

The Long and Winding Road?: Distance Traveled and Crossing State Lines for Abortion Services

Introduction

The number of U.S. abortion providers has been declining since 1982, which means many women must travel substantial distances to access abortion services. A number of states have implemented restrictions such as mandated waiting periods and parental involvement laws, which may motivate some women to cross state lines; these regulations, and strategies to deal with them, may also increase the distance women have to travel to reach a provider. We propose to combine national data from a nationally representative sample of abortion patients and a census of all U.S. abortion providers, both for 2008, to examine (1) how far women travel for abortion services, (2) the characteristics of women who travel longer distances and who cross state lines for this purpose, and (3) how distance traveled may be related to crossing state lines. We develop several hypotheses predicting the ways that socioeconomic status, age, gestation and residing in a state with a waiting period will affect travel for abortion care. We also propose to assess how commonly U.S. abortion patients go to the clinics nearest to them and how this dynamic is related to distance and crossing state lines for abortion care. Information from the proposed study will be used to inform public policy and, in particular, counter attempts to impose restrictions that could increase distances women have to travel, or the number of visits required, to obtain an abortion. Perhaps just as importantly, the findings will provide baseline information about issues related to travel that have already changed in recent years, as more states introduce restrictions around abortion services.

Data and Methods

Data for the analyses come from the Guttmacher Institute's 2008 Abortion Patient Survey (APS) and 2008 Abortion Provider Census (APC). The methodologies for both studies have been evaluated and described elsewhere,^{1, 5} and we only provide a brief description of each below.

2008 Abortion Patient Survey. The 2008 APS was the Guttmacher Institute's fourth national survey of abortion patients; prior surveys were conducted in 1987, 1994 and 2000.¹⁴⁻¹⁶ For the most recent survey, a sample of 107 facilities was randomly selected from the universe of all hospitals, clinics and physician's offices where abortions were known to be performed. The questionnaire, available in both English and Spanish, was distributed to women by facility staff. It included an introduction explaining the purpose of the survey and informing women that participation was voluntary and anonymous. The questionnaire and procedures were approved by the Guttmacher Institute's federally registered Institutional Review Board. Participating facilities reported performing 12,866 abortions during the sampling period, which extended from April 2008 to May 2009; usable data was collected

from 9,493 women obtaining abortions at 95 facilities for a response rate of 74%. Weights were constructed to make the data representative of all U.S. women obtaining abortions.

2008 Abortion Provider Census. The 2008 APC was Guttmacher's 15th national census of abortion providers. All facilities known to have performed abortions in 2005 were surveyed, and possible new providers were identified through sources including the Internet, newspaper ads, and telephone directories, as well as the membership directories of relevant membership organizations. Additional providers were identified throughout the data collection process. In addition to mailings, we obtained information about abortion incidence, and in some cases new providers, from health department agencies in 45 states and the District of Columbia. We surveyed 2,344 facilities and determined that 1,793 provided at least one abortion in 2008.¹

Outcome variables. Our analysis will focus on two outcomes: distance traveled and crossing state lines for abortion services. APS respondents were asked to provide their state of residence and zip code, and the data file also contains the zip code of the facility where respondents were obtaining their abortions. Distance between the centroid of each zip code was calculated to estimate distance. The dependent variable was highly skewed and for multivariate analyses we transformed the variable by obtaining the natural log. The second key outcome, crossing state lines, consists of a binary measure of whether the woman obtained an abortion in her state of residence.

Independent variables. The 2008 APS collected information on a number of patient characteristics. Those most relevant to the proposed project include demographic characteristics (age, race/ethnicity, union status, education, poverty level) and weeks since last menstrual period (LMP). Other measures include how the woman paid for the abortion and region of residence. The APS contains data from 875 women residing in states with two-visit counseling requirements and from 637 abortion patients under the age of 18.

Analytic strategy . Hypotheses will be assessed in both bivariate and multivariate analyses. Chi-square and t-test statistics are used to assess bivariate associations. We will rely on GLM and logistic regression for multivariate analyses.

PRELIMINARY FINDINGS

Distance to providers. We found that 8% travelled out-of-state for the abortion, 10% lived in a state that required two in-person visits and 39% lived in a state with a 24 hour waiting period. Abortion patients were most likely to live in the South (37%) and least likely to live in the Midwest (17%).

Depending on which measure is used, women travelled a mean distance of 29-37 miles to an abortion provider in 2008, with a median distance of 14-15 miles (Table 1). Notably, regardless of

whether the outliers are included, 71% of abortion patients travelled less than 25 miles and 14% travelled 25 -50 miles. Six to 7% travelled more than 100 miles to obtain abortions. (Subsequent bivariate analyses focus on the distance with the outliers excluded.)

Relative to women aged 20-24, those under age 18 travelled a significantly shorter distance for abortion services, as did all racial and ethnic groups compared to whites (Table 2). Women who paid with Medicaid or private insurance did not have to travel as far as women who paid out of pocket. Not surprisingly, women who crossed a state line to obtain an abortion travelled more than twice as far as those who obtained their abortion in state. Women who reside in the Midwest or the South travelled almost twice as far as those in the Northeast and those who lived outside of an MSA travelled almost four times as far as those who lived within one. Also notable are the absence of some of the expected associations, for example, there were no significant differences in distance travelled according to poverty status or gestation and women who lived in a state with the two visit requirement did not travel further than those who did not.

Notably, some of the associations observed at the bivariate analysis may be spurious, and for example, Black and Latina women are concentrated in metropolitan areas and this may be one reason they travelled significantly shorter distances than white women to obtain abortions. Thus, our next step was a multivariate analysis that simultaneously controlled for all the characteristics (using the transformed dependent variable). Most of the associations were maintained. Compared to white women, women of other races traveled significantly shorter distances to access abortion services while those who crossed state lines and lived in non-metropolitan areas traveled further than those who did not (Table 2, last column). Compared to women in the South, those in the Northeast and West travelled shorter distances. The one new association that did emerge in the multivariate analysis was gestation, and women obtaining abortions at 16 weeks or later traveled significantly further than women who had first trimester abortions once other characteristics were taken into account.

Crossing state lines for abortion services. Approximately 8% of women access abortion services in a state different from the one in which they lived (Table 3), and, perhaps not surprisingly, many of the same characteristics that predicted travelling longer distances were associated with this outcome. Race/ethnicity, payment type, region of facility (but not residence) and urbanicity were associated with crossing state lines. In particular, white women were most likely (10%) and Hispanic women least likely (5%) obtain abortions in another state; only 3% of women able to use Medicaid to pay for the abortion went to another state while 10% of women using financial assistance crossed state lines. Women obtaining abortions at facilities in the South and Midwest were most likely to have gone to another state

for an abortion while women at facilities in the West were least likely to have done so. More than one in five women who resided outside an MSA travelled out of state for abortion services.

Some, but not all, of the bivariate associations were maintained in the logistic regression models. Once other factors were taken into account Latina women were half as likely as white women to travel to another state for abortion services, as were women using Medicaid to pay for the procedure compared to women paying out of pocket. Women who lived outside of an MSA were four times more likely than women who did to obtain an abortion in a state other than the one they lived in. Region was not longer associated with crossing state lines once other factors were taken into account, but women obtaining abortions at 16 weeks or later were almost twice as likely as first trimester patients to do so.

Subsequent analyses will examine the extent to which women travel to the closest provider and whether women who cross state lines are doing so because the provider is closer or

Discussion and Conclusion

Most women who obtain abortions, 71%, travel less than 25 miles to do so. Contrary to popular belief, our analysis does not suggest that minors or women who live in states that mandate two-visit counseling are more likely to cross state-lines to avoid these restrictions. Women obtaining abortions at 16 weeks or later had to travel further and were more likely to cross state lines, presumably because there are fewer nearby providers nearby that offer these services. It is unclear why Hispanic women travel shorter distances and are less likely to cross state lines than white women; subsequent analysis will control for nativity as immigrant women may be less willing or able to travel far from where they live, especially if they are undocumented. That women in the South and the Midwest have to travel further and are more likely to cross state lines is likely due to the fact that there are fewer providers in the area.

References

- (1) Jones RK, Kooistra K. Abortion Incidence and Access to Services In the United States, 2008. *Perspectives on Sexual and Reproductive Health* 2011;43(1):41-50.
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Table 1. Distance travelled to abortion services in 2008

	2008 APS		
	Unadjusted	Top-coded	No outliers
Mean	37.2	31.5	28.8
Median	14.5	14.5	14.4
1-24 miles	70.7	70.7	71.2
25-49 miles	13.6	13.6	13.7
50-100 miles	8.7	8.7	8.7
>100 or more miles	7.0	7.0	6.3
Total N	8388	8388	8326

Table 2. Average distance (in miles) between patients home and facility where abortion was obtained, by selected characteristics and GLM estimates of distance (natural log) distance travelled

Characteristic	Mean	N	sd		GLM coeff	
	Outliers deleted					
All/intercept	28.8	42.2	8,326		4.32	***
Age						
<18	25.5	32.7	558	*	0.03	
18-19	28.4	40.2	914		0.09	
20-24	29.3	43.1	2,815		1.00	
25-29	28.5	42.3	2,005		0.00	
30-34	29.9	44.6	1,114		-0.03	
35-39	28.9	44.4	687		0.00	
40+	28.4	40.8	235		-0.06	
Race/ethnicity						
Non-Hispanic White	36.4	47.1	3,094		1.00	
Non-Hispanic Black	26.6	41.0	2,432	**	-0.29	***
Non-Hispanic Other	25.2	43.6	760	***	-0.14	**
Hispanic	21.1	32.2	2,040	***	-0.24	***
Highest level of education						
Less than high school	25.7	38.4	1,464		-0.10	*
High school grad	27.9	41.0	2,452		-0.06	
Some college	30.8	48.0	1,351		1.00	
College grad	28.8	42.2	8,326		-0.05	
Poverty status						
<100%	28.4	42.0	3,490		1.00	
100-199%	28.4	41.1	2,247		0.01	
200+%	29.5	43.3	2,589		0.06	
Gestation (weeks LMP)						
LE 12 weeks	28.4	41.7	7,467		1.00	
13-15 weeks	32.1	46.0	517		0.10	
16+ weeks	32.4	46.5	342		0.23	**
How paying for abortion						
Out of pocket/self	32.2	44.9	4,456		1.00	
Financial assistance	34.3	48.2	1,071		-0.02	
Private insurance	22.4	33.6	983	***	-0.08	
Medicaid	19.8	31.1	1,632	***	-0.07	
Crossed state line for abortion						
No	25.2	37.5	7,711	***	1.00	
Yes	74.3	65.4	611		1.02	***
Resides in two-visit state						
No	27.6	41.5	7,515		1.00	

Yes	39.5	46.9	810		0.09	
Region of residence						
Northeast	19.3	31.3	1,914		-0.40	**
Midwest	34.6	48.2	1,428	*	-0.28	*
South	37.4	47.9	3,024	**	1.00	
West	19.1	29.5	1,941		-0.33	**
Resides in MSA						
No	88.8	59.7	758	***	1.00	
Yes	22.8	34.7	7,568		-1.33	***

Table 3. Percentage distribution of women who cross state lines for abortion services, by selected characteristics, and odds ratios (logistic regression) predicting crossing state lines

	Cross state line		Odd ratios	
	No	Yes		
Age				
<18	92.1	7.9	1.81	
18-19	92.6	7.4	1.53	
20-24	92.1	7.9	1.00	
25-29	91.6	8.4	1.80	
30-34	91.7	8.3	1.65	
35-39	90.8	9.2	1.92	
40+	94.5	5.5	1.61	
Race/ethnicity				**
Non-Hispanic White	89.9	10.1	1.00	
Non-Hispanic Black	90.5	9.5	0.96	
Non-Hispanic Other	94.3	5.7	0.69	
Hispanic	95.7	4.3	0.50	***
Highest level of education				
Less than high school	93.1	6.9	0.93	
High school grad	91.9	8.1	1.03	
Some college	92	8	1.00	
College grad	90.8	9.2	0.93	
Poverty status				
<100%	92.6	7.4	1.00	
100-199%	92	8	0.95	
200+%	91	9	0.93	
Gestation (weeks LMP)				
LE 12 weeks	92.1	7.9	1.00	
13-15 weeks	92.1	7.9	1.00	
16+ weeks	89.3	10.7	1.79	*
How paying for abortion				***
Out of pocket/self	90.1	9.9	1.00	
Financial assistance	89.9	10.1	0.94	
Private insurance	93.3	6.7	0.85	
Medicaid	97	3	0.43	*
Resides in two-visit state				0.057
No	93.1	6.9	1.00	
Yes	80.7	19.3	1.01	
Resides in state with 24 hour waiting period				
No	94.2	5.8		

Yes	81.2	18.8		
Region of facility			*	
Northeast	94.2	5.8		0.71
Midwest	90.9	9.1		0.41
South	87.9	12.1		1.00
West	96.9	3.1		0.44
Resides in MSA			***	
No	78.1	21.9		3.99 ***
Yes	94.2	5.8		1.00
