Doctors Who Perform Abortions: Their Characteristics and Patterns of Holding and Using Hospital Privileges

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First Published April 15, 2019 Research Article Find in PubMed
https://doi.org/10.1177/2333392819841211

Article information

Abstract

Controversy exists regarding whether doctors who perform abortions should be required to hold hospital admitting privileges, but no research exists as to the extent to which they actually hold and use such privileges. Extensive Internet and government data sources were used to identify and verify abortionists in Florida. All medical and osteopathic abortion doctors who were licensed to practice at any time during the period 2011 to 2016 were included in the study (n = 85). Every abortionist hospital admission of a female patient aged 15 to 44 occurring during the 6-year study period was identified (n = 21 502). Abortionist physicians are 74.1% male, 62% have been in practice for 30 years or longer, 27.1% are graduates of foreign medical schools, and 55.3% are board certified. Nearly half (48.2%) of the abortionists had at least 1 malpractice claim, public complaint, disciplinary action, or criminal charge. Half (50.6%) of the abortionists reported hospital privileges, but only 32 (37.6%) admitted at least 1 patient to a hospital. Seven physicians accounted for 68.2% of all the admissions, and 79.6% of all admissions were related to a live birth. Black was the modal race (47.6%) and Medicaid the most frequent (64.9%) pay source. Nearly one-fifth (19.4%) of admissions came through the emergency department. Physicians who hold hospital privileges are significantly ($P < .05$) more likely to be board certified and to be approved for Medicaid payment than their colleagues without privileges. Of

those doctors who hold and use hospital privileges, the lowest admission volume physicians are significantly less likely to be involved in live births, more likely to admit commercially insured and white inpatients, and much more likely to use the emergency room as the route to hospital admissions for their Medicaid-eligible and black patients. Further study of abortionist physicians is indicated regarding their heterogeneous personal and professional characteristics; their career pathways and practice concentrations; their relative integration with or isolation from peers and the professional network; the importance of black and poor induced abortion patients in their total caseload; and, especially for abortionists without hospital privileges, the means by which their patients requiring emergency care and hospitalization are accommodated.

Keywords
hospital privileges, abortionist physicians, emergency room admissions, racial disparities, emergency visits

Introduction

Hospital Privileges, Abortion, and the Need for Research

Within the past few years, a number of state laws were enacted which required that physicians who provide abortions have admitting privileges at a hospital within 30 miles of the location of abortion. The justification offered by proponents of this legislation was that it would reduce the risk factor for patients who had potentially deadly complications during or after an abortion by expediting their emergency treatment and admission, if necessary, at a hospital. Opponents of these state laws argued, by contrast, that admitting privileges were medically unjustified largely based upon the opinion that abortion was a relatively safe procedure and that adverse events requiring a hospital admission or emergency department (ED) visit were rare.[1,2] From a research perspective, it is clear that findings concerning the incidence and outcomes of abortion complications remain inconclusive, largely because of the demonstrably inadequate systems of abortion certification and reporting in the United States.[3] Research from Finland and Denmark, countries with comprehensive systems for reporting abortions and other pregnancy outcomes, concluded that there

is a 4 times greater risk of mortality following abortion than childbirth.[4,5] These findings contrast with the often-referenced conclusion that childbirth-related mortality is 14 times that of abortion.[6]

Similarly, no research exists on the comparative outcomes of women who experience complications of an induced abortion performed by providers with and without hospital admitting privileges. More fundamentally, there has been no research at all on the extent to which abortionists actually hold and use hospital privileges. In particular, the question of whether and how often abortion doctors utilize the ED as a pathway to hospital admission is relevant to the legal issue of requiring privileges for abortionists.

The objectives of this analysis, therefore, were to describe the characteristics of physicians who perform induced abortions and to describe the extent to which they hold and use hospital admitting privileges, with an emphasis on the involvement of the ED in the admission. Specific foci of the analyses were on the differences in physicians with and without privileges and the differences in patient and practice characteristics associated with the volume of hospital admissions accounted for by each doctor. In a domain with literally no preceding research, this analysis was intended to explore and formulate important research questions and to inform the design and data needs of future hypothesis testing studies.

There is a broad professional consensus that the process of credentialing and hospital privileging for physicians enhances their competency and the quality of care rendered to patients. Hospital admitting privileges are obviously essential for surgeons who require the necessary technology, personnel, and support services found in the inpatient setting to practice their specialty. Many insurance companies require that a physician hold admitting privileges as a condition of participation in their provider networks.[7] The benefits of obtaining hospital privileges do not, however, accrue only to those physicians who practice exclusively within the inpatient setting. The American College of Surgeons and the American Medical Association produced 10 core principles for patient safety for office-based surgery and practice. The principles were approved by more than 3 dozen interested parties including the major accrediting organizations for ambulatory and office-based surgery

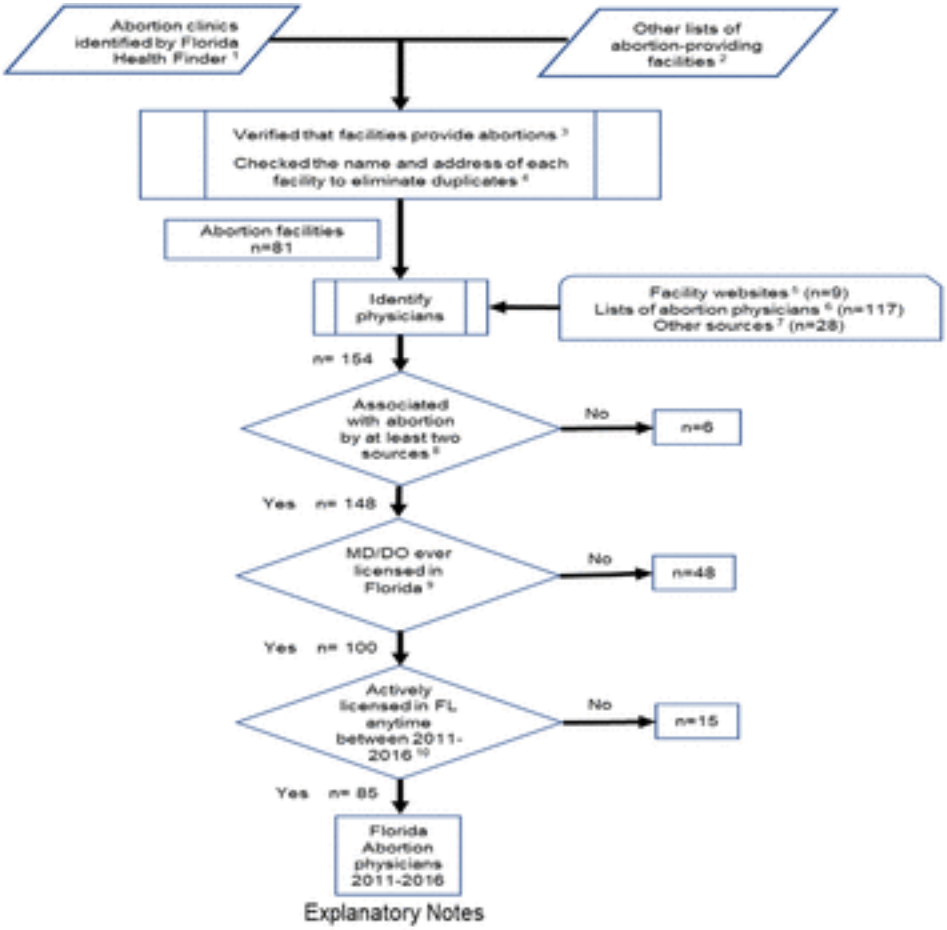
(Joint Commission on the Accreditation of Healthcare Organization, Accreditation Association for Ambulatory Health Care, Inc, American Association for Accreditation of Ambulatory Surgical Facilities, Inc); surgical and medical specialty societies, including the American College of Obstetricians and Gynecologists and the American Society for Reproductive Medicine; and various state medical associations (Massachusetts, New York, Kansas, Indiana, and Missouri). Two of the 10 core principles relate directly to the process of securing and maintaining hospital admitting privileges. Core principle No. 4 states that "physicians performing office based surgery must have admitting privileges at a nearby hospital…or a transfer agreement with another physician who has admitting privileges at a nearby hospital." Core principle No. 8 states that "a physician may show competency by maintaining core privileges at an accredited licensed hospital or ambulatory surgery center."[8] Finally, it is clear that hospital privileges are valued and sought in some form not only by physician–surgeons but also by nonsurgical primary care physician–practitioners such as family practice doctors, and even by nonphysician practitioners such as psychologists, optometrists, nurse-midwives, and others.[9-11] Hospital privileges also provide an opportunity for physicians to gain access to important diagnostic and treatment technology as well as a diverse network of provider specialists, which should enable each privileged physician to play a more complete and integrated role in optimizing the care delivered to each patient.

Methods

Abortion Physician Identification, Verification, and Inclusion Process

Abortionist physicians licensed in Florida between 2011 and 2016 were selected for the study using a 3-step process (Figure 1). First, a complete list of Florida abortion facilities was compiled using lists published by the Florida Department of Health (FDoH) and organizations interested in abortion provision. Second, the websites of these facilities were checked for physician names and Internet searches were performed to find physicians associated with the facilities. Third, each physician was associated with abortion by at least 2 different sources and then each physician's FDoH practitioner profile was checked to ensure that he or she was a medical doctor or osteopathic physician who was licensed in Florida between 2011 and 2016.

Physicians who self-identified as board certified by the American Board of Obstetricians and Gynecologists (ABOG) were validated by the ABOG Diplomate Verification Search System.



Explanatory Notes

1. Florida Health Finder provides a list of all abortion clinics currently licensed in Florida or closed after 2010. We identified all clinics licensed between 2011-2016.
2. These lists were compiled by organizations interested in abortion provision and accessibility
3. Other sources were checked to confirm that these facilities provided abortions, including facilities' websites, health care and business directories, patient reviews, and Florida Department of Health (FDOH) documents.
4. Some clinics changed names or locations during 2011-2016. To eliminate duplicates, lists of abortion providing facilities were compared and archived versions of facilities' websites, health care and business directories, patient reviews, news articles, and FDOH documents were checked.
5. The websites of the 81 abortion facilities were checked for physicians' names.
6. Lists of doctors compiled by organizations interested in abortion provision.
7. Other physicians were identified by performing Internet searches of abortion facilities' names and addresses (n=24); reviewing the IRS Forms 990 for abortion facilities, where available (n=3); and identifying the supervising physician in ARNP protocols for nurses working at abortion facilities (n=1).
8. Additional sources include the FDOH practitioner profiles, health care and business directories, patient reviews, news articles, FDOH documents, provider lists, and facility 990s.
9. Each physician was checked in the FDOH's practitioner profiles to determine whether they had ever been licensed in Florida as a health professional and, if so, whether they were a licensed MD or DO.
10. Each physician was checked in the FDOH's practitioner profiles to determine their initial licensing date and license expiration date. In cases where the license expiration date was after 2011 but the physician was deceased, obituaries were consulted to ensure that the physician had been alive sometime during 2011-2016 (3 physicians). In cases where the expiration date was after 2011 but the license was suspended or relinquished, disciplinary documents and news articles were used to verify that the physician had had an active license at some point during 2011-2016 (5 physicians).

Figure 1. Identifying and validating abortionist physicians in Florida.

The Florida Practitioner Profile

The primary source of physician characteristics for this analysis is the Florida Practitioner Profile (FPP), maintained by the Division of Medical Quality Assurance. Required by law since 1997, all medical doctors; osteopathic, chiropractic, and podiatric physicians; and licensed advanced registered nurse practitioners must report their profiles. Data elements residing in the FPP include practice address; participation in Medicaid; hospitals and other provider facilities at which the doctor holds privileges; other state licensures; year licensed in any jurisdiction; education and training, including postgraduate and professional (including dates); specialty certification; and proceedings and actions such as medical sanctions and termination, criminal offenses, and disciplinary actions undertaken against them by various organizations.

Florida Agency for Health Care Administration State Inpatient Database

The state inpatient database (SID) contains more than 100 clinical and nonclinical variables, such as principal and secondary diagnoses and procedures, admission and discharge status, patient demographic characteristics (eg, gender and race), expected payment sources, length of stay, and total charges. The FPP and SID are linkable via the physicians' licensure numbers.

We identified every patient discharge from Florida hospitals for women aged 15 to 44, for the years 2011 to 2016, attributable to any of our identified physicians. For each admission, we identified the Medicare Severity Diagnosis-Related Group (MSDRG), whether the admission had occurred through the ED, and the race and pay source of the patient. Abortion doctors were also segmented into high-, medium-, and low-volume groups based upon their total number of admissions.

We used Pearson (2×2) χ^2 statistic to test the significance of differences in the characteristics of physicians with and without hospital privileges. Similarly, we used the χ^2test of independence for assessing significant differences between the 3 admission volume determined physician groups (2×3) for the racial, pay source, ED involvement, and clinical composition of their inpatients. Significance was at the $P < .05$ level for all tests.

Findings

Physician Characteristics

Table 1 summarizes selected demographic and practice characteristics of the Florida abortionists identified in the sample. The 85 physicians are divided into those with (43, 50.6%) and without (42, 49.4%) hospital admitting privileges. Most abortionist physicians are men (63, 74.1%). Nearly 62% (n = 52) of the physicians have been in practice for more than 30 years. Twenty-three (27.1%) of the abortionists are foreign medical school graduates. The foreign medical schools represented were located in the following nations and territories: Belgium, Canada, Cayman Islands, Chile, Dominica, Germany, Grenada, Italy, Iran, India, Nicaragua, Philippines, Puerto Rico, Romania, Russia, Spain, and Thailand. Physicians with hospital privileges are significantly ($P < .05$) more likely to be board certified ($\chi^2 = 5.195$, $P = .22652$) and to be approved for Medicaid payment ($\chi^2 = 11.693$, $P = .00627$). Nearly half of the physicians (n = 41, 48.2%) had at least 1 malpractice claim, disciplinary action, public complaint, or criminal charge lodged against them.

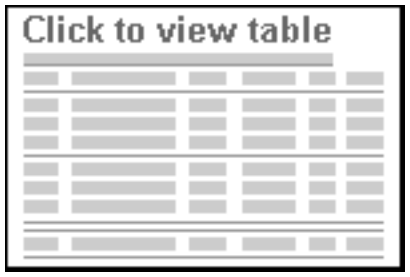


Table 1. Characteristics of Abortionist Physicians, n (%).

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Characteristic	Total, n (%)	With Privileges	Without Privileges	*P* Value
Total, n (%)	85 (100)	43 (50.6)	42 (49.4)	
Sex				
Female	22 (25.9)	9 (20.9)	13 (31.0)	.2907
Male	63 (74.1)	34 (79.1)	29 (69.0)	
Board certification				
Yes	47 (55.3)	29 (67.4)	18 (42.9)	.0226[a]
No	38 (44.7)	14 (32.6)	24 (57.1)	
Years in practice[b,c]				
<10	2 (2.35)	0	2 (4.76)	.0552
10-19	17 (20.0)	12 (27.9)	5 (11.9)	
20-29	14 (16.5)	9 (20.9)	5 (11.9)	
30-39	31 (36.5)	15 (34.9)	16 (38.1)	
40-49	15 (17.6)	6 (14.0)	9 (21.4)	
≥50	6 (7.06)	1 (2.33)	5 (11.9)	
Medical school				
International	23 (27.1)	12 (27.9)	11 (26.2)	.8608
Domestic	62 (72.9)	31 (72.1)	31 (73.8)	
Accepts Medicaid				
Yes	36 (42.4)	26 (60.5)	10 (23.8)	.0007[a]
No	49 (57.6)	17 (39.5)	32 (76.2)	
Sanctions[d]				
None	44 (51.8)	20 (46.5)	24 (57.1)	.3310
≥1	41 (48.2)	23 (53.5)	18 (42.9)	

[a]Significant at $P < .05$.
[b]If year practice began not specified by physician, default was year issued followed by year graduated from residency.
[c]Significance tested difference between ≤29 years practice versus ≥30 years.
[d]Sanctions include malpractice, disciplinary action, public complaint, or criminal charge(s).

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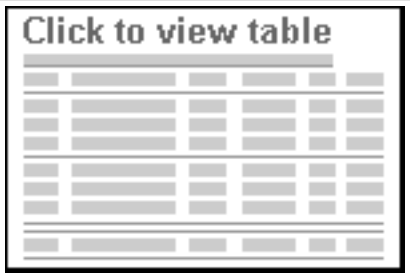
Admission Volume

Between 2011 and 2016, 32 (37.6%) of the Florida abortionist physicians had at least a single inpatient hospital admission of a woman aged 15 to 44 for any reason. In total, they were involved in 21 502 admissions. The distribution of the admissions by physician volume is highly skewed, and physicians were allocated into 3 groups

based on admission volume. Group 1 (high volume) was composed of 7 physicians who each accounted for 1019 to 4366 admissions over the 6-year period, representing 14 665 admissions or 68.2% of the total, averaging 349 admissions per doctor per year. Group 2 (medium volume) was composed of 8 physicians who each accounted for 430 to 881 admissions, representing 5799 admissions or 27.0% of the total, averaging 121 admissions per doctor per year. Group 3 (low volume) was composed of 17 physicians who each accounted for 1 to 288 admissions, representing 1038 admissions or 4.8% of the total, averaging 10 admissions per doctor per year.

Admissions by DRG

Admissions involving vaginal or cesarean deliveries, both with and without complicating diagnoses, account for 17 127 (79.6%) of total admissions. 1082 (5.0%) of the admissions involve surgical repair of the uterus and adnexa (fallopian tubes, ovaries) for various nonmalignant conditions both with and without complicating diagnosis. A total of 1081 (5.0%) of the admissions involve medical management of other antepartum diagnoses both with and without medical complications. Another 887 (4.1%) admissions involve abortions with and without dilation and curettage, postabortion diagnosis with and without an operating room procedure, and threatened abortion. Only 21 MSDRG categories account for nearly 97% of all admissions, with the remaining 3% of admissions distributed among nearly 300 MSDRG groups (Table 2).



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MSDRG	Admissions	Description (%)	Cumulative (%)
775	8762	Vaginal delivery without complicating diagnoses (40.75)	40.75
766	4697	Cesarean delivery without CC/MCC (21.84)	62.59
765	2432	Cesarean delivery with CC/MCC (11.31)	73.90
774	1005	Vaginal delivery with complicating diagnoses (4.67)	78.58
743	864	Uterine and adnexa procedure for nonmalignancy without CC/MCC (4.02)	82.60
781	816	Other antepartum diagnoses with medical complications (3.79)	86.39
782	265	Other antepartum diagnoses without medical complications (1.23)	87.62
777	261	Ectopic pregnancy (1.21)	88.84
778	255	Threatened abortion (1.19)	90.02
767	223	Vaginal delivery with sterilization and/or D&C (1.04)	91.06
770	221	Abortion with D&C, aspiration curettage or hysterotomy (1.03)	92.09
742	218	Uterine and adnexa procedure for nonmalignancy with CC/MCC (1.01)	93.10
779	218	Abortion without D&C (1.01)	94.12
776	161	Postpartum and postabortion diagnoses without OR procedure (0.75)	94.87
812	83	Red blood cell disorders without MCC (0.39)	95.25
761	77	Menstrual and other female reproductive system disorders without CC/MCC (0.36)	95.61
759	67	Infections, female reproductive system without CC/MCC (0.31)	95.92
392	46	Esophagitis, gastroenteritis, and miscellaneous digest disorders without MCC (0.21)	96.14
745	38	D&C, conization, laparoscopy, and tubal interruption without CC/MCC (0.18)	96.31
780	32	False labor (0.15)	96.46
769	32	Postpartum and postabortion diagnoses with OR procedure (0.15)	96.61
All other	729	All other (3.39)	100.00
Grand total	21 502		

Abbreviations: CC, complication or comorbidity; D&C, dilation and curettage; MCC, major complication or comorbidity; MSDRG, Medicare Severity Diagnosis-Related Group; OR, operating room.

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Volume group differences in the composition of admissions by DRG are apparent (Table 3). Increasing volume is associated with a higher percentage of admissions associated with live births by vaginal or cesarean deliveries. Births comprise 83.5% of the high-volume doctor admissions, but only 48.2% for the low-volume group (χ^2 = 837.0343, P = <.00001). By contrast, uterine procedures for nonmalignant conditions are more than one-fourth (27.0%) of low-volume doctor admissions, but only 3.4% for the high-volume group (χ^2 = 1127.7516, P < .00001). Differences in the number of abortion-related admissions between the groups are not significant. High-volume group admissions are concentrated in a small number of DRGs compared to a dispersed pattern of a larger number of low incidence DRGs among the medium- and low-volume doctors.

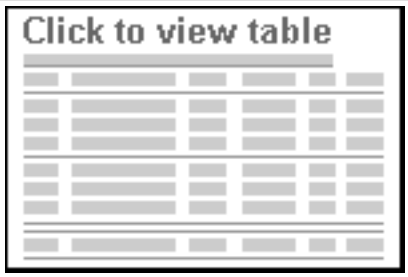

Table 3. Total Inpatient Admissions by Physician Volume Groups, by DRGs.

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DRGs	Combined Description	Admissions (%)			P Value
		High	Medium	Low	
765, 766, 767, 768, 774, 775	Vaginal and cesarean section deliveries with and without complicating comorbidities or conditions	12 257 (83.6)	4369 (75.3)	501 (48.3)	<.00001[a]
742, 743	Uterine and adnexa procedures for nonmalignancy, with and without complicating comorbidities or conditions	499 (3.4)	303 (5.2)	280 (27.0)	<.00001[a]
781, 782	Other antepartum diagnoses with and without medical complications	821 (5.6)	190 (3.3)	70 (6.7)	<.00001[a]
769, 770, 776, 777, 778, 779	Abortions with and without dilation and curettage; postpartum and postabortion diagnoses with and without an OR procedure; threatened abortion; ectopic pregnancy	778 (5.3)	303 (5.2)	67 (6.4)	.25424
All other DRGs		310 (2.1)	634 (11.0)	120 (11.6)	
Total		14 665	5799	1038	

Abbreviations: DRG, Diagnosis-Related Group; OR, operating room.
[a]Significant $P < .05$.

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Admissions Involving a Live Birth

Only 24 (28.2%) of the 85 physicians who perform abortions had 1 or more hospital admissions involving a live birth in the 6-year study period. Of the total 17 127 birth-related admissions, 2006 (11.7%) came through the ED. The top 5 doctors by birth volume accounted for 10 334 (60.3%) births. A single physician admitted nearly half (49.2%) of the births that came via ED, and only 5 doctors accounted for 1673 (83.4%) of total ED birth admissions. Ten doctors averaged 10 or more births per month, considered as a normal obstetrical case load. Five physicians averaged between 2 and 10 births per month, and 9 doctors averaged fewer than 2 births per month (Table 4).

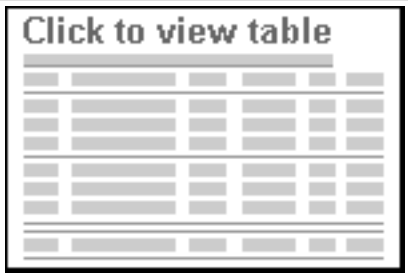

Table 4. Birth-Related Inpatient Admissions (2011-2016) by Abortionist Physician, ED/Non-ED, Per Month.

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Physician #	Non-ED	ED (%)	Total	Per Month
1	3394	162 (4.5)	3556	49.4
2	2168	67 (3.0)	2235	31.0
3	1419	78 (5.3)	1477	20.5
4	1349	128 (8.6)	1477	20.5
5	946	1 (0.001)	947	13.1
6	788	168 (17.6)	956	13.2
7	783	2 (0.002)	785	10.9
8	743	1 (0.001)	744	10.3
9	647	46 (6.6)	693	9.6
10	601	988 (62.2)	1589	22.0
11	591	227 (27.7)	818	11.4
12	460	0	460	6.4
13	446	3 (0.006)	449	6.2
14	420	0	420	5.8
15	113	73 (39.2)	186	2.6
16	72	0	72	1.0
17	51	30 (37.0)	81	1.10
18	53	32 (37.6)	85	1.20
19	40	0	40	0.50
20	14	0	14	0.19
21	10	0	10	0.14
22	5	0	5	0.07
23	4	0	4	0.05
24	4	0	4	0.05
Total	15 121	2006 (11.7)	17 127	9.91

Abbreviation: ED, emergency department.

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Total Admissions by Race, Pay Source, and ED Use

Of the 21 502 total admissions, 4171 (19.4%) were admitted through the ED and 17 331 (80.6%) through the normal admitting process. The distribution of admissions by pay source was Medicaid 13 955 (64.9%), commercial 5478 (25.5%), other 1804 (8.4%), and Medicare 267 (1.2%). By race, the discharges were black 10 237

(47.6%), white 8182 (38.1%), and other 3083 (14.3%). Admissions which were both black and Medicaid numbered 7591 (35.3%), of which 1632 (21.5%) were admitted through the ED (Table 5).

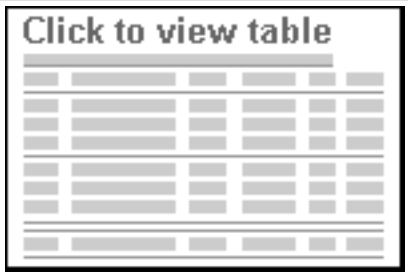

Table 5. Total Inpatient Admissions (2011-2016) by Abortionist Physicians, by Race, Pay Source, and ED/Non-ED.

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Pay Source	Black	White	Other	Total (%)
Emergency room				
Commercial	375	403	75	853 (20.4)
Medicaid	1632	702	314	2648 (63.5)
Medicare	51	41	3	95 (2.3)
Other	270	237	68	575 (13.8)
Total (%)	2328 (55.8)	1383 (33.2)	460 (11.0)	4171 (19.4)
Nonemergency room				
Commercial	1443	2512	668	4623 (26.7)
Medicaid	5959	3577	1771	11 307 (65.2)
Medicare	104	58	10	172 (<1.0)
Other	403	652	174	1229 (7.1)
Total (%)	7909 (45.6)	6799 (39.2)	2623 (15.2)	17 331 (80.6)

Abbreviation: ED, emergency department.

View larger version

Volume Group–Specific Admissions

Within-group admissions through the ED were as follows: group 1: 2703 (18.4%); group 2: 1141 (19.7%); and group 3: 327 (31.5%; $\chi^2 = 106.3229$, $P = <.00001$; Figure 2).

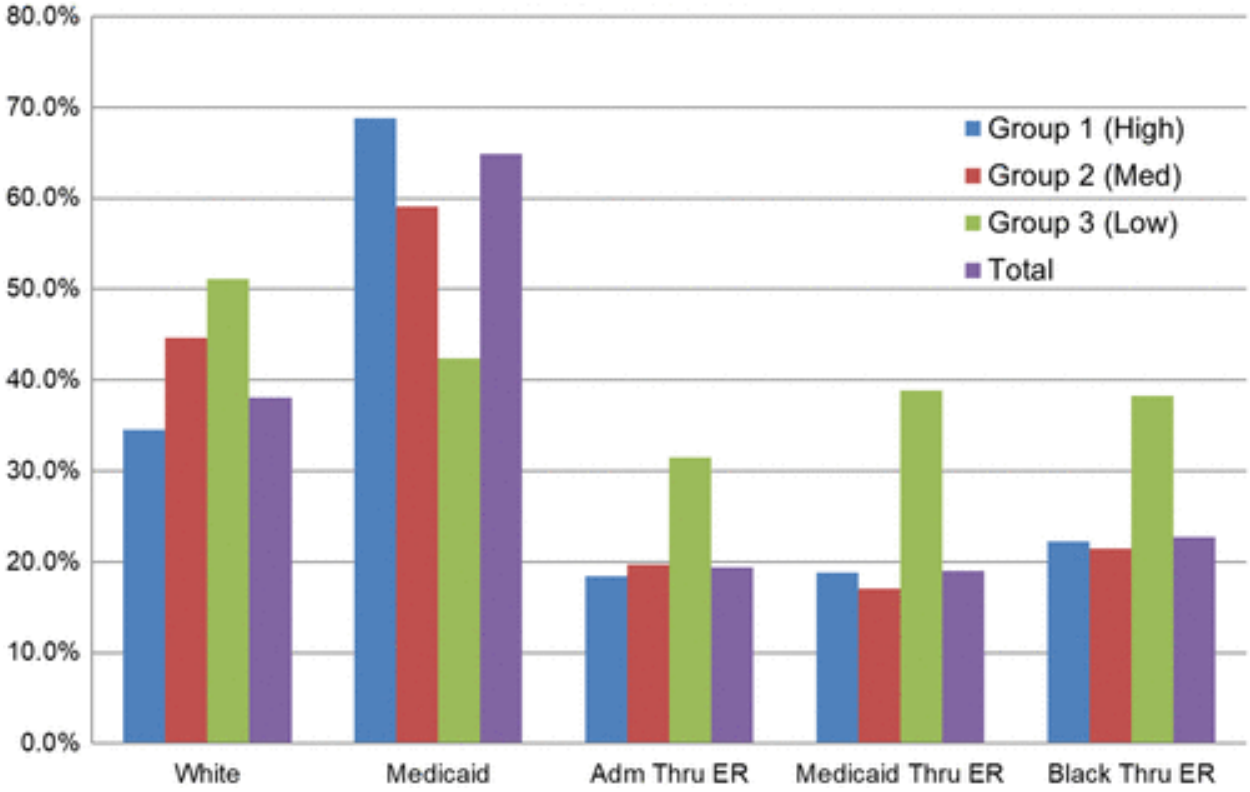

Figure 2. By volume group, white, Medicaid, and ED admissions. ED indicates emergency department.

Within-group admissions by pay source were as follows: Medicaid—group 1: 10 089 (68.8%); group 2: 3426 (59.1%); and group 3: 440 (42.4%; $\chi^2 = 414.899$, $P = <.00001$). Commercial—group 1: 3463 (23.6%); group 2: 1602 (27.6%); and group 3: 411 (39.6%; $\chi^2 = 149.9167$, $P = <.00001$). Other—group 1: 983 (6.7%); group 2: 660 (11.4%); and group 3: 161 (15.5%; $\chi^2 = 190.2832$, $P = <.00001$). Medicare—group 1: 130 (.90%); group 2: 111 (1.9%); and group 3: 26 (2.5%; $\chi^2 = 49.9764$, $P = <.00001$).

Within-group discharges by race were as follows: black—group 1: 7449 (50.8%); group 2: 2359 (40.6%); and group 3: 429 (41.3%); white—group 1: 5061 (34.5%); group 2: 2590 (44.8%); and group 3: 531 (51.2%); other—group 1: 2155 (14.7%); group 2: 850 (14.6%); and group 3: 78 (7.5%; $\chi^2 = 295.5377$, $P = <.00001$).

Medicaid and the ED

Of the total of 13 955 Medicaid discharges, 2648 (18.9%) were admitted through the ED. At the group level, the number and percentage of Medicaid admissions through the ED were as follows: group 1: 1892 (18.7%); group 2: 585 (17.1%); and group 3: 171 (38.9%; $\chi^2 = 121.5676$, $P = <.00001$).

Black Race and the ED

Of the total of 10 237 black admissions, 2328 (22.7%) were admitted through the ED. At the group level, the number and percentage of black admissions through the ED were as follows: group 1: 1658 (22.2%); group 2: 506 (21.4%); and group 3: 164 (38.2%; $\chi^2 = 61.7952$, $P = <.00001$).

Overall, admissions from doctors who do abortions are most likely to be Medicaid-eligible and black. Admissions of black Medicaid patients were more than one-third of the total. Admissions from the low-volume group of doctors were less likely to be black or Medicaid-eligible than the higher volume groups, but much more likely to flow through the ED.

Discussion

The profile of Florida abortionist characteristics and the findings related to their holding of hospital admitting privileges and subsequent utilization of the hospital raise questions of consequential public policy importance. This group of abortionists is relatively senior, is predominantly composed of doctors who have been in practice for more than 30 years, and is disproportionally male. Some anecdotal literature suggests that there may be barriers to abortion practice for early career doctors and that doctors who choose to do abortions often try to keep knowledge of this activity from their professional colleagues. The relatively advanced age distribution and large percentage of abortionists with some malpractice claim, disciplinary action, public complaint, or criminal charge suggest that these doctors may be a subset of practicing physicians for whom abortion practice may be a final professional expedient. A little more than half of the group is board certified, more than one-fourth

are foreign trained, and less than half admit patients to the hospital. At the same time, we find a number of board-certified obstetricians with apparently high-volume delivery practices among the group. The obvious conclusion is that abortionists are heterogeneous in terms of both personal and practice characteristics.

Only 43 of the 85 abortionists held privileges and, of those with privileges, only 32 had at least a single admission during the entire 6-year study period. A few of the doctors used the hospital extensively, those being board-certified obstetricians. The overwhelming number of admissions among this small group was for deliveries. The extent to which abortion doctors are also involved in delivering babies is of considerable research interest. The typical abortionist uses the hospital infrequently. Since only a very small fraction of induced abortions occur in an inpatient setting, it seems plausible to conclude that most abortionists concentrate on outpatient abortions and practice very little medical care that is related to other illnesses and injuries, which frequently result in the need for an inpatient hospitalization.

Since volume is associated with positive outcomes across a broad array of health services, the volumes and types of induced abortions performed by each physician and their pattern of adverse outcomes (eg, complications resulting in an ED visit) are of vital interest. An analysis of physician abortion volume and inpatient admission volume, controlling for important physician characteristics (eg, board certification), would provide insight into a profile of quality determinants for abortion-related care.

Despite the relatively sparse use of the hospital, nearly one-fifth (19.9%) of the admissions come from a visit to the ED, and this percentage is nearly 40% for black and Medicaid admissions from the lowest volume doctors. Inpatient admissions through the ED are expedited if the patient is under the care of a physician who is a frequent admitter to whom the inpatient admission can be assigned. This finding also supports the conclusion that doctors who do abortions are, in fact, involved in the care of patients whose illness or condition often requires an ED visit which frequently results in an admission. Further, abortionists who use the hospital the least are proportionally more likely to use the ED as a path to admission. For hospitalizations resulting from complications of an induced abortion performed in an ambulatory setting, whether and where the abortionist holds admitting privileges is likely an

important explanatory factor in the conduct and ultimate outcome of the process of care. With the ED admission as such a prominent occurrence for the Florida abortionist with hospital privileges, what is the experience of those patients who require an ED admission but whose doctor lacks privileges?

Finally, the disproportionate racial (black) and pay source (Medicaid) characteristics of abortionist inpatients confirm what is known about the large and long-standing racial disparity in abortion in the United States. In the period between 1990 and 2014, in states that reported race-specific abortion data to the Centers for Disease Control and Prevention, the black abortion rate was 3.4 times the white rate.[12] The fact that inpatient admissions from abortionist physicians are also disproportionally black and poor should stimulate further research on this understudied population.

Studies of doctors who perform abortions are absent from the peer-reviewed literature. How and why a physician becomes an abortionist are largely unexplored questions. Similarly, the extent to which these physicians are integrated with or isolated from the typical processes and communication networks of medical care, including the patient hospitalization event, is largely unknown and unexplained. A fundamental question made explicit but unanswered by this exploratory analysis is how many doctors restrict their practice exclusively to abortion. A major barrier to advancing this domain of science continues to be the lack of a universal and comprehensive reporting requirement for all induced abortions and the health-care professionals who perform them. Valid hypothesis testing analyses of these important research questions will require statistically representative samples of physicians and patients derived from such a comprehensive surveillance system.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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