

Time to Appointment and Delays in Accessing Care Among U.S. Abortion Patients



Rachel K. Jones and Jenna Jerman

Key Points

- In this analysis of individuals obtaining abortions in 2014, some 76% of patients were able to obtain an abortion within seven days of calling to make an appointment; the average time to appointment was 7.6 days.
- Characteristics associated with longer time to appointment included having had two or more births, exposure to disruptive life events, reliance on subsidies or discounts to pay for abortion care, and living in a state with a waiting period requirement.
- Characteristics associated with a shorter time to appointment included being married and choosing the facility because it could see the patient the soonest.
- Seven percent of abortion patients made the appointment more than 14 days prior to obtaining the abortion.
- Three characteristics were associated with having made the appointment more than 14 days ago: exposure to disruptive events, obtaining an abortion in the second trimester and living in a state with a waiting period.
- Two circumstances were associated with both a longer time to appointment and making the appointment more than two weeks ago: exposure to disruptive life events and living in a state with a waiting period.
- The majority of abortion patients (57%) had been exposed to one or more disruptive events in the last year, such as being unemployed, breaking up with a partner or falling behind on their rent or mortgage; 24% of patients had been exposed to two or more such events.
- The majority of abortion patients in our sample (54%) lived in a state without a waiting period. Twenty-four percent lived in a state with a waiting period that required counseling to be provided in person, and 22% lived in a state with a waiting period but no in-person counseling requirement.



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Background

For individuals who wish to terminate a pregnancy, timely access to abortion care is critical. Women who want to terminate using medication (as opposed to surgical) abortion must be able to access services within the first 70 days of pregnancy.¹ And regardless of the type of procedure, access to abortion in the first trimester is particularly important. First-trimester abortions are much less expensive than second-trimester procedures, often by several hundred dollars.² Most abortion patients are poor or low income, and many also pay out of pocket for abortion care;³ thus, the inability to obtain an abortion in the first trimester can make the procedure inaccessible. In addition, fewer facilities provide second-trimester abortion services,² which means the procedure may be unavailable to women who are unable to travel substantial distances to get to a second-trimester provider.

On average, abortion patients in 2004 waited seven (median) to 10 (mean) days between trying to make the appointment and obtaining the abortion.⁴ Patients who were poor or low income or who had two or more children typically waited 2–3 days longer than did higher income patients or those without children, respectively; patients aged 30 or older and those who were married saw providers 2–3 days earlier than did their younger and unmarried counterparts, respectively.⁴ These patterns suggest that personal circumstances can influence the time to appointment. For example, poor women and those with more children may need more time to find the funds to pay for the abortion or make child care arrangements, which may lead to delays. Married individuals may be able to rely on their partners to assist with these arrangements.

In addition to individual characteristics, a number of situational factors might affect time to appointment. One national study found that a majority of abortion patients (58%) would have preferred to have had their abortion sooner (including 52% of first-trimester patients),⁴ and at least one smaller study found this proportion to be as high as 74%.⁵ Across studies examining variables that may be related to delays in accessing abortion, the most common reasons for not receiving care sooner involved difficulties making arrangements, including the need to raise money and the inability to get an earlier appointment.^{4–9} Some 75% of abortion patients are poor or low income, yet 51% pay out of pocket for abortion care.³

Thus, some need time to find the money to pay for the procedure. In 2014, some 14% of abortion patients relied on financial assistance from an abortion fund or a clinic discount.³ These types of support are typically limited to low-income patients; while abortion funds alleviate financial burdens and potentially increase access to abortion care, the determination of eligibility and of the amount of funding needed can take time.¹⁰ Moreover, the majority of abortion patients have been exposed to one or more disruptive events in the last 12 months, including being unemployed, falling behind on a mortgage or rent, and separating from a partner,¹¹ and it is possible that these circumstances could delay access to care.

The logistics of finding and getting to a provider might also influence how long it takes patients to get an appointment. In 2008, two-thirds of abortion patients traveled less than 25 miles to access abortion care, but 17% traveled more than 50 miles.¹² Individuals who have to travel longer distances may also have to make arrangements for more child care and take a longer time off of work than do those who live near a provider. A national study found that 11% of abortion patients first went to a facility other than the one at which they eventually obtained the abortion,⁴ and a recent Nebraska study found that some patients received inappropriate referrals and were directed to facilities that did not provide abortions.⁵ These extra visits might result in delays in getting an appointment. While there has been relatively little research on how individuals know where to get an abortion, the Nebraska study found that the most common source of information was the Internet, through which 45% of abortion patients located a clinic.⁵ By contrast, 24% had been to the facility before, 10% were referred by someone who had been there before and 6% were referred by a health care provider. Studies have found that not knowing where to find abortion care is a common reason for delays in accessing services,^{4,7} and it is possible that direct referrals and prior experience with a facility could facilitate quicker access.

The foregoing factors resulting in delays might be more pronounced for second-trimester abortion patients. Drey et al. reported that 20% of second-trimester patients at one California facility had difficulty finding a provider, while only 7% of first-trimester patients did,¹³ and several studies found that approximately one-half of second-trimester patients had been referred to or visited a different facility before they made it to the one where

they obtained their abortion.^{7,13} Nearly one-third of the second-trimester patients in the California study were in their first trimester when they made their initial call regarding abortion services,⁶ and their having to deal with logistical issues such as visiting multiple providers might have meant they had moved into the second trimester by the time they were able to access care. In addition, some second-trimester procedures are more involved and can require clinic visits on two consecutive days,¹⁴ which could mean that patients need to make the appointment further in advance.

Finally, legal restrictions in the form of waiting periods could lead to a longer time to appointment. Waiting periods—which had been implemented in 27 states as of May 1, 2016¹⁵—require that women be provided with information about the procedure and then wait 24–72 hours before they can obtain the abortion. Waiting periods ostensibly provide individuals with time to think about their decision,¹⁵ but research has demonstrated that the overwhelming majority of abortion patients had already made up their mind before they called to make the appointment¹⁶ and were certain of their decision.^{17–19} Thus, the real motivation for these restrictions is to make it more difficult for individuals to obtain abortions. In some states, counseling information can be provided via mail, phone or the Internet, but an increasing number of states—13 as of May 2016¹⁵—require patients to obtain the counseling in person.

Several studies have examined the impact of waiting periods. The most examined policy is Mississippi's 1992 counseling and waiting period law, as this state was the first to successfully implement an in-person counseling requirement. Researchers found that the number and rate of abortions in the state fell, largely because more individuals went out of state for services after the law was implemented.^{20–22} Still, an estimated 10–13% of patients who wanted abortions were unable to obtain them once the two-visit requirement was enforced.^{20,21} On average, among women who obtained abortions, the mean gestational age increased by four days after the in-person requirement was enforced,²² and there was a substantial increase in the proportion of abortions that were performed in the second trimester.^{20,22} These latter patterns demonstrate that while abortion patients were required to wait only 24 hours between counseling and obtaining the procedure, the actual delay was typically longer for at least some women. A recent study of Utah's in-person counseling law found that a 72-hour waiting period translated, on average, into eight days between counseling and procedure for those patients who obtained an abortion.¹⁹

A comprehensive review of counseling and waiting period laws concluded that while in-person counseling requirements may affect access to abortion, those that allow counseling information to be provided via mail,

phone or the Internet appear to have little effect other than to postpone the timing of some abortions.²³

However, this conclusion was based on studies that, by the review authors' own account, were flawed. For example, the studies failed to distinguish between states that did and those that did not require in-person counseling, or whether states measured abortion according to the state in which it occurred as opposed to the state in which the patient lived. In January 2004, Texas implemented a waiting period requirement that allowed counseling to be provided via phone or the Internet, as well as in person. The law was found to have no impact on the early abortion rate in the state: There was no decrease in the number of abortions occurring before 16 weeks, no increase in the gestational age at which abortions were obtained and no increase in the number of women going out of state for services.²⁴ (At the same time the counseling law was implemented, a law requiring that abortions at 16 weeks or later be performed in an ambulatory surgical center also went into effect, and this did have an impact on later abortion rates.) To date, then, there is limited evidence that waiting periods without an in-person requirement increase time to appointment or result in substantial delays, and there are no studies comparing the impact of the two different types of waiting periods.

By using data from a national sample of nonhospital abortion patients, this study examines two related outcomes: how long ago abortion patients made their appointment and delays in accessing care, the latter defined as patients who made their appointments more than two weeks ago. Scant research has employed national data to examine these indicators, and we are interested in determining whether a number of individual characteristics and circumstances are associated with these outcomes. We also want to assess whether waiting periods are associated with a longer time to appointment and delays in accessing care, and whether there are stronger associations for waiting periods that require in-person counseling.

Methods

Data Collection

Data for this analysis come from the Guttmacher Institute's 2014 Abortion Patient Survey. A detailed description of the data collection process has been published elsewhere;³ we provide a brief summary here. The 2014 survey is the fifth in a series of surveys dating back to 1987, and uses a design similar to that employed in prior surveys. A sample of clinics and physicians' offices that provided at least 30 abortions in 2011 was randomly selected from the known universe of 1,720 providers identified by the Guttmacher Institute's 2011 Abortion Provider Census;²⁵ 87 facilities were recruited for participation between April 2014 and June 2015. Hospitals were excluded from the sampling design because of past recruitment challenges, but it is unlikely that their exclusion biased the results of this study as hospital procedures accounted for only 4% of all abortions in 2011.²⁵ The nonhospital universe was stratified by 2011 annual caseload (30–399 abortions; 400–1,999 abortions; 2,000–4,999 abortions; and 5,000 or more abortions), and by whether the facility was affiliated with any national organizations for women's reproductive health. Within each stratum, facilities were organized by census region and state, and then we systematically sampled facilities from each stratum.

Surveys were distributed and collected by facility staff members, who obtained information from 8,380 respondents using a four-page, self-administered questionnaire available in English and Spanish; the facilities performed 11,024 abortions during the survey period for a response rate of 76%. Complex sampling weights were constructed to account for patient nonresponse and variation from the original facility sampling plan. We obtained approval from the Guttmacher Institute's institutional review board.

Dependent Variables

We examined two dependent variables, both based on the question, "About how long ago did you call to schedule the appointment you are here for today?" Respondents were provided with spaces to write in the number of days or weeks. We converted weeks to days (e.g., two weeks was recoded to 14 days). Our analysis examined this as both a continuous variable and a dichotomous variable; using the latter, we compared patients who made their appointment more than 14 days ago to patients who made their appointment sooner.

Ten percent of the sample (835 individuals) did not

provide a response to this question, and were excluded; this was a higher level of nonresponse than for other items, including a question assessing whether respondents had had a prior abortion (5% nonresponse). The higher rate of nonresponse was potentially due to the fact that some patients were unable to recall the exact date when the appointment was made, and so chose not to answer. The survey also collected information about gestational age, and 91 patients indicated that they had made the appointment prior to the likely date of fertilization, sometimes by two or more weeks (e.g., they indicated they were six weeks' pregnant but made the appointment eight weeks ago). These respondents were also excluded from the current analysis, as we assumed they answered the item incorrectly. Forty respondents indicated they made the appointment more than seven weeks in the past, including patients who resided in nonrestrictive states, such as California and New York, and restrictive states, such as Texas and Arizona. We expect that some, if not most, of these respondents either answered the item incorrectly or faced unusual circumstances that were not representative of most abortion patients' experiences, so we removed them from the analysis. In total, 966 respondents, or 12% of the sample, were excluded from the current study. Appendix Table 1 (page 17) compares the demographic characteristics of patients who answered the question and of those with missing or invalid information on this measure. The excluded respondents were potentially more disadvantaged than the analytic sample, insofar as they were more likely to be unmarried and not cohabiting, black or Hispanic, or poor, and more likely to have had two or more births. In addition, patients residing in states without a waiting period were over-represented among those who did not answer the item. Nonetheless, the demographic profile of the analytic sample was very similar to that of the full sample, and we do not expect that the findings would be substantially altered if we had information from the excluded respondents.

We intended for respondents to interpret the item, "About how long ago did you call to schedule the appointment you are here for today?" to refer to the first call they made to the facility where they obtained the abortion, but we recognize that, for patients who visited more than one facility (approximately 11% nationally),⁴ it could have been interpreted to mean the first call they made to facilities that they called or visited prior to the one at which they

obtained the abortion. If the item was interpreted differently by respondents—for example, some patients who called or visited multiple facilities interpreted it to mean the current facility, while others who called or visited multiple facilities interpreted it to mean the first facility—this would mean our dependent variable was not reliable. Similarly, in states with waiting periods, and in states with an in-person requirement in particular, patients may have first called to make an appointment to obtain counseling and made a second call to make the appointment for the abortion. If their response was for the latter, this would underestimate our time to appointment measure. Finally, while the instructions to facility staff related that the survey was to be administered on the day of the abortion procedure (or the first day of the procedure, in the case of multiday procedures), it is possible that some patients in states with in-person waiting periods may have filled out the survey at the time they obtained counseling. This, too, would have resulted in an underestimate of time to appointment. Despite these potential shortcomings, we believe that our findings are likely to be valuable, given the limited number of national studies on this topic.

Independent Variables

We examined associations between a number of personal characteristics and time to appointment. Demographic characteristics included age, relationship status, race and ethnicity, number of prior births and family income level; measurement of these variables is discussed in more detail elsewhere.³ Situational characteristics included exposure to disruptive life events within the last 12 months, how the patient paid for the abortion, self-reported gestational age, reason for choosing the facility, whether the patient lives out of state, number of miles from home to the facility and type of waiting period.*

Respondents were asked if they had experienced any of eight potentially disruptive events in the last 12 months: death of a close friend, falling behind on rent or mortgage, separation from husband or partner, unemployment or looking for work for a month or more, having a dependent or close family member with a serious medical problem, birth of a baby, arrest or incarceration of a partner, and moving two or more times. We coded respondents as having been exposed to none, one, or two or more events.

Payment for services was measured by asking, “How are you paying for this abortion?” Response options were

private health insurance, Medicaid or public health insurance, payment out of pocket, reliance on financial assistance and some other method. Eight percent of respondents indicated multiple payment methods (e.g., self-pay and financial assistance), but for this analysis we coded responses into a single variable, with priority given to any insurance (public or private), followed by financial assistance, self-pay and other. For example, if a respondent reported using insurance and self-pay, she was coded as having used insurance. Some 244 patients, or 3% of the analytic sample, did not answer this item, and we grouped them into a “missing” category to maximize the sample size.

Gestational age was measured with two items. Respondents were asked to provide the first day of their last menstrual period, as well as how many weeks’ pregnant they were at the time of the survey. We relied on the first item to assess gestational age for most respondents; when responses to this item were not provided, we used responses to the second item. Gestational age was imputed for 197 patients (2.7% of the analytic sample) who did not respond to either item.

All respondents were asked “Which, if any, of the below influenced your decision to come to THIS particular facility?” Response options were: It was the most affordable; it was the closest; it takes my insurance; it offers medication abortion; it was recommended by another health care provider; it was recommended by a friend, family member or someone else I trust; I have been here before; it could see me the soonest; I wanted to avoid a waiting period in the state I live in; I wanted to avoid parental involvement laws in the state I live in; I am too far along in pregnancy to go to other providers; or other. In preliminary analyses we examined associations between each of the independent variables and all 12 reasons, but the current analysis includes only those that were significant in bivariable or multivariable analyses.

The distance a patient lived from the facility was measured in euclidian distance (i.e., “as the crow flies”), according to miles between the centroid of a patient’s home zip code and the zip code of the facility. Five percent of respondents in the analytic sample did not provide a zip code; to maximize the number of cases, this measure includes a “missing” category.

Finally, respondents were asked which state they lived in; we classified patients by whether they lived in a state with no waiting period, a state with a waiting period but no in-person counseling requirement or a state that required

*Other variables examined in preliminary analyses were gestational age at which respondents realized they were pregnant, educational attainment, type of health insurance, abortion history, whether the respondent lived outside a metropolitan area and exposure to intimate partner violence, including whether the patient reported that the pregnancy resulted from forced sex. These variables were not associated with either independent variable or were redundant with the variables that were used (e.g., payment for abortion services and type of health insurance), and so were excluded from the current analysis.

both a waiting period and in-person counseling. (Appendix Table 2, on page 18, provides a list of states by type of waiting period.) Several states implemented waiting periods over the course of the survey period; however, our measure is based on the law that was in place on the day the respondent obtained the abortion. If a respondent reported living in a state other than the one where she obtained the abortion, she was coded as going out of state for abortion care.

Analytic Strategy

We first examined the percentage distribution of respondents by the independent variables, focusing on characteristics that were not examined in an earlier study that explored patient characteristics.² We then compared the mean time to appointment within subgroups, using unadjusted ordinary least-squares regression analysis to determine which characteristics were associated with time to appointment. For these analyses the data were weighted, and we used the *svy* command in Stata version 13.1. We employed a mixed-effects linear regression model (*xtmixed*) to determine which characteristics were associated with time to appointment once other variables were taken into account. This model accounts for the hierarchical nature of the data—the fact that patients were clustered within facilities (which were located in states). To avoid overspecifying the models, the variables included in the mixed-effects models were limited to those characteristics that were associated with time to appointment in the bivariable analyses. We next examined characteristics associated with having made the appointment more than two weeks ago, using unadjusted logistic regression analysis to test for significant differences in this outcome among subgroups. Characteristics associated with this outcome in the bivariable analyses were then included in a mixed-effects logistic regression model (*meologit*).

Ideally, analyses that examine state-level characteristics such as waiting periods should include data representative of abortion patients in all 50 states and the District of Columbia. Our analytic data set included respondents residing in 47 states and the District of Columbia who obtained abortions at nonhospital facilities in 35 states and the District. While our sample is geographically diverse, it is not representative of abortion patients in any particular state; for example, there is only one respondent each from Rhode Island and Vermont. However, these are the only national data that allow us to examine issues related to time to appointment. Because we recognize the potential problems posed by these data limitations, we conducted supplementary analyses (presented in Appendix Tables 4 and 5, on pages 20–21) and included footnotes in the body of the report to summarize them when appropriate.

Results

Sample Characteristics

The demographic profile of our analytic sample was very similar to that for all nonhospital abortion patients,³ and so we focus on characteristics that were not examined in the previous report. A majority of abortion patients—57%—had been exposed to one or more disruptive life events in the last 12 months, including 24% who had been exposed to two or more (Table 1, page 9). Forty-six percent of patients paid for their procedure out of pocket, while 36% relied on private or public insurance and 13% on some type of financial assistance. The overwhelming majority of abortion patients (90%) obtained their procedure in the first trimester; 6% had an abortion at 12–15 weeks, and 4% did so at 16 or more weeks. One-third of patients said they were at the facility because it was the closest one, and one in five chose the facility because they had been there before.* Seven percent of patients were obtaining abortions in a state other than the one they lived in. Sixty-nine percent of abortion patients lived within 25 miles of the facility, 13% lived within 25–49 miles and 14% had traveled at least 50 miles. In 2014, the majority of patients in our sample (54%) lived in a state without a waiting period, and the remainder were equally likely to live in a state with only a waiting period (22%) or in one that also required in-person counseling (24%).†

Time to Appointment

On average, patients made their initial scheduling call 7.6 days before the abortion appointment (Table 2, page 10), and 76% made the appointment within seven days (not shown). Time to appointment varied by a number of characteristics. In the bivariable analyses, married patients made their appointment about a day closer to the scheduled procedure than did unmarried patients who were not cohabiting (6.9 vs. 7.7 days), and patients who had had two or more births made the appointment about half a day later than did those who had had none. Compared with

the poorest patients, those in the highest income group made their appointment about half a day closer to the procedure, and patients exposed to one or more disruptive events in the last 12 months had to wait a day longer than did patients exposed to no events. Patients who relied on financial assistance to pay for the procedure made their appointment almost two days further out than did patients who paid out of pocket (9.4 vs. 7.6 days), while the small proportion who were missing information on this item got an appointment substantially sooner (5.4 days).

Bivariable associations between personal and logistical preferences and time to appointment were not always intuitive. For example, patients who chose the facility because it was the closest one got an appointment about half a day later than did patients who did not indicate this reason, and those who chose the facility because they had been there before got in a half day later than did those who did not choose this reason. Other associations were in the expected direction: Patients who chose the facility because it could see them the soonest got in a day earlier than others, and patients who indicated that a health care provider had recommended the facility were seen about half a day earlier.

Women who lived 50 or more miles from the facility where the abortion was obtained received appointments a little more than a day further out than did patients who lived within 25 miles (8.5 vs. 7.4 days). Finally, patients who lived in states with either type of waiting period restriction got in one and a half to two days later (8.2 days for waiting period only and 8.9 days for in-person counseling) than did patients in states without restrictions (6.7 days), though the half-day difference between the two types of waiting periods was not statistically significant (not shown).

Many of these associations were maintained in the multivariable analyses, and the magnitude of the associations for many of the variables was the same even after other factors were taken into account. For example,

*Many of the facilities also provided family planning services, and this could have been the reason for a prior visit. Still, 88% of women who chose this option reported having had a prior abortion.

†Appendix Table 3 (page 19) compares the distributions of abortions in the 2011 Abortion Provider Census and the 2014 Abortion Patient Survey by type of waiting period. Women living in states without a waiting period appear to be underrepresented in the 2014 survey (in both full and analytic samples) when compared with the 2011 census (54% vs. 65%). In contrast, they appear to be overrepresented in states with both types of waiting period restrictions, accounting for 22% in states without an in-person counseling requirement and 24% in states with one, compared with 18% of abortions in 2011 for both groups of states.

TABLE 1

Percentage distribution of U.S. women obtaining abortions in nonhospital settings, by selected characteristics, 2014

Characteristic	% (N=7,414)	Characteristic	% (N=7,414)
Age-group		Abortion payment	
15–17	3.5	Self	46.0
18–19	8.4	Insurance	35.7
20–24	33.7	Financial assistance	13.2
25–29	26.6	Other	1.9
30–34	15.7	Missing	3.3
≥35	12.0	Gestational age (weeks)	
Relationship status		<12	90.4
Married	14.4	12–15	5.7
Cohabiting, not married	31.4	≥16	4.0
Not married, not cohabiting	54.2	Reason chose this facility†	
Race/ethnicity		Closest	32.6
White	40.8	Been here before	20.2
Black	23.9	Could see me the soonest	13.7
Hispanic	23.8	Recommended by provider	11.5
Asian/Pacific Islander	4.6	Lives out of state	
Multiracial	4.6	No	93.2
Other	2.4	Yes	6.8
No. of prior births		No. of miles from home to facility	
0	41.4	<25	68.8
1	26.2	25–49	13.1
≥2	32.4	≥50	13.5
Family income as % of federal poverty level		Missing	4.6
<100	47.7	Waiting period	
100–199	26.3	None	54.2
≥200	26.0	Waiting period only	21.8
Exposure to disruptive events in last 12 mos.		Waiting period plus in-person counseling	24.0
0	42.8	Total	
1	33.3	100.0	
≥2	23.8		

†Respondents could select multiple reasons. NOTE: Percentages may not add to 100.0 because of rounding.

TABLE 2

Mean number of days between patients' initial scheduling call and abortion appointment, by selected characteristics; and coefficients (and 95% confidence intervals) from multilevel mixed-effects linear regression models assessing the association between time to appointment and characteristics

Characteristic	Mean	Coefficient	Characteristic	Mean	Coefficient
All	7.6	na	Gestational age (weeks)		
Age-group			<12 (ref)	7.5	na
<18	7.2	na	12–15	8.2	na
18–19	7.1	na	≥16	8.2	na
20–24 (ref)	7.9	na	Reason chose this facility		
25–29	7.4	na	Closest		
30–34	7.5	na	No (ref)	7.4	na
≥35	7.6	na	Yes	8.0*	0.17 (–0.21 to 0.55)
Relationship status			Been here before		
Married	6.9*	–0.77 (–1.31 to –0.22)**	No (ref)	7.4	na
Cohabiting, not married	7.6	–0.19 (–0.58 to 0.20)	Yes	8.0*	0.39 (–0.06 to 0.83)
Not married, not cohabiting (ref)	7.7	na	Could see me the soonest		
Race/ethnicity			No (ref)	7.7	na
White (ref)	7.7	na	Yes	6.7***	–0.91 (–1.42 to –0.41)***
Black	7.7	na	Recommended by provider		
Hispanic	7.3	na	No (ref)	7.6	na
Asian/Pacific Islander	7.0	na	Yes	7.0*	–0.29 (–0.85 to 0.28)
Multiracial	7.5	na	Lives out of state		
Other	8.1	na	No (ref)	7.6	na
No. of prior births			Yes	7.4	na
0 (ref)	7.3	na	No. of miles from home to facility		
1	7.6	0.29 (–0.15 to 0.73)	<25 (ref)	7.4	na
≥2	7.8*	0.61 (0.17–1.05)**	25–49	7.5	–0.15 (–0.68 to 0.39)
Family income as % of federal poverty level			≥50	8.5**	0.41 (–0.15 to 0.96)
<100 (ref)	7.8	na	Missing	7.5	0.10 (–0.73 to 0.93)
100–199	7.5	–0.22 (–0.65 to 0.20)	Waiting period		
≥200	7.2*	–0.12 (–0.58 to 0.35)	None (ref)	6.7	na
Exposure to disruptive events in last 12 mos.			Waiting period only	8.2**	1.09 (0.22–1.97)*
0 (ref)	7.1	na	Waiting period plus in-person counseling	8.9***	1.59 (0.70–2.48)***
1	7.8**	0.61 (0.21–1.02)**	<i>Intercept</i>	<i>na</i>	<i>6.54 (5.81–7.26)***</i>
≥2	8.1***	0.71 (0.26–1.17)**			
Abortion payment					
Self (ref)	7.6	na			
Insurance	7.1	–0.03 (–0.51 to 0.44)			
Financial assistance	9.4***	0.85 (0.28–1.42)**			
Other	6.5	–0.09 (–1.49 to 1.30)			
Missing	5.4***	–1.50 (–2.53 to –0.46)**			

*p<.05. **p<.01. ***p<.001. NOTES: Coefficients represent days more or less for time to appointment in comparison to the reference group. na=not applicable. ref=reference group.

married patients made their appointment about a day sooner than did unmarried patients who were not cohabiting, and the coefficient of -0.8 was the same as the 0.8 -day difference in means in the bivariable analysis. Patients who had had two or more births received appointments about a half day later than did those who reported none, and patients who had been exposed to disruptive life events were delayed by a similar amount of time. Compared with women who paid for the procedure out of pocket, those who relied on financial assistance made their appointment almost a day later, whereas those who were missing information on this item got an appointment about a day and a half sooner.* Among the associations between personal and logistical reasons and time to appointment found at the bivariable level, only one reason retained significance in the multivariable analysis: Respondents who said they chose the facility because it could see them the soonest got in about a day earlier than those who did not indicate this reason. Finally, compared with patients who lived in states with no waiting period requirements, those who lived in states with a waiting period only were delayed by a day, and this increased to a day and a half for patients in states that required in-person counseling. However, the 0.5 -day difference between the two restriction types was not significant (not shown).†

More than Two Weeks To Appointment

A small but nonnegligible proportion of patients—7%—made their appointments more than two weeks before the day they obtained their abortion (Table 3, page 12), and we sought to understand which characteristics were associated with this delay. Patients who reported having had two or more births were more likely than those with none to have made the appointment more than two weeks ago (8% vs. 6%), and the proportion of the poorest patients who did so was slightly, but significantly, higher than that for the two higher income groups (8% vs. 6–7%). Patients who were exposed to one or more disruptive events in the last year were more likely than others to have made the appointment more than two weeks ago (9% vs. 5%). Compared with patients who paid out of pocket for their abortion, those who relied on

financial assistance were more likely to be delayed by more than two weeks (11% vs. 7%), whereas patients who were missing information on this item were less likely to have made their appointment that long ago (2%). Notably, patients who obtained abortions at 12–15 weeks' gestation or at 16 or more weeks (11% and 10%, respectively) were more likely than first-trimester patients (7%) to have made the appointment more than two weeks ago. A significant difference was also observed depending on distance to the facility: Patients who lived at least 50 miles from the facility were more likely than those who lived within 25 miles to wait more than two weeks for an appointment (9% vs. 7%). Finally, compared with patients who lived in states without waiting periods, patients who lived in states with either type of waiting period restriction were more likely to have made their appointments more than two weeks ago (8–10% vs. 6%). However, the difference between patients living in either of the states with restrictions was not statistically significant (not shown).

Only a few of the bivariable associations retained significance in the mixed-effects logistic regression analysis. Number of prior births, family income and reliance on financial assistance were no longer associated with delays, though patients who were missing information on payment method still had a decreased likelihood of being delayed. After other factors were controlled for, patients who had been exposed to one or more disruptive life events were more likely than others to have experienced an appointment delay of more than two weeks (odds ratios, 1.5–1.6). In addition, patients who had obtained abortions at 12–15 weeks were more likely than first-trimester patients to have experienced delays (1.4); the likelihood of such delays for women who had abortions at 16 or more weeks was slightly larger but only marginally significant ($p < .057$, not shown). Finally, compared with patients who lived in states with no waiting periods, those who lived in a state with a waiting period that did not require in-person counseling had an increased likelihood of having made the appointment more than two weeks ago (1.5), and this likelihood was even greater for patients who lived in a state that also required in-person counseling (1.9). The difference between these two findings, however, was not statistically significant (not shown).‡

*A majority of respondents who did not provide information about how they were paying for the abortion (54%) resided in states where state Medicaid pays for abortion care, and some abortion care facilities are able to enroll women in the program on site. One potential explanation for the association is that presumptive eligibility for Medicaid in states that cover abortion care allows women to access services sooner.

†Appendix Table 4 presents results when the waiting period refers to the state in which the abortion occurred. The one notable difference was that the positive association between time to appointment and being in a state with a waiting period only was no longer significant. A small proportion of women living in states with waiting periods (4%) traveled to a state with no waiting period. This may have increased the average time to appointment for all abortion patients in states without a waiting period, and in turn made the difference between this group and women in states with a waiting period that did not require in-person counseling no longer significant.

‡Appendix Table 5 shows results when the waiting period refers to the state in which the abortion occurred. There were no notable differences.

TABLE 3

Percentage of patients who made the appointment more than 14 days prior to obtaining an abortion, by selected characteristics; and odds ratios (and 95% confidence intervals) from multilevel mixed-effects logistic regression models assessing the association between this measure and characteristics

Characteristic	%	Odds ratio	Characteristic	%	Odds ratio
All	7.2	na	Exposure to disruptive events in last 12 mos.		
Age-group			0 (ref)	5.3	1.00
<18	5.9	na	1	8.6***	1.58 (1.28–1.96)***
18–19	7.2	na	≥2	8.6***	1.51 (1.19–1.91)**
20–24 (ref)	7.4	na	Abortion payment		
25–29	6.7	na	Self (ref)	7.1	1.00
30–34	7.4	na	Insurance	6.6	1.06 (0.83–1.35)
≥35	7.9	na	Financial assistance	10.8***	1.21 (0.93–1.57)
Relationship status			Other	4.7	0.98 (0.47–2.07)
Married	6.4	na	Missing	1.6**	0.31 (0.12–0.76)**
Cohabiting, not married	7.4	na	Gestational age (weeks)		
Not married, not cohabiting (ref)	7.3	na	<12 (ref)	6.9	1.00
Race/ethnicity			12–15	10.5*	1.44 (1.02–2.02)*
White (ref)	6.4	na	≥16	10.2**	1.49 (0.98–2.25)
Black	8.1	na	Lives out of state		
Hispanic	7.4	na	No (ref)	7.2	na
Asian/Pacific Islander	8.4	na	Yes	6.9	na
Multiracial	6.4	na	No. of miles from home to facility		
Other	9.2	na	<25 (ref)	6.9	1.00
No. of prior births			25–49	7.2	0.97 (0.73–1.28)
0 (ref)	6.3	1.00	≥50	8.9*	1.09 (0.84–1.42)
1	7.3	1.02 (0.81–1.28)	Missing	6.6	0.95 (0.61–1.49)
≥2	8.2*	1.20 (0.97–1.49)	Waiting period		
Family income as % of federal poverty level			None (ref)	5.6	1.00
<100 (ref)	8.2	1.00	Waiting period only	8.1*	1.45 (1.07–1.98)*
100–199	6.7*	0.86 (0.69–1.07)	Waiting period plus in-person counseling	10.0**	1.88 (1.39–2.54)***
≥200	5.9**	0.85 (0.66–1.08)	<i>Intercept</i>		
					<i>0.04 (0.03–0.06)***</i>

*p<.05. **p<.01. ***p<.001. NOTES: na=not applicable. ref=reference group.

Discussion

Three-quarters of abortion patients made their appointment within a week of their initial scheduling call. This may seem relatively quick given that providers of some types of specialized care are so busy that appointments sometimes have to be made weeks, or even months, in advance.^{26–28} However, abortion is a particularly time-sensitive procedure. Early medication abortion is an option only during the first 70 days of pregnancy.¹ Moreover, fewer providers offer second-trimester abortion services, and these are substantially more expensive than first-trimester procedures.² So delays of even one or two weeks can make services inaccessible if they push a patient into the second trimester.

On average, abortion patients made their appointment 7.6 days prior to undergoing the procedure, and a number of characteristics and circumstances were associated with longer or shorter times to appointment. In line with prior research,⁴ we found that patients who were married received appointments sooner than did those who were unmarried and not cohabiting, and that patients who had had two or more births got in later than did those who had had none. Patients who were married may have been able to rely on their partners to help with transportation or child care, making it easier for them to get to the facility sooner. In contrast, since most patients were unmarried, those with two or more children may have needed more time to make child care arrangements or they may have had to take school schedules into account when making the appointment. A majority of abortion patients had dealt with situations such as unemployment, falling behind on the rent or giving birth in the last 12 months, and exposure to these types of events was associated with a longer time to appointment. Some of these patients may still have been dealing with these events, or recovering from them, and so had a harder time scheduling the appointment. Furthermore, patients who were still experiencing such disruptions may have had to reschedule appointments one or more times. Patients who relied on financial assistance to pay some or all of the costs of the abortion got in about a day later than did patients who paid out of pocket. While financial assistance in the form of abortion fund subsidies may increase access to abortion, the determination of eligibility and the amount of funding needed may sometimes result in delays.¹⁰

Only one personal preference was associated with time to appointment once other variables were taken

into account. Respondents who chose a facility specifically because it could see them the soonest received an appointment one day sooner than did patients who did not indicate this as a reason. Because no other personal preferences remained significant in the multivariable analysis, it may be that many variables associated with a longer time to care have less to do with individual preferences than with external circumstances, many of which are beyond the patient's control.

Finally, we found that both types of abortion restrictions were associated with longer time to appointment. Patients who lived in a state with a waiting period only, or in a state that required both a waiting period and in-person counseling, made their appointments 1–1.5 days further out than did patients in states with no such restrictions.

It is concerning that 7% of patients made their appointment more than two weeks prior to obtaining their abortion. Research suggests that the majority of abortion patients, even those in the first trimester, would have preferred to have gotten an earlier appointment.⁴ Thus, while it is possible that some patients make their appointments far in advance for convenience, it is likely that most of these patients were delayed.

Only a few characteristics were consistently associated with having made an abortion appointment more than two weeks ago. Respondents who had been exposed to one or more disruptive life events during the last year were more likely than others to experience delays in accessing care. These types of circumstances, which were also associated with longer time to appointment, may lead to substantial delays for some patients. For example, patients who have recently lost a job or were behind on rent may need additional time to find the money to pay for the procedure. Respondents who were obtaining second-trimester abortions were more likely than women getting a first-trimester procedure to have made the appointment more than two weeks ago, though in the multivariable analysis this association was significant only for abortions at 12–15 weeks. One potential reason for this pattern is that substantial delays in accessing care meant that patients who were originally in the first trimester were later in their pregnancies by the time they got to the facility.⁶ Alternatively, because fewer providers offer second-trimester abortions, it could be that these patients had a more difficult time finding and getting to a provider and, in turn, had to make the appointment further in advance. The fact that getting an abortion

at 16 or more weeks was not associated with a delay in the multivariable analysis could be due to lack of statistical power, or to the fact that such a small proportion of the abortions in our sample (4%) took place at this gestational age. If our sample had been larger, it is likely that we would have found that such abortions were also associated with having made the appointment more than two weeks ago.

We found that waiting periods were strongly correlated with patients' having to wait more than two weeks to obtain an abortion. Our analysis controlled for a range of individual variables that might substantially delay access to care, but we were unable to determine potential ways that waiting periods might result in delays. It is possible that clinic logistics in these states made it necessary for some patients to make their appointments far in advance. For example, some states require that the mandated counseling be provided by the physician who will be performing the procedure, and if the physician is at the facility only one day a week, patients would have to wait a minimum of one week after counseling to obtain care. It is worth noting that 6% of patients living in states without a waiting period made the appointment more than two weeks before they obtained the procedure (compared with 8–10% of patients living in states with this restriction), hence waiting periods are not the only factor contributing to delays. Here, too, clinic logistics may play a role. For example, some clinics provide abortion services only one day a week, or even every other week, and this can automatically result in delays regardless of whether there is a waiting period.

To our knowledge, no study has examined time to appointment or delays in accessing care according to type of waiting period. Our study suggests that the requirement of in-person counseling does not result in a substantially longer time to appointment or in more delay than waiting periods that do not impose this requirement. This finding is somewhat unexpected given the additional burden posed by the in-person visit and prior research finding that waiting periods that do not require an in-person visit do not appear to affect abortion rates or gestational age at abortion.^{23,24} There are several potential explanations for our findings. Given that the associations between type of waiting period and time to appointment operated in the expected direction—that is, associations were consistently stronger for in-person counseling—our study may have simply lacked the statistical power to detect real differences. Also, some facilities in states that are not legally required to provide in-person counseling may have patients come in for counseling because it is easier than providing counseling in other formats. For example, at least one state (Alabama) requires that counseling materials be provided via certified mail or in person.^{29,30} The mail process results in longer delays than does in-person

counseling for many patients, and most clinics require that women come to facilities for this information;²⁹ in turn, the waiting period is equivalent to an in-person requirement. In addition, a number of mandated counseling laws require that the information be provided by physicians or other licensed medical professionals, and the amount of information required to be covered in the sessions can sometimes be quite lengthy.^{20,31} These regulations may be a substantial burden from an administrative perspective insofar as they detract from time devoted to clinical services, hence they may result in a longer time to appointment and delays in care even in the absence of a mandated in-person counseling requirement.³¹

Finally, it is worth pointing out that characteristics such as age, race and ethnicity, and poverty—characteristics associated with a range of reproductive health outcomes—were not associated with either of our delay measures. Instead, logistical issues, life circumstances and waiting periods appear to be the main variables associated with time to appointment and delays in accessing services.

Limitations

This study has several shortcomings. The item used to construct both of our dependent variables may not have been interpreted the same way by all respondents; patients who visited multiple facilities, or who rescheduled their appointments at the same facility, may have answered the item differently. Prior research has found that 11% of abortion patients tried to go to a facility other than the one at which they obtained their abortions, and these patients took twice as long to access services.⁴ Our study did not collect information on attempts to access services at a different facility, and thus our measure may underestimate time to appointment and delays in accessing services. Another limitation is that 12% of the original sample did not provide information about how long ago they had made the appointment, and if these respondents differed from those who remained in the analysis on time to appointment, this would bias the results. Furthermore, while our analyses incorporated a measure of state abortion restrictions, the data are not representative at the state level. If respondents were concentrated at facilities or in states that had longer wait times for reasons unrelated to waiting periods, this would inflate the impact of this measure. For example, a number of states have additional laws that are likely to reduce access to abortion, including restrictions on state Medicaid funding for abortion services and targeted regulation of abortion provider laws. (These laws impose burdensome and unnecessary requirements on abortion providers, such as hospital admitting privileges and adherence to the standards of ambulatory surgical centers.) In recent years,

targeted regulation laws have resulted in the closing of a number of facilities in high-profile states, such as Texas and Ohio,^{32–35} and there is evidence that such laws can result in longer wait times.³⁶ Most states with waiting periods impose at least one of these other two restrictions, and our measure of waiting periods may also be capturing the impact of these other restrictions. Unfortunately, the Abortion Patient Survey does not allow us to sort out the differential impact of each law or the cumulative effect.* Similarly, characteristics such as abortion provider density and distribution are likely to affect time to appointment and delays, but we were unable to incorporate these measures into our analyses.

Finally, and perhaps most importantly, our study examines time to appointment and delays in care only among individuals who were able to access clinical abortion services. Prior research suggests that waiting periods that require an in-person visit are associated with declines in abortion rates of up to 10–13%.^{20,21} Our study does not capture women who were unable to obtain abortions because of these (or other types of) restrictions.

Conclusions

While it is reassuring that most patients who accessed clinical abortion services were able to make their appointments in about a week, it is concerning that a nonnegligible minority had to wait more than two weeks to be seen. One strategy to alleviate this problem would be to eliminate state-mandated waiting periods, as these are one of the few variables associated with having made an appointment more than two weeks ago. Although the ostensible rationale for waiting period laws is to give individuals additional time to consider their decision, the overwhelming majority of abortion patients have made up their minds to have an abortion prior to making the appointment.¹⁶ Thus, waiting periods pose an unnecessary burden for individuals seeking abortion care.

*In preliminary analyses we explored both of these strategies—examining the association of the dependent variables with each abortion restriction as well as with a measure of cumulative restrictions. We determined that most of the association between time to appointment and delays in accessing services was due to waiting periods, and so included only this restriction in the current analysis.

References

1. American College of Obstetricians and Gynecologists, Medical management of first-trimester abortion: practice bulletin no. 143, *Obstetrics & Gynecology*, 2014, 123:676–692.
2. Jerman J and Jones RK, Secondary measures of access to abortion services in the United States, 2011 and 2012: gestational age limits, cost, and harassment, *Women's Health Issues*, 2014, 24(4):19–24.
3. Jerman J, Jones RK and Onda T, *Characteristics of U.S. Abortion Patients in 2014 and Changes Since 2008*, New York: Guttmacher Institute, 2016.
4. Finer LB et al., Timing of steps and reasons for delays in obtaining abortions in the United States, *Contraception*, 2006, 74(4):334–344.
5. French V et al., Influence of clinician referral on Nebraska women's decision-to-abortion time, *Contraception*, 2016, 93(3):236–243.
6. Foster DG et al., Predictors of delay in each step leading to an abortion, *Contraception*, 2008, 77(4):289–293.
7. Upadhyay UD et al., Denial of abortion because of provider gestational age limits in the United States, *American Journal of Public Health*, 2014, 104(9):1687–1694.
8. Roberts SCM et al., Out-of-pocket costs and insurance coverage for abortion in the United States, *Women's Health Issues*, 2014, 24(2):e211–e218, doi:10.1016/j.whi.2014.01.003.
9. Karasek D, Roberts S and Weitz TA, Abortion patients' experience and perceptions of waiting periods: survey evidence before Arizona's two-visit 24-hour mandatory waiting period law, *Women's Health Issues*, 2016, 26(1):60–66.
10. Towey S, Poggi S and Roth R, *Abortion Funding: A Matter of Justice*, Boston: National Network of Abortion Funds, 2005.
11. Jones RK, Frohwirth L and Moore A, More than poverty: disruptive events among women having abortions in the USA, *Journal of Family Planning and Reproductive Health*, 2013, 39(1):36–43.
12. Jones RK and Jerman J, How far did US women travel for abortion services in 2008? *Journal of Women's Health*, 2013, 22(8):706–713.
13. Drey EA et al., Risk factors associated with presenting for abortion in the second trimester, *Obstetrics & Gynecology*, 2006, 107(1):128–135.
14. Hammond C and Chasen S, Dilation and evacuation, in: Paul M et al., eds., *Management of Unintended Pregnancy and Abnormal Pregnancy*, Sussex, UK: Wiley-Blackwell, 2009, pp. 157–177.
15. Guttmacher Institute, Counseling and waiting periods for abortion, *State Laws and Policies (as of May 1, 2016)*, 2016, <https://www.guttmacher.org/state-policy/explore/counseling-and-waiting-periods-abortion>.
16. Moore AM, Frohwirth L and Blades N, What women want from abortion counseling in the United States: a qualitative study of abortion patients in 2008, *Social Work in Health Care*, 2011, 50(6):424–442.
17. Foster DG et al., Attitudes and decision making among women seeking abortions at one U.S. clinic, *Perspectives on Sexual and Reproductive Health*, 2012, 44(2):117–124.
18. Gatter M et al., Relationship between ultrasound viewing and proceeding to abortion, *Obstetrics & Gynecology*, 2014, 123(1):81–87.
19. Roberts SCM et al., Utah's 72-hour waiting period for abortion: experiences among a clinic-based sample of women, *Perspectives on Sexual and Reproductive Health*, 2016, 48(4), doi:10.1363/48e8216.
20. Althaus FA and Henshaw SK, The effects of mandatory delay laws on abortion patients and providers, *Family Planning Perspectives*, 1994, 26(5):228–233.
21. Joyce T, Henshaw SK and DeClerque Skatrud J, The impact of Mississippi's mandatory delay law on abortions and births, *Journal of the American Medical Association*, 1997, 278(8):653–658.
22. Joyce T and Kaestner R, The impact of Mississippi's mandatory delay law on the timing of abortion, *Family Planning Perspectives*, 2000, 32(1):4–13.
23. Joyce T et al., *The Impact of State Mandatory Counseling and Waiting Period Laws on Abortion: A Literature Review*, New York: Guttmacher Institute, 2009.

24. Colman S and Joyce T, Regulating abortion: impact on patients and providers in Texas, *Journal of Policy Analysis and Management*, 2011, 30(4):775–797.
25. Jones RK and Jerman J, Abortion incidence and service availability in the United States, 2011, *Perspectives on Sexual and Reproductive Health*, 2014, 46(1):3–14, doi:10.1363/46e0414.
26. Merritt Hawkins, 2014 survey of patient appointment wait times: physician appointment wait times & Medicaid and Medicare acceptance rates, 2014, <http://www.merrithawkins.com/2014-survey/patientwaittime.aspx>.
27. Murphy S, Appointment delays reported at VA clinics in Tulsa, Vinita, *Washington Times*, Apr. 9, 2015, <http://www.washingtontimes.com/news/2015/apr/9/appointment-delays-reported-at-va-clinics-in-tulsa/>.
28. Rosenthal E, The health care waiting game, *New York Times*, July 5, 2014, http://www.nytimes.com/2014/07/06/sunday-review/long-waits-for-doctors-appointments-have-become-the-norm.html?_r=0.
29. White K et al., Experiences accessing abortion care in Alabama among women traveling for services, *Contraception*, 2016, 26(3):298-304.
30. NARAL Pro-Choice America, Alabama: biased counseling & mandatory delay, 2014, <http://www.prochoiceamerica.org/government-and-you/state-governments/state-profiles/alabama.html?templateName=template-161602701&issueID=1&ssumID=2441>.
31. Mercier RJ et al., The experiences and adaptations of abortion providers practicing under a new TRAP law: a qualitative study, *Contraception*, 2015, 91(6):507–512.
32. Carr Smyth J, Ohio clinics close, abortions decline amid restrictions, *Associated Press*, May 3, 2015, http://www.huffingtonpost.com/2015/05/03/ohio-abortion-clinics-clo_n_7199964.html.
33. Liptak A, Supreme Court to hear Texas abortion law case, *New York Times*, Nov. 13, 2015, <http://www.nytimes.com/2015/11/14/us/politics/supreme-court-accepts-texas-abortion-law-case.html>.
34. Soffen K, How Texas could set national template for limiting abortion access, *New York Times*, Aug. 19, 2015, <http://www.nytimes.com/2015/08/20/upshot/how-texas-could-set-national-template-for-limiting-abortion-access.html>.
35. Culp-Ressler T, This state is quietly becoming one of the worst for women’s health (and no, it’s not Texas), *Think Progress*, Mar. 3, 2014, <http://thinkprogress.org/health/2014/03/30/3419979/ohio-abortion-access-attacks/>.
36. Texas Policy Evaluation Project, Abortion wait times in Texas: the shrinking capacity of facilities and the potential impact of closing non-ASC clinics, Oct. 5, 2015, <https://utexas.app.box.com/AbortionWaitTimeBrief>.

Percentage distribution of abortion patients, by selected characteristics, according to whether they answered the item about time to appointment

Characteristic	Missing information		Full sample
	Yes	No	
Age-group			
<18	4.5	3.5	3.6
18–19	7.3	8.4	8.2
20–24	32.4	33.7	33.6
25–29	25.3	26.6	26.5
30–34	17.4	15.7	15.9
≥35	13.1	12.0	12.2
Relationship status			
Married	13.6	14.4	14.3
Cohabiting, not married	28.3	31.4	31.0
Not married, not cohabiting	58.1	54.2 *	54.7
No. of prior births			
0	35.2	41.4 ***	40.7
1	26.2	26.2	26.2
≥2	38.6	32.4 **	33.1
Race/ethnicity			
White	23.0	40.8 ***	38.7
Black	32.3	23.9 ***	24.9
Hispanic	32.6	23.8 ***	24.8
Asian/Pacific Islander	4.9	4.6 ***	4.7
Multiracial	3.7	4.6 ***	4.5
Other	3.4	2.4	2.5
Family income as % of federal poverty level			
<100	61.6	47.7 ***	49.3
100–199	21.2	26.3 **	25.7
≥200	17.2	26.0 ***	25.0
Waiting period			
None	60.9	54.2 **	55.0
Waiting period only	17.7	21.8	21.3
Waiting period plus in-person counseling	21.5	24.0	23.7
<i>Unweighted N</i>	966	7,414	8,380

*p<.05. **p<.01. ***p<.001. NOTE: Percentages may not add to 100.0 because of rounding.

APPENDIX TABLE 2

Type of state waiting period in effect during the fielding process

State	Waiting period	In-person counseling
Total	26	10
Alabama	X	
Alaska		
Arizona	X	X
Arkansas	X	
California		
Colorado		
Connecticut		
Delaware		
District of Columbia		
Florida		
Georgia	X	
Hawaii		
Idaho	X	
Illinois		
Indiana	X	X
Iowa		
Kansas	X	
Kentucky	X	
Louisiana	X	X
Maine		
Maryland		
Massachusetts		
Michigan	X	
Minnesota	X	
Mississippi	X	X
Missouri	X	X
Montana		
Nebraska	X	
Nevada		
New Hampshire		
New Jersey		
New Mexico		
New York		
North Carolina	X	
North Dakota	X	
Ohio	X	X
Oklahoma	X	
Oregon		
Pennsylvania	X	
Rhode Island		
South Carolina	X	
South Dakota	X	
Tennessee		
Texas	X	X
Utah	X	X
Vermont		
Virginia	X	X
Washington		
West Virginia	X	
Wisconsin	X	X
Wyoming		

APPENDIX TABLE 3

Percentage distribution of abortions from the 2011 Abortion Provider Census and the 2014 Abortion Patient Survey samples, by type of state restriction in 2014

Restriction	2011 Abortion Provider Census	2014 Abortion Patient Survey			
		Analytic sample		Full sample	
		Residence†	Facility‡	Residence†	Facility‡
None	65	54	55	55	56
Waiting period only	18	22	22	21	21
Waiting period plus in-person counseling	18	24	23	24	23
<i>Unweighted N</i>	<i>1,058,490</i>	<i>7,414</i>	<i>7,414</i>	<i>8,380</i>	<i>8,380</i>

†Refers to state in which patients resided. ‡Refers to state in which patients obtained their abortions (and is comparable to Abortion Provider Census data, which measured state of occurrence).

Coefficients (and 95% confidence intervals) from multilevel mixed-effects linear regression models assessing the association between time to appointment and women's selected characteristics, using state of occurrence for waiting period restrictions

Characteristic	Coefficient
Relationship status	
Married	-0.78 (-1.33 to -0.23)**
Cohabiting, not married	-0.19 (-0.58 to 0.20)
Not married, not cohabiting (ref)	na
No. of prior births	
0 (ref)	na
1	0.29 (-0.15 to 0.74)
≥2	0.61 (0.17-1.05)**
Family income as % of federal poverty level	
<100 (ref)	na
100-199	-0.23 (-0.66 to 0.19)
≥200	-0.12 (-0.58 to 0.34)
Exposure to disruptive events in last 12 mos.	
0 (ref)	na
1	0.61 (0.21-1.01)**
≥2	0.70 (0.25-1.16)**
Abortion payment	
Self (ref)	na
Insurance	-0.03 (-0.50 to 0.45)
Financial assistance	0.83 (0.26-1.40)**
Other	-0.10 (-1.49 to 1.30)
Missing	-1.49 (-2.52 to -0.46)**
Reason chose this facility	
Closest	
No (ref)	na
Yes	0.17 (-0.21 to 0.56)
Been here before	
No (ref)	na
Yes	0.39 (-0.05 to 0.84)
Could see me the soonest	
No (ref)	na
Yes	-0.91 (-1.41 to -0.41)***
Recommended by provider	
No (ref)	na
Yes	-0.28 (-0.84 to 0.29)
No. of miles from home to facility	
<25 (ref)	na
25-49	-0.15 (-0.68 to 0.38)
≥50	0.47 (-0.07 to 1.02)
Missing	0.08 (-0.75 to 0.91)
Waiting period	
None (ref)	na
Waiting period only	1.09 (-0.04 to 2.21)
Waiting period plus in-person counseling	2.24 (1.11-3.38)***
<i>Intercept</i>	<i>6.42 (5.68-7.17)***</i>
<i>Unweighted N</i>	<i>7,414</i>

p<.01. *p<.001. NOTES: Coefficients represent days more or less for time to appointment in comparison to the reference group. na=not applicable. ref=reference group.

Odds ratios (and 95% confidence intervals) from multilevel mixed-effects logistic regression models assessing the association between delayed appointment and women's selected characteristics, using state of occurrence for waiting period restrictions

Characteristic	Odds ratio
No. of prior births	
0 (ref)	1.00
1	1.02 (0.81–1.29)
≥2	1.20 (0.97–1.49)
Family income as % of federal poverty level	
<100 (ref)	1.00
100–199	0.86 (0.69–1.07)
≥200	0.85 (0.66–1.08)
Exposure to disruptive events in last 12 mos.	
0 (ref)	1.00
1	1.58 (1.28–1.96)***
≥2	1.50 (1.19–1.90)**
Abortion payment	
Self (ref)	1.00
Insurance	1.05 (0.82–1.34)
Financial assistance	1.19 (0.92–1.55)
Other	0.97 (0.46–2.05)
Missing	0.31 (0.12–0.76)**
Gestational age (weeks)	
<12 (ref)	1.00
12–15	1.44 (1.02–2.02)*
≥16	1.50 (0.99–2.26)
No. of miles from home to facility	
<25 (ref)	1.00
25–49	0.97 (0.74–1.28)
≥50	1.13 (0.87–1.46)
Missing	0.95 (0.61–1.48)
Waiting period	
None (ref)	1.00
Waiting period only	1.44 (1.05–1.99)*
Waiting period plus in-person counseling	1.96 (1.43–2.70)***
<i>Intercept</i>	<i>0.04 (0.03–0.06)***</i>
<i>Unweighted N</i>	<i>7,414</i>

*p<.05. **p<.01. ***p<.001. NOTE: ref=reference group.



**Good reproductive health policy
starts with credible research**

125 Maiden Lane
New York, NY 10038
(212) 248-1111; fax (212) 248-1951
info@guttmacher.org

www.guttmacher.org