that they referred patients to a facility or practice where they could obtain an abortion, but 271 (35%) said they would not provide a referral.

Conclusions: Only a small proportion of all obstetrician-gynecologists in private practice settings provide abortions. Among nonproviders, a substantial minority do not offer abortion referrals.

Implications: Particularly in geographic areas with few abortion providers, continued efforts are needed to equip medical professionals with information and training to make direct referrals.

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1. Introduction

In 2014, 926,190 abortions were performed in the United States (U.S.); the overwhelming majority, 95%, of these procedures were provided in outpatient clinics [1]. Physicians in private practice were estimated to have provided only 1% of these abortions, though they accounted for 15% of known

abortion providers [1]. However, many physicians who provide abortions in a private practice setting do not advertise their services and may not be captured in large surveys used to estimate U.S. abortion incidence. For example, the Guttmacher Institute's Abortion Provider Census (APC) provides the most comprehensive abortion counts for the U.S.; yet, information from a national sample of obstetrician-gynecologists in 1992 estimated that as much as 3% of abortions in that year were not captured in APC because they occurred in private practices [2]. The increased use of medication abortion, which occurred following FDA approval of mifepristone in 2000, could have further increased the undercount of abortions if substantial numbers of obstetrician-gynecologists (and other physicians) began providing them.

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Published data suggest that 14% of obstetrician-gynecologists provided abortions in 2008, and this estimate may be increasing [3,4]. Obstetrician-gynecologists in private practice may be the first point of contact for some women who have an unintended pregnancy, particularly those with private health insurance. Even when physicians do not provide abortions, they can serve as a resource by connecting patients to care.

This study examines the provision of abortion among obstetrician-gynecologists in private practice. Additionally, we examine their willingness to provide referrals for abortion services and explore regional variation in these patterns.

2. Materials and methods

2.1. Study design and procedures

This observational study uses data from a national survey of U.S. obstetrician-gynecologists to estimate the frequency with which abortions and referrals for abortion care are provided in private practice settings. The survey was a supplement to the Guttmacher Institute's 2015 APC [1], which surveys all facilities known to provide abortion care. The 2015 APC replicated Henshaw's 1994 methodology to estimate the number of abortion-providing obstetrician-gynecologists and abortions missed by the most recent APC [2]. We used the American Medical Association's (AMA's) Physician Masterfile, which included 42,700 AMA member and nonmember obstetrician-gynecologists. We obtained a random sample of 2000 physicians who identified their specialty as obstetrics and gynecology and provided a phone number to the AMA; the latter was necessary so that we could conduct phone follow-up. Email addresses were not provided with the Masterfile. Notably, 49% of all obstetrician-gynecologists in the Masterfile did not provide a phone number, and our strategy assumed that these physicians did not differ from those who did with regard to abortion provision.

The study sample was restricted to actively practicing obstetrician-gynecologists who worked in private practice, which we defined as facilities that were not obviously affiliated with a larger health care entity and had names suggesting that they were physician owned. Physicians who were clinic based, retired or deceased, or did not provide accurate contact information were excluded from the sample. Prior to mailing the survey, 29 physicians were identified as clinic based and removed from the sample. Ten physicians from the sample were in private practice, but they were already surveyed in the APC. These physicians were not resurveyed; instead, their data were based on information provided in the APC.

We mailed the survey to the 1961 remaining physicians and followed with another mailing to nonrespondents after 4 weeks. A team of four trained research assistants conducted up to three rounds of phone follow-up with remaining

nonrespondents between February and May 2016. Information obtained during phone follow-up was often provided by office staff rather than the physician as surveyors were seldom, if ever, connected to the physician via phone.

2.2. Survey instrument

The survey instrument adapted items from the 2015 APC questionnaire and was evaluated by clinical experts for accuracy and clarity. The survey was offered only in English and included 13 questions. An introduction to the survey included its purpose and reminded respondents that participation was voluntary. Respondents were asked to provide information only on their individual practice at the facility the survey was mailed to. The study procedures were approved through expedited review by the Guttmacher Institute's federally registered institutional review board.

2.3. Measures

The key measures examined in this study include abortion provision, referral practices and region of facility. Abortion provision was measured using the survey question: "Did you provide any abortion at this office between January 1, 2013, and December 31, 2014?" Those who responded positively were subsequently asked "How many abortions (including surgical and medical) did **you** provide in this office in 2013 and 2014?" To understand type of abortion provision, the survey then asked: "What types of abortion procedures did you provide at this office in 2013 and 2014" with response categories including (1) ONLY surgical abortions, (2) ONLY early medical abortions and (3) BOTH surgical and early medical abortions.

All respondents were asked "Are there other physicians who provide abortions at this office?" in order to identify facilities that provided abortions, even if not by the respondent physician.

To assess referral practices, survey respondents were asked: "If a patient requests an abortion, do you ever refer them to a facility or practice where they can obtain an abortion?" Response categories were (1) Yes, (2) No and (3) It depends on the circumstances. Those who reported "Yes" were identified as making direct referrals. Those who reported "No" were asked to identify their reason(s) from a preset list, indicated in Table 1. Respondents who selected the reason "I refer patients to alternative information sources (e.g., the Planned Parenthood website)" were identified as making indirect referrals.

Finally, a measure of facility region was constructed using census categorizations based on the state in which the practice was located [5]. This was the only provider characteristic collected on the survey.

2.4. Analysis

We report the frequency with which respondents reported providing abortions and type of procedures performed. We also examine the prevalence of abortion referrals among

Table 1

Percent distribution of reasons cited for not providing abortion referrals among obstetrician-gynecologists who do not perform abortions, by type of survey response

Reasons for not providing referrals	All respondents <i>N</i> =271		Initial respondents <i>n</i> =58		Follow-up respondents <i>n</i> =213	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
I refer patients to alternative information sources instead (e.g., Planned Parenthood website)	81	30	22	38	59	28
My office has a policy specifically against discussing abortions	46	17	5	9	41	19
I have a moral or ethical objection to abortion	44	16	19	33	25	12
N/A, I have not encountered a patient seeking and abortion at this office	39	14	9	16	30	14
Other reasons	29	11	1	2	28	13
My office staff is against abortion	24	9	6	10	18	8
I do not know of any abortion providers in my area	22	8	9	16	13	6
My community is against abortion	5	2	4	7	1	0
I believe an abortion will harm my patient's health	4	1	2	3	2	1

Percentages may not add up to 100 because respondents were able to select multiple reasons.

All respondents include initial respondents and follow-up respondents.

Initial respondents are those who responded to the initial request and completed a paper survey.

Follow-up respondents are those who provided information during telephone follow-up.

nonproviders and the distribution of reasons for not referring. Abortion provision and referral practices are examined by region and compared using bivariate logistic regression. These analyses are then repeated separately for responses provided by mail to our initial request (initial respondents) and those responses provided over the phone during follow-up (follow-up respondents) in order to examine response variation between these two groups. Among abortion providers, 11 (16%) did not provide data on number of abortions, and 12 (18%) did not report the types of abortions provided; among nonabortion providers, 148 (16%) did not report their referral practices. These respondents are excluded from analyses of these three variables; our analysis assumes that these obstetrician-gynecologists were similar to those who provided this information. All analyses are conducted using Stata 14 software (Stata Corporation, College Station, TX, USA).

3. Results

Of the 1961 obstetrician-gynecologists who were mailed surveys, 432 were removed from the sample because they had incorrect contact information or were deceased or retired. Our analytic sample consisted of 988 physicians' practices, resulting in an overall response rate of 65%. Among these completed surveys, 339 (34%) were returned by mail, and 649 (66%) were completed during follow-up phone calls with clinic receptionists, office managers or other frontline staff.

From the sample, 67 (7%) obstetrician-gynecologists reported providing at least one abortion in 2013 or 2014, and of these, 36 (54%) reported that other physicians at the practice also provided abortions. Among physicians in the

Northeast and West, 14% and 11%, respectively ($n=24$ in each), were abortion providers; these proportions were significantly higher than those in the South and Midwest, where 3% ($n=10$) and 4% ($n=9$) of the surveyed physicians, respectively, were providers ($p<.01$).

Those obstetrician-gynecologists who were abortion providers reported performing a median of 10 abortions (range: 0–300) per year in 2014, though 33 (59%) providers reported performing 10 or fewer. Some 23 (42%) respondents indicated that they only provided surgical abortions, 14 (25%) only provided early medication abortion, and 18 (33%) provided both types.

Among the 921 (93%) respondents who did not provide abortions, 415 (54%) indicated that they referred patients to a facility or practice where they could obtain an abortion, 271 (35%) said they would not provide a referral, and 87 (11%) indicated that it would depend on the circumstances. We found variation in the regional distribution of the 271 respondents who reported not providing referrals. In the Northeast and West, 27% ($n=34$ and $n=42$, respectively) of the regions' physicians reported that they would not provide referrals, whereas 36% ($n=69$) and 42% ($n=126$) of the physicians from the Midwest and South, respectively, would not refer for abortion (Fig. 1). Compared to the Northeast and West, the South had a significantly higher proportion of physicians who would not provide abortion referrals ($p<.01$).

The most common reason for not providing direct referrals was because indirect referrals were provided, with 81 (30%) respondents citing this reason (Table 1). Some 46 (17%) physicians indicated that their practice had a policy against providing referrals for abortion, and 44 (16%) indicated that they had a moral or ethical objection to abortion; minimal overlap existed between these latter two groups of respondents (data not shown). Some 39 (14%) respondents who did not provide referrals also related that

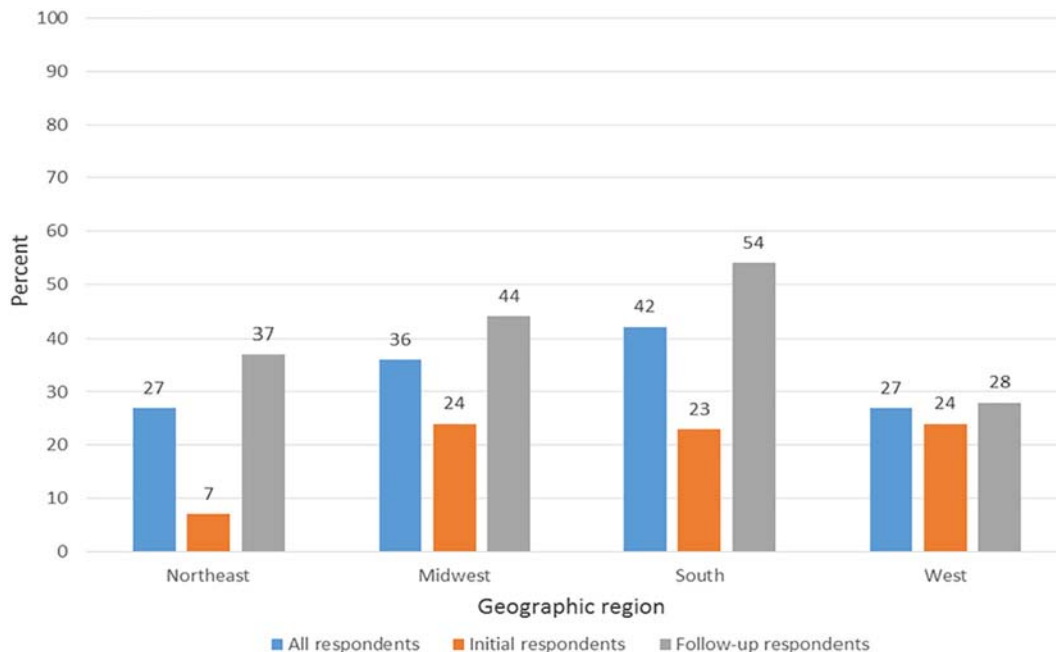


Fig. 1. Percent distribution of obstetrician-gynecologists who neither perform abortions nor provide abortion referrals, by region and type of survey response. All respondents include initial respondents and follow-up respondents. Initial respondents are those who responded to the initial request and completed a paper survey. Follow-up respondents are those who provided information during telephone follow-up.

they had not encountered a patient seeking an abortion at that office. All other response categories were indicated by less than 11% of respondents.

We found variation in abortion provision and referral practices by type of survey response. For example, 44 (13%) initial respondents indicated that they had provided an abortion in 2013 or 2014 compared to 23 (4%) follow-up

respondents (not shown). Among initial respondents who were not abortion providers, a higher proportion ($n=198$; 71%) indicated referring for abortion compared to follow-up respondents ($n=217$; 44%); this comparison was inverted when examining the proportion of physicians who did not refer by survey response type (Fig. 2). The reasons referrals were not provided were relatively similar regardless of

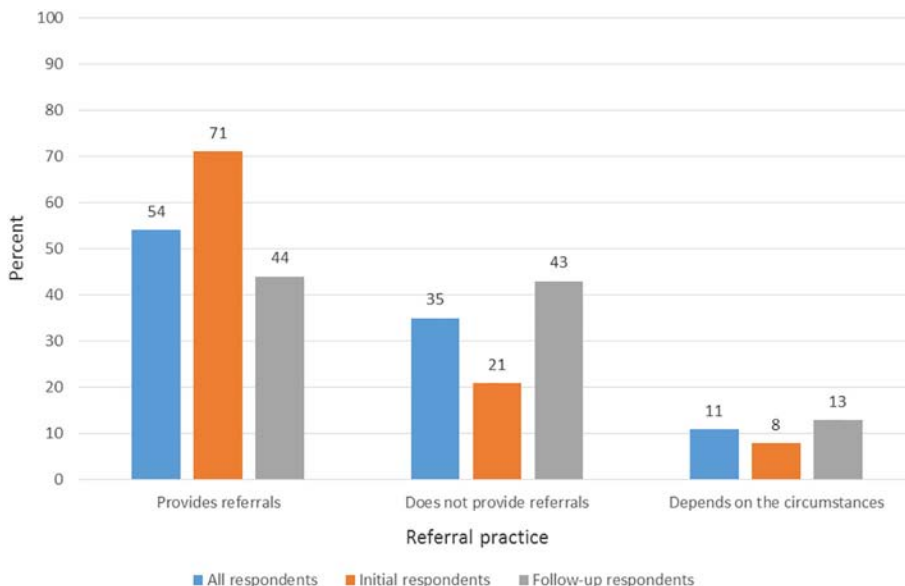


Fig. 2. Percent distribution of abortion referral practices among obstetrician-gynecologists who do not provide abortion, by type of survey response. All respondents include initial respondents and follow-up respondents. Initial respondents are those who responded to the initial request and completed a paper survey. Follow-up respondents are those who provided information during telephone follow-up.

survey response type (Table 1) with the exception that a significantly higher proportion of initial respondents ($n=19$; 33%) compared to follow-up respondents ($n=25$; 12%) reported that moral or ethical objections were a reason they did not provide referrals ($p<.01$).

4. Discussion

Our study suggests that, overall, approximately 7% of obstetrician-gynecologists in a private practice setting have recently provided abortion care. Based on this result, with approximately 21,000 active obstetrician-gynecologists working in private practices [6,7], our findings suggest that up to an estimated 1500 of these physicians recently provided an abortion. This estimate is substantially higher than the 245 practices documented in the 2015 APC [1].

Stulberg et al. [3] found that 14% of obstetrician-gynecologists provided abortions in 2008. Similar to our study, they relied on a sample of obstetrician-gynecologists from the AMA Masterfile, with a comparable sample size and response rate. However, our analysis is limited to physicians who provided abortions in private practice, whereas Stulberg et al. included providers who worked in an array of settings, including hospitals and clinics. Both studies found the same regional variations: a higher proportion of obstetrician-gynecologists in the Northeast and West provide abortion care than in the Midwest and the South.

Early medication abortion is considered to be well-suited for practices with a low volume of procedures because it does not require training, sedation or special equipment. However, we found that obstetrician-gynecologists in our study were more likely to provide surgical than medication abortions. Despite its safety record, Mifeprex remains subject to a set of restrictions for drugs that are known to cause serious side effects [8]. Furthermore, physicians must register to obtain mifepristone, and some may prefer to maintain “anonymity” [9]. Together, these hurdles may discourage physicians from providing medication abortion.

A majority of respondents provided referrals for abortion care, but 21%–43% clearly indicated they did not. Here, too, we found regional differences. Because there are fewer facilities providing abortions in the Midwest and the South, health care professionals in these regions may not know where to refer patients. Still, it was more common for respondents to indicate that moral issues or office policies prevented them from providing referrals than lack of knowledge.

Our study has several shortcomings. The practices of obstetrician-gynecologists who are in the AMA may not be representative of all such private practices in the U.S., especially since not all obstetrician-gynecologists are included in the Masterfile. We were unable to isolate whether the reasons for the different responses between initial and follow-up respondents were due, in part, to survey type (e.g., mailed survey versus telephone follow-up), typical respondent (e.g., physician versus front office

staff), actual variation in abortion provision or a combination of these and other factors. For example, physicians who provide abortions may be more familiar with the Guttmacher Institute or more motivated to respond to the survey than nonproviders. Alternately, front office staff may be reluctant to provide sensitive information to an organization unfamiliar to them, or they may be unaware that abortion services are available if physicians are discrete about their provision. Had we anticipated this variation by survey response type when designing the study, we could have called the frontline staff in the offices of physicians who returned a mailed survey to assess any differences between phone and mailed responses among the initial responders. We failed to obtain information on 40% of the obstetrician-gynecologist practices in our original sample, and we assume that these practices are similar to those that responded by phone. As a result, our overall abortion prevalence (7%) may be an overestimate, and the true estimate may be closer to that found among follow-up respondents.

Despite these challenges, this study addresses critical gaps in research. Estimating the share of obstetrician-gynecologists in private practice who are abortion providers contributes to a more complete understanding of abortion provision and access in the U.S. Furthermore, our study provides data on abortion referral practices, which can guide ongoing and future referral training efforts.

Overall, our study suggests that only a small proportion of obstetrician-gynecologists provide abortion care in private practice settings. This could be due to a variety of factors including inadequate training, office or organizational policies, stigma and (perceived) lack of demand. That private practices in the Midwest and South were less likely to provide abortion care could also be due to the relatively high number of abortion restrictions, such as mandated counseling and waiting periods, in many of the states in these regions [10]. Physicians may determine that adapting and adhering to these mounting laws are not economically feasible.

Where office policies, community attitudes or state laws discourage or prevent provision of abortion care in private practice settings, obstetrician-gynecologists have a professional obligation to refer patients for care [11]. Our study suggests that a majority of private practices provide direct referrals, although those in the Midwest and the South are less likely to do so. Indirect referrals, while perhaps better than no referral, are likely inadequate; without a direct contact for care, women seeking an abortion may encounter misinformation regarding their pregnancy options or the availability of abortion care. Furthermore, our findings suggest that office staff may also be in a position to provide abortion referrals to patients. To this end, education and training on referrals may have the most impact when an entire clinic team is included [12,13]. Continued efforts by clinical training programs and organizations such as *Provide* are needed to equip all health care professionals with information and training to make direct referrals, particularly in areas with fewer abortion clinic facilities [13].

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References

- [1] Jones RK, Jerman J. Abortion incidence and service availability in the United States, 2014. *Perspect Sex Reprod Health* 2017;49:17–27, <https://doi.org/10.1363/psrh.12015>.
- [2] Henshaw SK, Van Vort J. Abortion services in the United States, 1991 and 1992. *Fam Plann Perspect* 1994;26:100–12, <https://doi.org/10.2307/2136033>.
- [3] Stulberg DB, Dude AM, Dahlquist I, Curlin FA. Abortion provision among practicing obstetrician-gynecologists. *Obstet Gynecol* 2011;118:609–14, <https://doi.org/10.1097/AOG.0b013e31822ad973>.
- [4] Grossman D, Grindlay K, Schulkin J. Abortion provision among a national sample of obstetrician–gynecologists. *Contraception* 2017;96:272–3, <https://doi.org/10.1016/j.contraception.2017.07.044>.
- [5] US Census Bureau. 2010 Geographic terms and concepts — census regions and divisions of the United States. US Census Bureau, Geography Division; 2010.
- [6] ACOG. ACOG membership statistics. American College of Obstetrics and Gynecology (ACOG); 2017.
- [7] Occupational employment and wages: obstetricians and gynecologists. US Department of Labor, Bureau of Labor Statistics; 2016.
- [8] Mifeprex REMS Study Group, Raymond EG, Blanchard K, Blumenthal PD, Cleland K, Foster AM, et al. Sixteen years of overregulation: time to unburden Mifeprex. *Med* 2017;376:790–4, <https://doi.org/10.1056/NEJMs1612526>.
- [9] Grossman D. Give women their reproductive revolution: it's long past time to remove the FDA's unscientific restrictions on the abortion pill. *US News World Rep* 2016 September 30. Retrieved from <https://www.usnews.com>.
- [10] An overview of abortion laws. Guttmacher Institute; 2017.
- [11] American College of Obstetricians and Gynecologists. ACOG Committee opinion no. 385 November 2007: the limits of conscientious refusal in reproductive medicine. *Obstet Gynecol* 2007;110:1203–8, <https://doi.org/10.1097/01.AOG.0000291561.48203.27>.
- [12] Dodge LE, Haider S, Hacker MR. Using a simulated patient to assess referral for abortion services in the USA. *J Fam Plann Reprod Health Care* 2012;38:246–51, <https://doi.org/10.1136/jfprhc-2011-100176>.
- [13] Zurek M, O'Donnell J, Hart R, Rogow D. Referral-making in the current landscape of abortion access. *Contraception* 2015;91:1–5, <https://doi.org/10.1016/j.contraception.2014.10.007>.