



Editor's Choice

Association of Provider Specialty With Abortion-Related Morbidity and Adverse Events Among Patients Having Procedural and Medication Abortions



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ABSTRACT

Objective: Since abortion was legalized throughout the United States in 1973, states have passed restrictive abortion policies, including permitting only obstetrician-gynecologist physicians (OBGYNs) to provide abortions. We are unaware of any research that directly compares patient safety-related outcomes by physician specialty. In this study, we compared major and any abortion-related morbidity and adverse events in abortion care provided by physicians of other specialties versus OBGYNs.

Study Design: Using the IBM Watson Health MarketScan claims database, we identified privately insured individuals who had an induced abortion between January 1, 2011, and December 31, 2014. The primary outcome was major abortion-related morbidity or adverse events, and the secondary outcome was any abortion-related morbidity or adverse events occurring within 6 weeks of the abortion.

Results: The study cohort included 34,764 patients who had 35,407 abortions—4,843 (13.7%) abortions provided by physicians of other specialties and 30,564 (86.3%) abortions provided by OBGYNs. Major and any abortion-related morbidity or adverse event occurred in 115 (0.3%) and 1,271 (3.6%) of 35,407 of abortions, respectively. In adjusted analyses, there was no statistically significant difference in major abortion-related morbidity or adverse events comparing physicians of other specialties versus OBGYNs (adjusted odds ratio, 1.02; 95% confidence interval, 0.59–1.75), and no statistically significant difference in any abortion-related morbidity or adverse events comparing physicians of other specialties versus OBGYNs (adjusted odds ratio, 0.91; 95% confidence interval, 0.77–1.09).

Conclusions: There were no differences in abortion-related morbidity or adverse events by physician specialty. Our findings do not support state laws limiting abortion care to OBGYN physicians.

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Since *Roe v. Wade* legalized abortion in the United States in 1973, many states have passed various policies aimed at restricting abortion access, including parental notification

requirements, mandatory waiting periods, mandated counseling requirements, and restrictions on insurance coverage for abortion (Nash, Mohammed, Cappello, & Naide, 2019). Physician specialty has also been the target of restrictive abortion policies, with two states requiring abortions be performed by obstetrician-gynecologist physicians (OBGYNs). In Mississippi, a 2012 state law requires all abortions be performed exclusively by OBGYNs (Mississippi Legislature House Bill No. 1390, 2012), whereas in South Carolina, only OBGYNs can perform abortions

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after 14 weeks gestation (Guttmacher Institute, 2020). Additional states have passed similar laws, although enforcement is currently blocked by legal rulings. Given that only 63% of abortion providers are OBGYNs (Rayburn, Klagholz, Murray-Kreza, Doweel, & Strunk, 2012) restricting abortion provision to OBGYNs can have profound impact on abortion availability. The remaining abortion care in the United States is provided by physicians of other specialties and advanced practice clinicians (i.e., physician assistants, certified nurse midwives, and nurse practitioners) (O'Connell et al., 2009).

Prior studies comparing abortion safety among physicians and advanced practice providers have shown clinically equivalent abortion outcomes (Berer, 2009; Renner, Brahmi, & Kapp, 2013; Weitz et al., 2013), with a recent study showing that states with a licensed physician requirement had significantly higher maternal mortality rates compared with states without this restriction (Vilda et al., 2021). There have been minimal data on abortion safety by physician specialty. Existing research has shown low abortion complication rates overall (Upadhyay et al., 2015), including among family physicians (Bennett et al., 2009); however, we are unaware of any studies that directly compare abortion outcomes by physician specialty. To investigate abortion safety by physician specialty, we examined a national database of private health insurance claims to compare major and any abortion-related morbidity and adverse events among abortions (both medication and procedural) performed by physicians of other specialties and OBGYNs.

Methods

Study Design

This analysis is a retrospective cohort study using the IBM Watson Health MarketScan claims database to compare major and any abortion-related morbidity and adverse events in abortions performed by physicians of other specialties versus OBGYNs. The institutional review board considered this study exempt because it examined existing data that are publicly available. The institutional review board considered this study not human subjects research.

Data Source

Data are from the MarketScan Commercial Claims and Encounters database, which is constructed and maintained by IBM Watson Health. MarketScan consists of reimbursed health care claims for employees, retirees, and their dependents of over 250 medium and large employers and health plans in all 50 U.S. states and Washington, DC. The database includes claims information from more than 130 payers and describes the health care service use and expenditures for approximately 50 million covered employees and family members per year. The database contains inpatient claims, outpatient claims, outpatient prescription drug claims, and enrollment information. Claims data contain a unique encrypted patient identifier and information on patient age, sex, geographic location (state and Metropolitan Statistical Area), and type of health plan. The analysis included data from calendar years 2011-2014.

Study Sample

The study cohort was previously identified by Roberts et al. (2018), who compared abortion-related morbidity and adverse

events in abortions performed at ambulatory surgery centers versus office-based settings. The inclusion criteria for the parent study was individuals who had a claim for an induced abortion at an ambulatory surgery center or an office-based setting between January 1, 2011, and December 31, 2014, and were enrolled in their insurance plan for at least 1 year before and at least 6 weeks after the index abortion.

All medication and all procedural abortions regardless of gestational age were included. The *International Classification of Diseases* (ICD) procedure codes were 59840 for first trimester aspiration abortion; S0199, S0190, and S0191 for first trimester medication abortion; and 59841, 59850, 59851, 59855, 59856, 59857, S2260, S2265, and S2266 for second trimester abortion (S0191s were only included if they had an abortion diagnosis code or unwanted pregnancy diagnosis code). The U.S. Food and Drug Administration approved medication abortion as a safe and effective option in 2000 for pregnancies of up to 49 days gestation (Chen & Creinin, 2015; U.S. Food and Drug Administration, 2021a) and extended that to 70 days gestation in 2016 (U.S. Food and Drug Administration, 2021b). During the study period, the majority of abortions in the United States were procedural abortions, and aspiration procedures were the most common type of abortion regardless of gestational age (Jatlaoui et al., 2016). Aspiration abortions are usually performed in an office-based settings (Roberts et al., 2018). Dilation and evacuation account for the majority of abortions between 14 and 20 weeks gestation (ACOG Practice Bulletin No. 135, 2013; Roberts et al., 2018).

In the parent study, 49,287 individuals met inclusion criteria as stated above and had 50,311 induced abortions. The study sample was then further refined based on the MarketScan provider type variable, which indicates the type and specialty of the performing provider and is mapped from carrier specific coding to Watson Health standard values. Of the 135 possible categories for the provider variable, we excluded nonprovider categories (e.g., public health agency, laboratory, etc.) ($n = 3,212$) as the focus of our study was abortion safety by provider, and nonphysician categories (e.g., dentists, pharmacists, advance practice clinicians, etc.) ($n = 1050$) because the number of associated abortion-related morbidities and adverse events was insufficiently powered for analysis. Categories where physician specialty could not be determined (medical doctor, osteopathic medicine, multispecialty physician group, preventive medicine) ($n = 7,500$) and categories with the missing physician specialty code ($n = 3,142$) were also excluded. The effect of excluding the 10,642 abortions owing to undetermined or missing physician specialty was further investigated in sensitivity analyses as described elsewhere in this article. Abortions were then categorized by physician specialty—physicians of other specialties versus obstetrics and gynecology (OBGYN). There were 32 non-OBGYN physician specialties represented; the five most common were family medicine, internal medicine, pediatrics, surgery, and anesthesiology. The final analytic sample included 34,764 individuals who had 35,407 abortions.

Outcomes

Abortion-related morbidity or adverse events occurring within 6 weeks of the abortion were identified as described in depth previously in the parent study (Roberts et al., 2018). Specifically, events were coded using the PAIRS framework, a set of standardized criteria for assessing abortion-related incidents for first trimester aspiration abortion procedures (Taylor et al., 2017),

Table 1
Description of Abortions in 2011-2014 (N = 35,407)

	No (%) of Abortions			p Value*
	Total	Abortions Provided by OBGYN Physicians	Abortions Provided by Physicians of Other Specialties	
No. of abortions	35,407	30,564	4,843	<.0001
Abortion type				<.0001
First trimester aspiration	16,636 (47.0)	14,550 (47.6)	2,086 (43.1)	
First trimester medication	9,677 (27.3)	8,125 (26.6)	1,552 (32.1)	
Second trimester and later	9,094 (25.7)	7,889 (25.8)	1,205 (24.9)	
Year of abortion				<.0001
2011	9,216 (26.0)	8,171 (26.7)	1,045 (21.6)	
2012	9,196 (26.0)	7,925 (25.9)	1,271 (26.2)	
2013	8,325 (23.5)	7,011 (22.9)	1,314 (27.1)	
2014	8,670 (24.5)	7,457 (24.4)	1,213 (25.1)	
Region of the United States				<.0001
Northeast	15,804 (44.6)	14,634 (47.9)	1,170 (24.2)	
Midwest	4,571 (12.9)	3,880 (12.7)	691 (14.3)	
South	5,673 (16.0)	5,202 (17.0)	471 (9.7)	
West	8,760 (24.7)	6,289 (20.6)	2,471 (51.0)	
Other	929 (2.0)	559 (1.8)	40 (0.8)	
Elixhauser Risk Score	3.2 ± 6.25	3.2 ± 6.33	3.1 ± 6.09	.23
Age, years	28.4 ± 7.30	28.5 ± 7.28	27.9 ± 7.34	<.0001

Abbreviation: OBGYN, obstetrician-gynecologist physician.

Values are number (%) or mean ± standard deviation.

* The p values represent χ^2 tests for categorical variables and the Student t test for continuous variables

modified to include events that might occur after first trimester medication abortion and second trimester and later abortion. The events include retained products of conception (including retained placenta), failed abortion, hemorrhage, infection, uterine perforation, anesthesia reaction, symptomatic intrauterine material, postabortal hematometra, cervical injury, disseminated intravascular coagulation, missed ectopic pregnancy, and other or undetermined. Abortion-related events were identified and individually coded by a clinically trained reviewer who manually reviewed all available billing data (including ICD-9 codes, Current Procedural Terminology codes, Healthcare Common Procedure Coding System codes, laboratory tests, and medication codes) for every health care encounter that occurred within 6 weeks of the abortion at any location. Diagnosis codes for miscarriage complications were also included to capture possible errors in diagnosis codes. Additionally, health care encounters that occurred within 6 weeks of the index abortion were also searched systematically to identify people who received injection or intravenous antibiotics, had a repeat procedure or additional dose of misoprostol, or had a missed ectopic pregnancy.

The primary outcome was any major abortion-related morbidity or adverse events, defined as events that required overnight hospital admission, additional surgery, or blood transfusion. The secondary outcome was any abortion-related morbidity or adverse events, regardless of severity.

Control Variables

Abortion type was categorized as first trimester aspiration, first trimester medication abortion (typically occurring up to 9 weeks gestation at the time of this study), and second trimester and later abortions. Other control variables included calendar year, U.S. region (Northeast, South, Midwest, West, other) (U.S. Census Bureau, 2010), and the Elixhauser Comorbidity Index (Elixhauser, Steiner, Harris, & Coffey, 1998). The Elixhauser Comorbidity Index is a method to categorize comorbidities using ICD codes, and was included in our study as a continuous

variable to allow for comorbidity risk adjustment (Elixhauser et al., 1998). Age was included as a continuous variable.

Statistical Analysis

Descriptive analyses were conducted first to examine the proportion of abortions with a subsequent morbidity or adverse event, in total and by physician specialty (physicians of other specialties vs. OBGYNs), further stratified by abortion type (i.e., first trimester aspiration, first trimester medication, second trimester and later), and demographic variables. We examined the unadjusted rates of abortion-related morbidities and adverse events within 6 weeks after an abortion, in total and with further breakdown by physician specialty, abortion type, year of abortion, U.S. region, and Elixhauser risk score. To examine the independent associations of physician specialty with the risk of abortion-related morbidities and adverse events while being able to control the effects from other risk factors and/or confounders, we further performed a multivariable logistic regression analysis using the generalized estimating equation method to account for the correlations of repeated measures within the subjects. Odds ratios (ORs) and 95% confidence intervals (CIs) were calculated for the multivariable regression models. All analyses were performed using SAS version 9.4 software (SAS Institute, Cary, NC). All tests were two-sided, with a p value of less than .05 considered statistically significant.

Sensitivity Analysis

As described, 10,642 abortions were excluded because they were performed by physicians whose specialty could not be determined or was missing, representing 21.2% of the abortions in the eligible sample. We sought to determine whether the exclusion of these abortions had the potential to alter the main results by conducting two different sensitivity analyses. In the first sensitivity analysis, all physicians whose specialty could not be determined or was missing were assumed to be OBGYNs and abortions from this group were combined with the known

Table 2
Unadjusted Rates of Major and Any Abortion-Related Morbidities and Adverse Events by Physicians of Other Specialties versus OBGYN Physicians (N = 35 407)

	Total (N = 35 407)	Major Abortion-Related Morbidities and Adverse Events (n = 115)	p Value for Major Abortion-Related Morbidity and Adverse Events ^a	Any Abortion-Related Morbidity and Adverse Events (n = 1 271)	p Value for Any Abortion-Related Morbidity and Adverse Event ^a
Physician specialty			.9415		.5691
OBGYN physicians	30,564 (86.3)	99 (86.1)		1 104 (86.9)	
Physicians of other specialties	4,843 (13.7)	16 (13.9)		167 (13.1)	
Abortion type			.0510		<.0001
First trimester aspiration	16,636 (47.0)	41 (35.7)		456 (35.9)	
First trimester medication	9,677 (27.3)	38 (33.0)		554 (43.6)	
Second trimester and later	9,094 (25.7)	36 (31.3)		261 (20.5)	
Year of abortion			.1866		.0280
2011	9,216 (26.0)	30 (26.1)		294 (23.1)	
2012	9,196 (26.0)	39 (33.9)		354 (27.9)	
2013	8,325 (23.5)	20 (17.4)		285 (22.4)	
2014	8,670 (24.5)	26 (22.6)		338 (26.6)	
U.S. Region			.8244		.4843
Northeast	15,804 (44.6)	47 (40.9)		568 (44.7)	
Midwest	4,571 (12.9)	17 (14.8)		148 (11.6)	
South	5,673 (16.0)	21 (18.3)		209 (16.4)	
West	8,760 (24.7)	29 (25.2)		329 (25.9)	
Other	599 (1.7)	1 (0.9)		17 (1.3)	
Elixhauser Risk Score	3.16 (6.33)	4.69 (6.62)	.0094	4.17 (7.18)	<.0001
Age, years	28.38 (7.28)	30.40 (7.50)	.0028	28.82 (7.13)	.0274

Abbreviation: OBGYN, obstetrician-gynecologist physician.

Values are number (%) or mean ± standard deviation.

* The p values represent χ^2 tests for categorical variables and the Student t test for continuous variables.

OBGYN cohort. In the second sensitivity analysis, all physicians whose specialty could not be determined or was missing were assumed to be physicians of other specialties, and abortions from this group were combined with the known physicians of other specialties cohort. In these sensitivity analyses, we assessed whether our main findings would be altered when modeling these examples of physician miscategorization.

Results

Of the 35,407 abortions in the final analytic sample, 4,843 (13.7%) were provided by physicians of other specialties and 30,564 (86.3%) were provided by OBGYNs (Table 1). The cohort of physicians of other specialties was composed largely of family physicians (87.3%), but also included smaller numbers of other primary care physicians (i.e., pediatrics, internal medicine physicians). In regards to abortion type, 16,636 (47%) were first trimester aspiration abortions, 9,677 (27.3%) were first trimester medication abortions, and 9,094 (25.7%) were second trimester and later abortions (Table 1). Of the second trimester abortions, 7,889 (86.7%) were provided by OBGYNs and 1,205 (13.3%) were provided by physicians of other specialties (Table 1), including family medicine, internal medicine, pediatrics, surgery, and anesthesiology. The mean age was 28.4 ± 7.3 years, with patients who had an abortion provided by an OBGYN being slightly older (28.5 years vs. 27.9 years; $p < .0001$). The proportion of abortions provided by OBGYNs versus physicians of other specialties differed significantly by calendar year ($p < .0001$), with a greater proportion of abortions being provided by OBGYNs in 2011–2012 compared with the later study years. OBGYNs were also more likely to provide abortions in the Northeast region, whereas physicians of other specialties were more prominent in the West region. There was no statistically significant difference in the Elixhauser comorbidity index of patients who had abortions provided by physicians of other specialties versus OBGYNs.

The rate of any abortion related morbidity or adverse event was greater in the medication abortion group (5.72%) compared with the first trimester aspiration (2.74%) and second trimester and later abortion group (2.87%). This is attributable to the expected increased incidence of incomplete abortions with medication abortions (Chen & Creinin, 2015). Notably, there was no increased risk of major adverse events with medication abortions. Overall, the primary outcome of major abortion related morbidity or adverse events was rare, occurring in 0.3% (16 of 4,843) of abortions provided by physicians of other specialties compared with 0.3% (99 of 30,564) of abortions provided by OBGYNs ($p = .94$, unadjusted) (Table 2). In adjusted analyses, controlling for abortion type, calendar year, U.S. region, Elixhauser Risk Score, and age, there was no statistically significant difference in the primary outcome comparing physicians of other specialties versus OBGYNs (adjusted OR, 1.02; 95% CI, 0.59–1.75) (Table 3). Similarly, the secondary outcome of any abortion-related morbidity or adverse events occurred in 3.4% of abortions (167 of 4,843) provided by physicians of other specialties compared with 3.6% of abortions (1,104 of 30,564) provided by OBGYNs ($p = .57$, unadjusted). There was also no statistically significant difference in the adjusted analysis of the secondary outcome comparing physicians of other specialties versus OBGYNs, controlling for the same variables (adjusted OR, 0.91; 95% CI, 0.77–1.09) (Table 3). We subsequently considered whether the results may be different just among the subsample of first trimester aspiration abortions; however, we similarly found that there was no difference in major or any adverse outcomes when comparing physicians of other specialties compared with OBGYNs (adjusted OR, 1.02; 95% CI, 0.59–1.75 and adjusted OR 0.91; 95% CI, 0.77–1.09, respectively).

In regard to the sensitivity analysis, when assuming all physicians whose specialty could not be determined or was missing were OBGYNs, there were no differences in the adjusted odds of major (adjusted OR, 0.96; 95% CI, 0.57–1.63) or any (adjusted OR, 0.95; 95% CI, 0.80–1.13) abortion-related morbidities and adverse

Table 3Adjusted Odds of Major and Any Abortion-Related Morbidities and Adverse Events in Abortions by Physicians of Other Specialties versus OBGYN Physicians ($N = 35,407$)

Variables	Adjusted OR (95% CI) for Major Abortion-Related Morbidity and Adverse Event	Adjusted OR (95% CI) for any Abortion-Related Morbidity and Adverse Event
Physician specialty		
OBGYN physicians	1 (reference)	1 (reference)
Physicians of other specialties	1.02 (0.59–1.75)	0.91 (0.77–1.09)
Abortion type		
First trimester aspiration	1 (reference)	1 (reference)
First trimester medication	1.61 (1.04–2.51)	2.18 (1.91–2.48)
Second trimester and later	1.62 (1.03–2.54)	1.05 (0.90–1.23)
Year of abortion		
2011	1 (reference)	1 (reference)
2012	1.30 (0.82–2.09)	1.19 (1.01–1.39)
2013	0.73 (0.42–1.30)	1.05 (0.89–1.24)
2014	0.92 (0.55–1.56)	1.16 (0.99–1.36)
Region of the United States		
Northeast	1 (reference)	1 (reference)
Midwest	1.22 (0.70–2.13)	0.87 (0.72–1.05)
South	1.19 (0.70–2.00)	1.06 (0.89–1.25)
West	1.09 (0.69–1.75)	1.01 (0.87–1.17)
Elixhauser Risk Score	1.03 (1.01–1.04)	1.03 (1.02–1.04)
Age (years)	1.04 (1.01–1.06)	1.01 (1.00–1.01)

Abbreviations: CI, confidence interval; OBGYN, obstetrician-gynecologist physician; OR, odds ratio.

events. When assuming all physicians whose specialty could not be determined or was missing were physicians of other specialties, there was no statistically significant difference in the adjusted odds of major abortion related morbidities and adverse events (OR, 1.13; 95% CI, 0.80–1.58) and physicians of other specialties were less likely to have any abortion-related morbidities and adverse events (OR, 0.97; 95% CI, 0.78–0.98).

Discussion

Several states have passed laws to limit abortion provision to only OBGYNs; however, we are not aware of any published research evidence that supports the need for such policies. In this retrospective analysis of over 35,000 U.S. abortions performed between 2011 and 2014, there was no statistically significant difference in major or any abortion-related morbidity or adverse events with abortions provided by physicians of other specialties versus OBGYNs. Our findings do not lend support to state restrictions limiting abortion care to OBGYNs.

Restricting physicians of different specialties from providing abortions can decrease the number of available abortion providers. This would be more likely to affect individuals living where access to abortion care is already limited. For example, individuals living in the South and Midwest are less likely to live in a county with an abortion provider (Jones & Jerman, 2014, 2017). Furthermore, given that only 6.4% of OBGYNs work in rural areas (Rayburn et al., 2012), there is a shortage of OBGYNs available to provide abortion care to individuals residing in rural areas. Family medicine physicians are more likely to work in rural areas than other physician specialties (Agency for Healthcare Research and Quality, 2018), with 42% of physician visits in rural areas occurring at family physician offices (Green et al., 2005). For family physicians interested in providing abortion care, well-established national programs for abortion training in family medicine residency exist, including the Training in Early Abortion for Comprehensive Health care and Center for Reproductive Health Education in Family Medicine (RHEDI, 2021; TEACH, 2020). Allowing physicians of different specialties the opportunity to provide abortion care could

potentially increase the number of available providers, thereby increasing abortion access for individuals living in areas of the country where abortion access is currently limited.

Allowing physicians of other specialties to be involved in abortion care would improve access by not only increasing the number of available abortion providers, but also expanding options for where a patient can choose to seek abortion care. In prior studies surveying patients regarding abortion care, many indicated that they would have chosen to have their abortion in a primary care setting if the option had been available, citing reasons such as “comfort” and “familiarity” with a clinician with whom they have an established relationship (Godfrey, Rubin, Smith, Khare, & Gold, 2010; Rubin, Godfrey, Shapiro, & Gold, 2009). A study of patients in an urban internal medicine clinic revealed that of those open to having an abortion, a majority believed it was important for internal medicine clinics to provide medication abortions and would consider having a medication abortion there if it were offered (Page, Stumbar, & Gold, 2012).

One strength of this study is the use of a large, national claims database, yielding a large sample size to allow for a direct comparison of abortion-related morbidities and adverse events between OBGYNs and physicians of other specialties. The sample size was sufficiently large to detect any clinically meaningful differences in major or any abortion-related morbidities or adverse events between OBGYNs and physicians of other specialties. Claims databases routinely record health care visits and treatments that occur after procedures (Upadhyay et al., 2015), such as abortions, and thus, post-procedure events are well-captured, thereby limiting bias in relation to loss of follow-up.

A main limitation of this study is that the MarketScan data are limited to patients with private health insurance and do not represent abortions paid by public funding, out of pocket, or by other sources. Roughly 15% of the approximately 1 million abortions each year are paid through private health insurance, with 60% of insured patients paying out of pocket for their abortion care (Jerman, Jones, & Onda, 2016). For these reasons, the study findings may not be generalizable to all abortions in the United States and additional studies evaluating abortion provider specialty and type would further address this issue. Another limitation is that 10,642 abortions

were excluded from the study for categories where physician specialty could not be determined or was missing. To address this limitation, we performed sensitivity analyses that showed that even if the specialties of these physicians were known and included, our main findings would have been unchanged. Another limitation is that the percentage of second trimester abortions in our study (25.7%) is higher than the national percentage of abortions occurring after 12 weeks (approximately 12%) (Guttmacher Institute, 2019). This finding may be explained by previous research showing that individuals having second trimester abortions are more likely to pay for their care using health insurance, compared with those having first trimester abortions (Jones & Finer, 2012). An additional limitation is the use of a previously defined cohort of abortions performed in ambulatory surgical centers or office-based settings, so only abortions occurring in those locations were included in our study. Notably missing are abortions that took place in hospitals, but those account for less than 5% of abortions in the United States (Jones, Witwer, & Jerman, 2019) and represent more complicated cases that deserve further study. This precludes the analysis of induction of labor as a method of second trimester abortion. The claims data do not include information about patients' decisions to seek care from providers of particular specialties, which would confound the analysis; however, given the limitations to accessing abortion care in many parts of the United States, this factor is unlikely to play a statistically significant role. Other limitations to claims data include the lack of detailed patient sociodemographic variables or clinic/provider variables, as well as the possibility of incorrect physician specialty attribution in the billing data, although we do not suspect this would have been more or less likely to occur with OBGYNs versus physician of other specialties.

Conclusions

Our study found no statistically significant differences in morbidities and adverse events in abortions when performed by OBGYNs versus physicians of other specialties. These findings do not support state laws that limit physicians of other specialties from providing abortions. Future research should investigate whether restrictions by physician specialty have affected abortion access, availability, and costs in states where these laws have been enacted.

Implications for Practice and/or Policy

This study found no differences in the rate of abortion-related complications among abortions provided by obstetrician-gynecologists and physicians of other specialties, and thus does not support restrictive abortion policies aimed at limiting abortion provision to obstetrician-gynecologists alone.

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