Abortion Incidence and Service Availability in the United States, 2017



Rachel K. Jones, Elizabeth Witwer and Jenna Jerman

Key Points

- This study used new data from the Guttmacher Institute to examine trends in abortion incidence and rates between 2014 and 2017. In addition, we examined changes in the number of health care facilities that provide abortions.
- In 2017, an estimated 862,320 abortions were provided in clinical settings in the United States, representing a 7% decline since 2014 and the continuation of a long-term trend.
- The U.S. abortion rate dropped to 13.5 abortions per 1,000 women aged 15-44 in 2017, the lowest rate recorded since abortion was legalized in 1973. Abortion rates fell in most states and in all four regions of the country.
- A total of 339,640 medication abortions occurred in 2017—about 39% of all abortions.
- As in previous years, clinics provided the overwhelming majority of U.S. abortions (95%), while private physicians' offices and hospitals accounted for 5%.
- In 2017, 808 clinic facilities provided abortions, a 2% increase from 2014. However, regional and state disparities in clinic availability grew more pronounced; the number of clinics increased in the Northeast and the West, by 16% and 4% respectively, and decreased in the Midwest and the South, by 6% and 9%, respectively.
- Although the number of state abortion restrictions continued to increase in the Midwest and South between 2014 and 2017, these restrictive policies do not appear to have been the primary driver of declining abortion rates. There was also no consistent relationship between increases or decreases in clinic numbers and changes in state abortion rates.
- Fertility rates declined in almost all states between 2014 and 2017, and it is unlikely that the decline in abortion was due to an increase in unintended births.
- Factors that may have contributed to the decline in abortion were improvements in contraceptive use and increases in the number of individuals relying on self-managed abortions outside of a clinical setting.



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Introduction

bortion surveillance in the United States is an important public health indicator that is needed to estimate pregnancy rates, and it can also serve as a measure of access to reproductive health care. Between 2011 and 2014, the U.S. abortion rate declined from 16.9 to 14.6 abortions per 1,000 women aged 15–44, the lowest rate ever recorded and the continuation of a decades-long trend.¹ Still, in 2014, almost one in five pregnancies ended in abortion, and given abortion rates in that year, an estimated one in four U.S. women will have an abortion in their lifetime.² These statistics demonstrate that abortion is not uncommon.

The Supreme Court of the United States recognized the constitutional right to abortion in 1973 in Roe v. Wade. In the decades since, the Court has continued to affirm the fundamental right to abortion, including in 1992 in Planned Parenthood v. Casey and in 2016 in Whole Women's Health v. Hellerstedt.^{3,4} Despite existing precedents, states have continued to find ways to restrict or ban abortion, enacting more than 227 restrictions between January 2014 and June 2019.5 More than a dozen cases challenging some of the most extreme restrictions—such as bans on abortions after six weeks' gestation—currently have the potential to reach the Supreme Court, and the outcomes could pose significant challenges to the legal framework protecting abortion rights.⁶ If the Court undermines or overturns Roe v. Wade, this will likely exacerbate existing disparities in abortion access and may allow individual states to explicitly or effectively ban abortion altogether.7 Although prior research has not found state policy to be the primary driver of the decline in the national abortion rate, 1 abortion bans would undoubtedly prevent many individuals from obtaining abortion care in clinical settings.

Documenting changes in the number of health care facilities that provide abortion is also an important activity, as the number of facilities can directly affect the availability and accessibility of care. In 2014, the vast majority (95%) of abortions were provided by clinic facilities, while 4% were provided by hospitals and 1% by private physicians' offices.¹ Between 2011 and 2014, the number of clinics providing abortions had declined by 6%. These declines were steepest in the Midwest and South (22% and 13%, respectively), regions that had also enacted the most abortion restrictions.⁸ Still, the 2014 study did not identify a clear association between changes in clinic numbers and state abortion rates between 2011 and 2014; for example,

the declines in abortion rates in some states that had lost one-third or more of their clinic facilities mirrored, or were smaller than, the national decline. Updated national data suggest that the overall number of facilities providing abortion did not change much between 2014¹ and 2017,9 but state and regional patterns of clinic closures may reveal meaningful patterns in availability of and access to services over time.

Some individuals may self-manage their abortion outside of clinical settings. National estimates of the incidence of self-managed abortion are limited and cannot be developed using traditional surveillance at the facility level. However, facility-level reports of the number of patients seen following an *attempt* to self-manage an abortion may reveal interesting patterns when those individuals seek follow-up care. In 2014, 12% of nonhospital facilities reported that they had seen one or more patients who had attempted to self-manage an abortion, and these proportions were highest in the South (21%) and the Midwest (16%).¹

This report, which summarizes findings from the Guttmacher Institute's most recent Abortion Provider Census (APC), provides estimates of abortion incidence and the number of clinic facilities providing abortion care in 2017, nationally and by state. We also examine patterns in abortion rates and abortion legislation in the 10 states that experienced the largest proportionate declines and increases in clinic numbers. The last APC gathered data for 2014, and our analysis focuses on changes since that time. Finally, we examine the incidence of medication abortion and facilities that provided only medication abortion in 2017. Taken together, the data from this report provide the most comprehensive accounting of abortion incidence and of the landscape of clinical abortion service provision in the United States.

Methods

ata for this study are from the Guttmacher Institute's most recent APC. This was the 18th national census of its kind; the first assessed abortion incidence in 1973.10 Conducted between January 2018 and March 2019, the APC surveyed all health care facilities known or suspected to have been providing abortions in the United States in 2016 and 2017. We modeled the data collection instruments on the guestionnaires used in our prior study, which collected data for 2013 and 2014. Several new questions were added, and other changes were made to improve clarity. The instrument sent to clinics and to physicians' offices had more questions than the questionnaire for hospital facilities, in order to account for differences in service provision. We asked contacts at all facilities the number of abortions provided at their site in 2016 and 2017.

The universe for data collection included all facilities known to have provided abortions in 2014, as well as additional or new facilities identified through Web-based searches, media reports, and reviews of directories of organizations and associations that work with abortionproviding facilities. The universe also included facilities identified in a national survey of obstetrician-gynecologists conducted by the Guttmacher Institute in 2015 to capture information on abortion and referrals provided in private practice settings. 11 We sent two mailings, one in January 2018 and a second to all nonresponding facilities four weeks later. We conducted intensive telephone, fax and e-mail follow-up for 13 months (from early March 2018 through March 2019) to acquire completed questionnaires. We gave priority to obtaining the total number of abortions for 2016 and 2017 over other questions on the survey. During this period of follow-up, we documented more than 16,775 phone calls, e-mails and faxes, including contacts for facilities that we discovered had closed during the survey period.

We also collected state health department data for 2016 and 2017 to supplement information obtained from abortion-providing facilities, and we sometimes used this information to generate estimates for nonresponding facilities. We requested abortion occurrence data from state

health department offices in 45 states and the District of Columbia. The quality, completeness and type of health department data available varied widely across states. Where possible, we collected the number of abortions by facility, but most commonly, health departments provided data by county of occurrence or by facility type. In some states, we were able to obtain only the total number of abortions.

Response rates and completeness of data

We collected data directly from 59% of the 2,277 facilities in our universe of potential abortion-providing facilities; we received questionnaires from 954 entities (42%) and acquired data during telephone and e-mail follow-up from an additional 386 entities (17%). We used health department data to determine the abortion caseloads of 423 facilities (19%). For another 446 facilities (20%), we estimated abortion totals using a variety of techniques and information sources. In some cases, estimates were based on 2013 and 2014 caseloads, with adjustments for trends in service provision at other facilities in the same state or metropolitan area. In addition, to estimate caseloads at a small number of facilities, we combined information from a range of sources, including the internet,* other researchers and key informants in communities who had in-depth knowledge about reproductive health service provision.

The majority (72%) of facilities that did not provide data and for which we made estimates were hospitals and physicians' offices, which have small abortion caseloads (based on responding facilities). We determined that 71 of the 446 facilities for which we estimated caseloads provided no abortions during the survey period. The remaining 68 facilities (3%) in the overall survey universe were found to have closed, to have stopped providing abortions before 2016 or to have been added in error.

The large majority (89%) of the total number of abortions that we counted in 2017 were reported by the facilities, 75% via questionnaire and an additional 14% from nonresponse follow-up. Two percent of the abortions we

^{*}Internet sources used to inform estimates included news stories about facilities, patient reviews on Yelp and Google, images of the facility on Google maps and information on antichoice websites. Information on clinic websites also helped inform caseload estimates, including the number of days and gestations at which abortions were provided, the amount charged and the provision of financial aid for abortion.

counted were obtained from health departments, and we estimated 9% of abortions using historical data and information from key informants and information obtained via the internet. This distribution is comparable to that in the 2014 APC, where 68% of counted abortions were reported via questionnaire, 20% from nonresponse follow-up, 7% from estimates and 5% from health department data.

The degree to which data were estimated varied across states. States for which we had to estimate more than 10% of abortions (the highest proportion of missing data) were Rhode Island (31%), Florida (25%), New York (19%), New Jersey (17%), North Carolina (15%), Nevada (14%), New Mexico (11%) and Texas (11%).

We obtained approval for this study from the Guttmacher Institute's federally registered institutional review board.

Analysis

We distinguished among four types of abortion-providing facilities: specialized abortion clinics, nonspecialized clinics, hospitals and physicians' offices. Specialized abortion clinics are defined as nonhospital facilities in which half or more of patient visits were for abortion services, regardless of annual abortion caseload. Nonspecialized clinics are nonhospital facilities in which fewer than half of patient visits were for abortion services. Physicians' offices are defined as facilities that provided fewer than 400 abortions per year and had names suggesting that they were private practices. Physicians' offices that provided 400 or more abortions per year are categorized as clinics (either specialized or nonspecialized), as their caseload suggests service provision more closely mirroring that of a clinic. Similarly, as in the past, we classified hospital-affiliated clinics as either specialized or nonspecialized clinics; traditional hospital-based sites of care, such as operating rooms, emergency departments, labor and delivery wards and maternal-fetal medicine departments, are classified as hospitals.

We used Census Bureau data on the population of women aged 15–44 on July 1, 2016, and July 1, 2017, to calculate the national abortion rate, as well as the rates for each state and the District of Columbia. We estimated the national abortion ratio as the proportion of pregnancies that ended in abortion (and excluded those ending in miscarriages). To do this, we combined our abortion counts with National Center for Health Statistics data on the

number of U.S. births in the one-year periods beginning on July 1 of 2016 and 2017. 13,14

More than two-thirds of nonhospital facilities (68%) offered information about the number of early medication abortions they provided, specified as abortions provided by mifepristone with misoprostol, by methotrexate or by misoprostol alone up to 10 weeks since the last menstrual period (LMP). "Early" medication abortion was indicated on the survey to preclude the reporting of medication used for cervical preparation prior to surgical abortion. The response rate on this measure varied by facility type and caseload, and we constructed weights to account for these differences. We also estimated the proportion of eligible abortions that were provided using medication. As of June 2016, the U.S. Food and Drug Administration (FDA) regimen permits use of mifepristone up to 10 weeks' gestation. To estimate the number of eligible abortions, we used the 2015 Centers for Disease Control and Prevention (CDC) abortion surveillance report (the most recent CDC data available) to calculate the proportion of all abortions performed at nine weeks or less and applied this proportion to our 2017 abortion count.15

Changes to the survey

The 2014 APC questionnaire included an item asking nonhospital facilities if any patients had been treated for missed or failed abortions due to self-induction in 2014, and if so, how many. We included a similar item on the 2017 guestionnaire but removed the yes/no screener and asked only for the total number of patients treated for missed or failed self-managed abortions in 2017. Among nonhospital facilities, 55% provided information on this item, but 106 facilities indicated "don't know," compared with 10 in 2014. It was unclear whether a "don't know" response on the 2017 survey indicated that respondents were unsure of the total number of patients or that they were unsure whether they had seen any patients for this reason. Of the 106 facility responses indicating "don't know," 67 were completed by four respondents at central administrative offices; they indicated "don't know" for each facility in the network, including some with abortion totals as few as one or two in 2017. We were able to follow up with three out of four of these respondents, and they indicated that clinic staff may have seen patients who attempted self-induction but were unsure; for example, they noted that it was possible some miscarriages they

[†]These proportions do not add to 100% because of rounding. ‡As a validity check for these eight states, we considered comparing trends in the total number of abortions reported by clinic facilities that responded on the 2014 and 2017 surveys, to see how they corresponded with patterns in total abortions that included facilities for which we had to make estimates. However, fluctuations in clinic numbers between surveys (e.g., nine clinics that provided abortions in Texas in 2014 were not doing so in 2017, and two new facilities had started providing abortions) meant that this strategy was not feasible.

treated may have been self-managed. Thus, as we did for the 2014 data, we assumed that a "don't know" response meant facility staff were unsure whether patients had been treated for self-induction; these facilities were coded as missing data for this question. As a sensitivity analysis, we examined this measure assuming that a response of "don't know" was equivalent to having seen no patients who attempted to self-manage. We constructed weights to take response patterns by facility size into account, and our findings are based on weighted data.

In the findings and discussion, we focus on the 2017 abortion data; estimates for 2016 are included in tables reporting numbers and rates of abortions.

Findings

Abortion incidence

The total number of abortions, the abortion rate and the abortion ratio in the United States all declined between 2014 and 2017 (Table 1, page 13). In 2017, 862,320 abortions were provided in clinical settings, a 7% decline from 2014. The 2017 abortion rate of 13.5 abortions per 1,000 women aged 15–44 represented an 8% decline from 2014. Just under one in five pregnancies (births and abortions), 18.4%, ended in abortion in 2017.

While abortion incidence and rates declined in most states, the degree of change varied substantially (Table 2, page 14). Declines in abortion rates were largest in Delaware, Arkansas, West Virginia, Alabama and Virginia; most of these states also had abortion rates substantially lower than the national rate in 2014, so even a small change in this measure can seem large. Abortion rates increased in Mississippi, New Jersey, Minnesota, Georgia, Maryland and Wisconsin.§ While abortion rates declined in all four regions, the drop was steepest in the West (14%). Indeed, states considered to be supportive of abortion rights in 2017—including large states such as California and New York—accounted for 43% of all U.S. abortions in that year but 55% of the decline since 2014.**

Areas with the highest abortion rates in 2017 were the District of Columbia, New Jersey, New York, Maryland and Florida. Rates were lowest in Wyoming, South Dakota, Kentucky, Idaho and Missouri. Notably, our study measures abortion by state of occurrence and does not account for individuals crossing state lines for abortion care; in the five states with the lowest rates, 28% or more of individuals go out of state to obtain abortions.¹⁷

Abortion facilities

In 2017, 1,587 health care facilities were known to have provided abortions (Table 3, page 16), a 5% decline from 2014. Changes in the overall number of facilities over time varied by facility type. The number of hospitals providing abortions declined by 19%, from 638 to 518. This decrease was largely attributable to California, where 114

hospitals that provided 633 abortions in 2014 reported zero procedures in 2017 (data not shown). California hospitals accounted for the same proportion of abortions in the state in both years (5%).

The number of specialized abortion clinics—facilities where half or more of patients received abortion care—declined by 7%, from 272 in 2014 to 253 in 2017. The number of nonspecialized clinics increased by 7% over the same period, from 517 to 555. Clinic facilities play a critical role in abortion provision, and, in 2017, specialized abortion clinics provided 60% of all abortions, while nonspecialized clinics provided 35%.

Changes in the number of clinics (both specialized and nonspecialized) providing abortion care varied substantially by region and by state (Table 4, page 17). (Information on the total number of facilities providing abortion care, by state, is available in Appendix Table 1, page 21.) The number of clinic facilities declined by 9% in the South, the largest of the four regions. Indeed, nine of the 17 states in the South lost at least one such clinic during the study period. The Midwest also saw a 6% decline in the number of clinic facilities providing abortion care—i.e., six fewer clinic facilities in 2017 than in 2014. Indiana, lowa, Ohio and Wisconsin all had fewer clinics in 2017 than in 2014.

The number of clinic facilities increased by 16% in the Northeast and by 4% in the West. Four of the nine states in the Northeast had an increase in clinic facilities, as did five of 13 in the West. Despite this overall increase, a few states in each of these regions also saw a decline in the number of clinic facilities between 2014 and 2017.

The overall increase in clinic facility numbers masks some amount of turnover. Of the 808 clinic facilities providing abortions in 2017, 127 had not been providing this care in 2014. Similarly, of the 789 clinic facilities providing abortions in 2014, 103 had stopped doing so or had closed by 2017.^{††}

In 2017, 89% of U.S. counties did not have a clinic facility that provided abortion care, and 38% of women aged 15–44 lived in these counties (Table 4); these figures are comparable to those found in 2014—90% and

[§]Proportionately, the increase in abortion incidence was largest in Wyoming, but due to the small number of abortions in that state, the 22% increase represented only 20 more abortions in 2017 than in 2014. **In 2017, 12 states were considered to be supportive of abortion rights: California, Connecticut, Hawaii, Maine, Maryland, Montana, New Jersey, New Mexico, New York, Oregon, Vermont and Washington. ††These numbers do not perfectly align, as some facilities transitioned from being classified as physicians' offices to being nonspecialized clinic facilities, or vice versa, when their annual caseload rose above or fell below 400 abortions.

39%, respectively.¹ In five states, fewer than 10% of women lived in a county without a clinic facility: California, Connecticut, Hawaii, Nevada and New York. In Mississippi and Wyoming, more than 90% of women lived in a county without such a clinic.

Changes in clinic numbers, abortion rates and policy context

To explore whether decreases in the numbers of clinics across states might be related to declining abortion rates (and vice versa), we examined changes in rates in the 10 states with the largest proportionate increases and decreases in clinic numbers. We also examined the number of new laws enacted in all 20 states, as these restrictions could have made it harder for health care facilities to provide abortions.

Five of the 10 states with the largest proportionate declines in clinics had one fewer facility in 2017 than in 2014: Kentucky, West Virginia, Rhode Island, Wisconsin and Louisiana (Table 5, page 19). In fact, Kentucky and West Virginia were left with only one clinic in 2017. Thirteen of the 25 clinics that were no longer providing abortion in these 10 states had been specialized abortion clinics (which had provided an average of 957 abortions each year in 2014), and the other 12 had been nonspecialized clinics (data not shown).

The change in abortion rates varied among states with the largest proportionate declines in clinic numbers (Table 5). Abortion rates increased or stayed the same in Wisconsin and New Mexico. Declines in abortion rates were lower than or comparable to the national level in six of the states and larger than average in only two, West Virginia (–26%) and lowa (–15%). All but two of the states—New Mexico and Rhode Island—had enacted multiple abortion restrictions over the study period.

Six of the 10 states with the largest proportionate increases in clinic facilities had one or two additional facilities in 2017. Larger increases were seen in Maine (12 clinics), Massachusetts (5), New York (18) and Washington (7). The proportion of women in counties without a clinic decreased from 55% to 24% in Maine and from 37% to 32% in Alaska. The overwhelming majority of newly providing clinics in these 10 states (50 in total) were nonspecialized clinics; only three were abortion clinics (data not shown).

Abortion rates declined in all 10 states that had more clinic facilities in 2017 than they did in 2014; declines of more than twice the national rate occurred in Delaware (–37%) and South Carolina (–17%). Half of these states

had not enacted any abortion restrictions during the study period; among the five that had, Oklahoma and South Carolina had enacted the greatest number of restrictions (eight each). A correlation analysis revealed no association between percentage change in rates and percentage change in clinic providers between 2014 and 2017, either nationally (r=-.04, p=.764) or among the 20 states in Table 5 (r=-.05, p=.894; data not shown).

Medication abortion

In 2017, 339,640 medication abortions were provided in nonhospital facilities (Table 6, page 20), a 25% increase from 2014.¹ Medication abortion accounted for 39% of all abortions. Assuming that health care providers followed the FDA-recommended regimen that allows mifepristone to be administered up to 10 weeks' gestation, we estimate that 60% of all eligible abortions were early medication abortions (data not shown). The majority of medication abortions were provided by specialized clinics and at high-volume facilities (those with annual caseloads of more than 1,000 abortions).

In 2017, a minimum of 25% of all nonhospital facilities (including physicians' offices) and 30% of clinics provided only early medication abortion, representing a slight increase from 2014, when these figures were 23% and 26%, respectively.¹ In particular, a higher proportion of nonspecialized clinics (41%) than specialized abortion clinics (4%) offered only early medication abortion. Facilities with abortion caseloads of 30–399 abortions had the highest proportion offering only early medication abortion (41%).

Self-managed abortion

In 2017, 18% of nonhospital facilities reported that they had seen one or more patients for a missed or failed abortion due to self-induction (data not shown), up from 12% in 2014. Reports of self-managed abortion were highest in the South (25%) and the West (21%), compared with 10% in the Midwest and 14% in the Northeast. The majority of these facilities (54%) had seen only one or two such patients, but four facilities (all high-volume) reported 50 or more.

The sensitivity analysis (which assumed that a response of "don't know" to the question was comparable to having seen no patients who attempted to self-manage) suggested that 15% of nonhospital facilities had seen at least one of these patients; the regional distributions were 18% in the South, 19% in the West, 11% in the Northeast and 9% in the Midwest.

Discussion

etween 2014 and 2017, abortions provided in clinical settings in the United States continued to decline. The 2017 rate of 13.5 abortions per 1,000 women aged 15–44 is the lowest recorded since abortion was legalized nationally in 1973 and is 54% lower than the peak rate of 29.3 per 1,000 in 1980. 18 The decline was seen across all four regions and most states.

One factor that can contribute to declines in abortion is a reduction in the number of facilities providing this care. While hospitals and physicians' offices constituted a substantial share of abortion-providing facilities, the overwhelming majority of abortions, 95%, were provided by clinics. Thus, our analysis focused on trends in clinic facilities during the study period. Nationally, there was a slight (2%) increase in the total number of clinic facilities, but this increase was not evenly distributed by region because the overall number of clinics increased only in the Northeast and in the West. The substantial increase seen in Maine was due to the introduction of abortion services via telemedicine. 19 Adoption of this technology allowed for a jump in the number of clinical sites providing abortion care in a state where a larger than average proportion of residents live in rural areas. Similar developments may have contributed to the increase in clinics in Alaska and Washington.20

The overall number of clinics in the Midwest and the South declined. Texas had the largest drop, losing seven clinic facilities between 2014 and 2017. The 2014 figure included clinics that provided any abortions within that year, but a number of these facilities had stopped providing abortion care at some point in 2014 due to state abortion restrictions—in particular, the requirement that physicians providing abortions have admitting privileges at a nearby hospital.²¹ While this and other Texas restrictions have since been struck down by the U.S. Supreme Court,3 a number of clinics in the state have not reopened or reintroduced abortion care. The Texas legislature passed 10 additional abortion restrictions between 2014 and 2017, indicating continued attempts to restrict access to abortion care. Similarly, a state restriction passed in Ohio in 2013 that required facilities providing abortions to have a transfer agreement with a public hospital was amended to be even more stringent in 2015, requiring that the public hospital be within 30 miles of the facility; this development contributed to the continued decline of clinic facilities in that state.22

In 2014, four states had only one clinic providing abortion care—Mississippi, Missouri, North Dakota and South Dakota.¹ In 2017, Kentucky and West Virginia were also down to one clinic facility, while Missouri has fluctuated between one and three clinical sites (see Limitations). All of these states are located in the Midwest and the South.

Our analysis did not identify any clear patterns between changes in states' number of clinic facilities and trends in state abortion rates. Iowa and West Virginia were the only states that lost a substantial share of clinics and also had larger than average declines in abortion rates. In 2014, 13–14% of abortions in both states were provided to nonresidents.¹⁷ It is possible that the declines in abortion in these states reflect, at least in part, a decline in the number of individuals who crossed state lines to obtain care, since there were fewer clinics.

All 10 states that had a meaningful increase in clinic numbers also showed declines in their abortion rates. Most of the new facilities, or facilities that had not previously provided abortions in these states, were nonspecialized clinics, suggesting that the concurrent expansion of abortion care and decrease in abortion rates was taking place in the context of an increase in comprehensive health care.

While the decline in the number of clinics providing abortion care in some states likely prevented some patients from obtaining wanted abortions, other factors also contributed to the decline in the abortion rate. Fertility rates declined in virtually all states between 2014 and 2017, ¹⁴ suggesting that the drop in abortions was not compensated for by an increase in births. Rather, declines in reported abortions could be related to at least two other factors: self-managed abortion and a decline in pregnancy rates.

Our analysis found an increase in the proportion of nonhospital facilities that had treated at least one patient for a missed or failed abortion due to self-induction, from 12% in 2014 to 15–18% in 2017. For more than a decade, the drug misoprostol has been available over or behind the counter in other countries and has been brought to the United States, and researchers have documented its use for self-managed abortion in the United States. ^{23–25} More recently, drugs similar to those used in the U.S. medication abortion regimen—a highly effective combination of mifepristone and misoprostol—have become available on the internet, ²⁶ as have websites providing accurate information about how to safely and effectively self-manage

abortion using drugs obtained outside of a clinical setting. In particular, Aid Access, an international organization that provides medication abortion pills via mail order to people living in the United States, launched their website in March 2018 (after the study period) and reported filling 2,500 prescriptions in that year.²⁷ The majority of patients obtaining abortions are poor or low-income, many lack health insurance that will cover the procedure,²⁸ and many live in states with numerous abortion restrictions.⁸

These factors, along with the increased accessibility of resources to help individuals safely self-manage their abortions outside of a clinical setting, likely account for some of the decline in abortions that we have documented. However, one national survey of U.S. adult women, conducted in 2017, found that only 1.4% reported ever having attempted to end a pregnancy on their own.²⁴ Moreover, 24% of these instances had occurred prior to 2000, and only 28% were reported to have been successful. Abortion is underreported on surveys of this type, and the actual incidence may be higher, ^{29,30} but it is nonetheless unlikely that even a substantial increase in self-managed abortion can account for the majority of the decline in abortion incidence nationally during the study period.

The decline in births and abortions also means that fewer people were getting pregnant. Improved contraceptive use is one factor that could have contributed to this change. The most recent national data suggest that between 2014 and 2016, the proportion of women aged 15–44 using long-acting reversible contraceptive methods increased by 23%, from 13% to 16%; levels of sterilization were 25% and 26%, respectively.31,32 Greater reliance on highly effective methods appears to have been balanced by a drop in the use of hormonal methods such as the pill and the injectable (Depo) which, combined, declined from 29% to 25% of all contraceptive use. Still, it is possible that a decline in contraceptive failures could have reduced the incidence of unintended pregnancy. Additionally, statelevel efforts to increase access to long-acting reversible contraceptive methods^{33–35} may have had a measurable impact, particularly in states with higher-than-average abortion rates.

Medication abortion has come to play a pivotal role in abortion care. Even while the overall number of abortions declined, the number of medication abortions and the proportion of all abortions that were medication abortions increased. Some of this increase was due to a June 2016 change in the FDA medication abortion regimen: Prior to that time, state laws in North Dakota, Ohio and Texas mandated that facilities adhere to a less-effective regimen that relied on outdated guidelines on the maximum gestation at which this method could be used.³⁶ For the years in which these state laws were in effect, the required regimen increased the cost of medication abortion and

restricted the number of patients who were eligible to use it.^{37,38} The continued increase in clinics that provide only early medication abortion might also have contributed to the increased incidence in this category of abortion. This category of facilities may include clinics that do not have the staff or equipment to provide procedural abortions, and their ability to provide medication abortion has likely increased access to care. At the same time, it is also possible that some of the increase can be attributed to early medication abortion's being the only option available to patients in some areas.

Limitations

This study had a number of shortcomings. Although 89% of the abortions we counted in 2017 were based on information provided by individuals working at or for the facilities from which the data were collected, we estimated 9% of abortions. This problem was particularly pronounced in eight states, including larger ones such as New York and Florida. It is possible that we consistently underestimated or overestimated these caseloads, which would mean that our count is inaccurate. In addition, our study was only able to measure abortions that occurred in clinical settings. If the number of individuals who were able to successfully self-manage their abortions has increased substantially, then the decline we recorded may have been artificially high. While we found an increase in the proportion of nonhospital facilities that had seen at least one patient who had attempted to self-manage, this estimate is based on the assumption that facilities that did not provide information on this measure were similar to those that did.

We are aware that our study did not capture all facilities that provide a small number of abortions per year—hospitals and private physicians' offices in particular. A 2016 study of abortion provision in private practices of obstetrician-gynecologists suggests that our study is missing as many as 1,200 of these facilities and as many as 12,000 abortions (or 1% of the total abortions estimated to have occurred in 2017). Still, we are confident that we have accounted for most, if not all, clinic facilities, and these provide the overwhelming number of abortions.

Our study measured abortion by state of occurrence, but many patients cross state lines to obtain care. For example, CDC data for 2015 suggest that 28% of abortions reported to have occurred to residents of Idaho and 83% of those to residents of Wyoming were obtained in other states. 1,17 Similarly, though the District of Columbia (DC) had the highest abortion rate in the country in 2017, the majority of abortions provided in DC in 2014 were for nonresidents, most commonly individuals from Maryland or Virginia. 17

The abortion policy landscape changes rapidly, and

some of the information in this report may already be out of date. For example, while Missouri had three clinics providing abortion care in 2017, two have since closed due to a law mandating that physicians at medication-only abortion facilities have admitting privileges at a local hospital and a contract with an obstetriciangynecologist.³⁹ Similarly, we found some amount of turnover among clinics from one study period to the next, and the number of facilities providing abortion care is constantly changing.

Conclusions

eclines in abortion were seen in all four regions of the United States, including in states with policy landscapes that were both restrictive toward and supportive of abortion rights. However, access to abortion, when measured by the number of clinic facilities in a state, has become more polarized across regions of the country. The overall number of clinics increased in the Northeast and the West but declined in the Midwest and the South: in addition, more states (all in the Midwest or the South) have only one clinic remaining. These patterns demonstrate that the existence of more clinic facilities does not necessarily translate to an increase in abortion rates. Rather, an increase in clinic numbers likely represents greater access to health care in general, enabling patients to travel shorter distances, obtain abortion care in nonspecialized settings and perhaps obtain contraceptive care more easily.

Medication abortion plays an integral role in abortion care, having accounted for 39% of all abortions in 2017

and more than half of abortions occurring prior to 10 weeks' gestation. The availability of mifepristone not only allows some patients to choose between types of abortion procedure, but also lends itself to innovations in health care delivery models, such as telemedicine. For this reason, the landscape of abortion provision and access in the United States may change as these innovations spread. In addition, the increased availability of highly effective and affordable abortion pills via the internet has the potential to substantially increase access to abortion, for which future surveillance efforts will need to account. It will also be important to ensure that policies and funding promote access to all methods of abortion, so that people seeking this care are able to obtain the care that is best for them.

As abortion service delivery and utilization continue to be restricted at the state level, documentation of abortion incidence, abortion rates and numbers of service sites is necessary to establish baselines and measure trends in a changing health care landscape.

TABLE 1

Number of reported abortions, abortion rate and abortion ratio, United States, 2000-2017

	No. (in 000s)	Rate*	Ratio†
Year			
2000	1,313.0	21.3	24.5
2001	[1,291.0]	[20.9]	[24.4]
2002	[1,269.0]	[20.5]	[23.8]
2003	[1,250.0]	[20.2]	[23.3]
2004	1,222.1	19.7	22.9
2005	1,206.2	19.4	22.4
2006	[1,242.2]	[19.9]	[22.9]
2007	1,209.6	19.4	21.9
2008	1,212.4	19.4	22.5
2009	[1,151.6]	[18.5]	[22.2]
2010	1,102.7	17.7	21.7
2011	1,058.5	16.9	21.2
2012	[1,011.0]	[16.1]	[20.4]
2013	958.7	15.2	19.4
2014	926.2	14.6	18.8
2015	[899.5]	[14.2]	[18.5]
2016	874.1	13.7	18.3
2017	862.3	13.5	18.4

^{*}Abortions per 1,000 women aged 15–44 as of July 1 of each year.†Abortions per 100 pregnancies ending in an abortion or a live birth; for each year, the ratio is based on births occurring during the 12-month period starting in July of that year. NOTE: Figures in brackets are estimated by interpolation of numbers of abortions and adjustments made to CDC Abortion Surveillance Reports. SOURCES: 2000–2014 abortion numbers, rates and ratios—reference 1. 2015 abortion numbers—special tabulations of data from the 2013–2014 Guttmacher Institute Abortion Provider Census. 2015–2017 population data—reference 12. 2015–2017 birth data—references 13 and 14.

TABLE 2

Number of reported abortions and abortion rate in 2014, 2016 and 2017; and percentage change in rates between 2014 and 2017, all by region and state in which the abortion occurred

		No.		Rate*			
Region and state	2014	2016	2017	2014	2016	2017	% change, 2014–2017
U.S. total	926,190	874,080	862,320	14.6	13.7	13.5	-8
	0.40.000	000.040	004.040	04.0	24.0	20.5	
Northeast	240,320	232,040	224,310	21.8	21.2	20.5	
Connecticut	13,140	12,210	11,910	19.2	18.1	17.7	8
Maine	2,220	2,060	2,040	9.5	8.9	8.8	
Massachusetts	21,020	19,200	18,590	15.3	14.0	13.5	
New Hampshire	2,540	2,310	2,210	10.4	9.6	9.2	
New Jersey	44,460	48,300	48,110	25.8	28.2	28.0	9
New York	119,940	110,840	105,380	29.6	27.6	26.3	-11
Pennsylvania	32,030	32,230	31,260	13.3	13.5	13.1	-1
Rhode Island	3,580	3,510	3,500	17.0	16.8	16.7	-2
Vermont	1,400	1,360	1,300	12.1	12.0	11.4	-5
 Midwest	138,940	133,410	133,120	10.6	10.2	10.2	
Illinois	42,270	41,740	42,080	16.3	16.4	16.6	2
Indiana	8,180	7,630	7,710	6.3	5.9	5.9	_
lowa	4,380	4,250	3,760	7.5	7.2	6.3	- -15
Kansas	7,240	6,820	6,830	12.9	12.2	12.2	
Michigan	29,120	27,280	26,630	15.4	14.6	14.2	
Minnesota	9,760	10,150	10,740	9.3	9.6	10.1	9
Missouri	5,130	5,290	4,710	4.4	4.5	4.0	
Nebraska	2,280	1,950	2,020	6.3	5.3	5.5	
North Dakota				8.7	7.9	7.9	
	1,260	1,150	1,160	-			
Ohio	22,730	20,520	20,630	10.3	9.3	9.4	
South Dakota	550	470	500	3.5	3.0	3.1	
Wisconsin	6,050	6,170	6,360	5.6	5.7	5.9	6
South	308,060	289,730	295,290	12.9	11.9	12.1	-6
Alabama	8,020	6,630	6,110	8.3	7.0	6.4	-23
 Arkansas	4,590	3,300	3,200	8.0	5.7	5.5	-30
 Delaware	3,010	2,240	1,900	16.7	12.5	10.5	-37
District of Columbia	5,820	1,910	5,630	32.7	10.4	30.2	-8
 Florida	75,990	70,130	71,050	20.6	18.5	18.6	-10
Georgia	33,000	34,870	36,330	15.7	16.4	16.9	8
Kentucky	3,530	3,280	3,200	4.1	3.9	3.8	-9
Louisiana	10,150	10,500	9,920	10.8	11.2	10.6	-2

^{*}Abortions per 1,000 women aged 15–44. NOTE: Numbers of abortions are rounded to the nearest 10. SOURCE: 2014 data—reference 1.

TABLE 2

Number of reported abortions and abortion rate in 2014, 2016 and 2017; and percentage change in rates between 2014 and 2017, all by region and state in which the abortion occurred (continued)

		No.			Rate*		
	IVO.			. Tutto			
Region and state	2014	2016	2017	2014	2016	2017	% change, 2014–2017
South (continued)							
Maryland	28,140	30,190	29,800	23.4	25.3	25.0	7
Mississippi	2,290	2,510	2,550	3.8	4.2	4.3	13
North Carolina	29,960	26,990	29,500	15.1	13.5	14.6	-3
Oklahoma	5,330	4,380	4,780	7.0	5.7	6.2	-11
South Carolina	6,040	5,730	5,120	6.4	6.0	5.3	-17
Tennessee	13,880	11,990	12,140	10.7	9.2	9.2	-14
Texas	55,230	53,780	55,440	9.8	9.2	9.4	-3
Virginia	21,080	19,590	17,210	12.5	11.7	10.2	-18
West Virginia	2,020	1,700	1,430	6.0	5.2	4.4	-26
West	238,860	218,900	209,600	15.6	14.2	13.5	-14
Alaska	1,470	1,260	1,260	10.0	8.6	8.6	-14
Arizona	12,870	13,330	12,400	9.8	10.0	9.2	-6
California	157,350	140,700	132,680	19.5	17.4	16.4	-16
Colorado	13,160	12,380	12,390	12.1	11.1	10.9	-10
Hawaii	3,760	3,100	3,200	14.0	11.6	12.0	-14
Idaho	1,320	1,270	1,290	4.2	3.9	3.9	-6
Montana	1,690	1,630	1,580	9.1	8.7	8.3	-9
Nevada	10,970	9,540	9,690	19.4	16.5	16.4	-15
New Mexico	4,650	5,350	4,620	11.7	13.5	11.7	0
Oregon	9,330	9,850	9,640	12.0	12.3	11.9	-1
Utah	2,960	3,030	2,990	4.6	4.6	4.4	-4
Washington	19,230	17,350	17,740	13.7	12.1	12.1	-12
Wyoming	120	110	140	1.1	1.0	1.3	22

^{*}Abortions per 1,000 women aged 15-44. NOTE: Numbers of abortions are rounded to the nearest 10. SOURCE: 2014 data—reference 1.

TABLE 3

Number and percentage distribution of abortion providers and of abortions, by provider type and caseload, 2014 and 2017

	Facilities					Abortio	ons	
	N	lo.	%		No.		%	
	2014	2017	2014	2017	2014	2017	2014	2017
Total	1,671	1,587	100	100	926,190	862,320	100	100
Facility type								
Hospital	638	518	38	33	34,410	28,760	4	3
Abortion clinic	272	253	16	16	547,130	519,180	59	60
Nonspecialized clinic	517	555	31	35	331,790	302,860	36	35
Physicians' office*	244	261	15	16	12,870	11,510	1	1
Facility caseload								
1–29	659	609	39	38	5,900	5,310	1	1
30–399	477	474	29	30	72,020	75,280	8	9
400–999	247	230	15	14	160,720	148,140	17	17
1,000–4,999	269	255	16	16	561,120	499,010	61	58
≥5,000	19	19	1	1	126,440	134,580	14	16

^{*}Physicians' offices reporting 400 or more abortions a year are classified as clinics. NOTE: Numbers of abortions are rounded to the nearest 10 and percentages may not add to 100 because of rounding. SOURCE: 2014 data—reference 1.

Total number of abortion-providing clinics, 2014 and 2017; percentage of counties without a clinic and percentage of women living in those counties; all by region and by state

		No. of clinics			
Region and state	2014	2017	% change, 2014–2017	% of counties without a clinic, 2017	% of women in counties with no clinic, 2017
U.S. total	789	808	2	89	38
Northeast	212	245	16	54	21
Connecticut	25	26	4	13	5
Maine	4	16	300	31	24
Massachusetts	14	19	36	43	13
New Hampshire	4	4	0	60	30
New Jersey	41	41	0	33	26
New York	95	113	19	39	8
Pennsylvania	20	18	-10	85	48
Rhode Island	3	2	-33	60	22
Vermont	6	6	0	64	38
Midwest	97	91	-6	95	54
Illinois	24	25	4	90	37
Indiana	9	6	-33	96	70
lowa	12	8	-33	93	58
Kansas	4	4	0	98	61
Michigan	20	21	5	87	35
Minnesota	6	7	17	97	61
Missouri	1	3	200	97	78
Nebraska	3	3	0	97	40
North Dakota	1	1	0	98	72
Ohio	12	9	-25	93	55
South Dakota	1	1	0	98	76
Wisconsin	4	3	-25	97	70
South	214	195	– 9	94	51
Alabama	5	5	0	93	59
Arkansas	3	3	0	97	77
Delaware	3	4	33	33	18
District of Columbia	5	4	-20	0	0
Florida	71	65	-8	73	24
Georgia	17	15	-12	95	55
Kentucky	2	1	-50	99	82
Louisiana	5	4	-20	94	72

Total number of abortion-providing clinics, 2014 and 2017; percentage of counties without a clinic and percentage of women living in those counties; all by region and by state (continued)

		No. of clinics				
Region and state	2014	2017	% change, 2014–2017	% of counties without a clinic, 2017	% of women in counties with no clinic, 2017	
South (continued)						
Maryland	25	25	0	71	29	
Mississippi	1	1	0	99	91	
North Carolina	16	14	-13	91	53	
Oklahoma	3	4	33	96	53	
South Carolina	3	4	33	93	71	
Tennessee	7	8	14	96	63	
Texas	28	21	-25	96	43	
Virginia	18	16	-11	93	80	
West Virginia	2	1	-50	98	90	
West	266	277	4	79	15	
Alaska	3	4	33	86	32	
Arizona	9	8	-11	80	18	
California	152	161	6	40	3	
Colorado	21	18	-14	80	27	
Hawaii	4	4	0	40	5	
Idaho	3	3	0	95	67	
Montana	5	5	0	93	56	
Nevada	8	7	-13	88	9	
New Mexico	9	6	-33	91	48	
Oregon	15	16	7	78	23	
Utah	2	3	50	97	63	
Washington	33	40	21	59	10	
Wyoming*	2	2	0	96	96	

^{*}The 2014 APC indicated that Wyoming had only one clinic facility. We determined that one facility in the state that was providing abortions in 2014 and 2017 and had previously been classified as a physicians' office was actually a clinic. SOURCE: 2014 data—reference 1.

Number of clinics providing abortions in 2014 and 2017, and percentage change; abortion rates in 2014 and 2017, and percentage change; and number of new abortion restrictions enacted 2014–2017, all among states with the largest proportionate declines and increases in clinic numbers

	No. of clinics				Abortion rate*		
	2014	2017	% change	2014	2017	% change	new restric- tions in effect 2014–2017
I.S. total	789	808	2	14.6	13.5	-8	196
0 states with propo	rtionately larges	t declines in num	nber of clinics				
Kentucky	2	1	-50	4.1	3.8	-9	3
West Virginia	2	1	-50	6.0	4.4	-26	6
Indiana	9	6	-33	6.3	5.9	-6	20
lowa	12	8	-33	7.5	6.3	-15	9
New Mexico	9	6	-33	11.7	11.7	0	0
Rhode Island	3	2	-33	17.0	16.7	-2	0
Ohio	12	9	-25	10.3	9.4	-9	8
Texas	28	21	-25	9.8	9.4	-3	10
Wisconsin	4	3	-25	5.6	5.9	6	3
Louisiana	5	4	-20	10.8	10.6	-2	6
0 states with propo	rtionately larges	t increases in nu	mber of clinics				
Maine	4	16	300	9.5	8.8	- 7	0
Missouri	1	3	200	4.4	4.0	-8	5
Utah	2	3	50	4.6	4.4	-4	2
Massachusetts	14	19	36	15.3	13.5	-12	0
Alaska	3	4	33	10.0	8.6	-14	6
Delaware	3	4	33	16.7	10.5	-37	0
Oklahoma	3	4	33	7.0	6.2	-11	8
South Carolina	3	4	33	6.4	5.3	-17	8
Washington	33	40	21	13.7	12.1	-12	0
New York	95	113	19	29.6	26.3	-11	0

^{*}Abortions per 1,000 women aged 15–44. SOURCE: 2014 data—reference 1.

Number of medication abortions, and among facilities offering only early medication abortions, number and percentage of all nonhospital providers, all by facility type and facility caseload, 2017

			ng only early tion abortion
	No. of medication abortions	No.	% of all nonhospital providers
U.S. total	339,640	269	25
Facility type			
Physicians' office	5,020	30	11
Nonspecialized clinic	153,350	229	41
Abortion clinic	181,280	10	4
Facility caseload			
1–29	1,230	57	24
30–399	39,880	138	41
400–999	84,330	68	31
≥1,000	214,190	6	2

NOTE: Numbers of abortions are rounded to the nearest 10.

Total number of abortion-providing facilities, 2014 and 2017, and percentage change, by region and by state

Region and state	2014	2017	% change
U.S. total	1,671	1,587	-5
	,	·	
Northeast	476	518	9
Connecticut	59	54	-8
Maine	9	21	133
Massachusetts	43	47	9
New Hampshire	12	12	0
New Jersey	79	76	-4
New York	218	252	16
Pennsylvania	42	43	2
Rhode Island	5	3	-40
Vermont	9	10	11
Midwest	142	137	-4
Illinois	40	40	0
Indiana	11	9	-18
lowa	13	9	-31
Kansas	4	4	0
Michigan	29	30	3
Minnesota	11	11	0
Missouri	2	4	100
Nebraska	5	7	40
North Dakota	1	1	0
Ohio	17	14	-18
South Dakota	2	2	0
Wisconsin	7	6	-14
South	336	314	- 7
Alabama	9	7	-22
Arkansas	4	4	0
Delaware	6	6	0
District of Columbia	9	8	-11
Florida	86	85	-1
Georgia	28	26	-7
Kentucky	3	3	0
Louisiana	5	4	-20

Total number of abortion-providing facilities, 2014 and 2017, and percentage change, by region and by state (continued)

Region and state	2014	2017	% change
South (continued)	2014	2017	70 Change
Maryland	41	44	7
Mississippi	2	3	50
North Carolina		-	
	37	26	-30
Oklahoma	5	6	20
South Carolina	7	10	43
Tennessee	11	12	9
Texas	44	35	-20
Virginia	34	32	-6
West Virginia	5	3	-40
West	717	618	-14
Alaska	8	6	-25
Arizona	12	11	-8
California	512	419	-18
Colorado	36	32	-11
Hawaii	29	28	- 3
Idaho	5	5	0
Montana	5	5	0
Nevada	13	11	– 15
New Mexico	11	7	-36
Oregon	27	29	7
Utah	6	12	100
Washington	50	51	2
Wyoming	3	2	-33

SOURCE: 2014 data—reference 1.

References

- Jones RK and Jerman J, Abortion incidence and service availability in the United States, 2014, Perspectives on Sexual and Reproductive Health, 2017, 49(1):17–27, doi:10.1363/psrh.12015.
- 2. Jones RK and Jerman J, Population group abortion rates and lifetime incidence of abortion: United States, 2008–2014, *American Journal of Public Health*, 2017, 107(12):1904–1909, doi:10.2105/AJPH.2017.304042.
- 3. Whole Woman's Health v. Hellerstedt, 136 S. Ct. 2292 (2016).
- 4. Planned Parenthood of Southeastern Pa. v. Casey, 505 U.S. 833 (1992).
- 5. Nash E, Guttmacher Institute, personal communication, May 28, 2019.
- 6. Nash E, A surge in bans on abortion as early as six weeks, before most people know they are pregnant, policy analysis, 2019, https://www. guttmacher.org/article/2019/03/surge-bans-abortion-early-six-weeksmost-people-know-they-are-pregnant.
- 7. Nash E et al., Radical attempts to ban abortion dominate state policy trends in the first quarter of 2019, New York: Guttmacher Institute, 2019, https://www.guttmacher.org/article/2019/04/radical-attempts-ban-abortion-dominate-state-policy-trends-first-quarter-2019.
- Jones RK, Ingerick M and Jerman J, Differences in abortion service delivery in hostile, middle-ground and supportive states in 2014, Women's Health Issues, 2018, 28(3):212–218, doi:10.1016/j. whi.2017.12.003.
- Cartwright AF et al., Identifying national availability of abortion care and distance from major US cities: systematic online search, *Journal of Medical Internet Research*, 2018, 20(5):e186, doi:10.2196/jmir.9717.
- Weinstock E et al., Legal abortions in the United States since the 1973 Supreme Court decisions, Family Planning Perspectives, 1975, 7(1):23–31. doi:10.2307/2134111.
- Desai S, Jones RK and Castle K, Estimating abortion provision and abortion referrals among United States obstetrician-gynecologists in private practice, *Contraception*, 2018, 97(4):297–302, doi:10.1016/j. contraception.2017.11.004.
- 12. National Center for Health Statistics, Vintage 2018 postcensal estimates of the resident population of the United States, no date, https://www.census.gov/programs-surveys/popest/data/data-sets.html.
- 13. Martin J et al., Births: final data for 2016, National Vital Statistics Reports, 2018, Vol. 67, No. 1.
- **14.** Martin J et al., Births: final data for 2017, *National Vital Statistics Reports*, 2018, Vol. 67, No. 8.
- **15.** Jatlaoui TC et al., Abortion surveillance—United States, 2015, *Morbidity and Mortality Weekly Report*, 2018, 67(13):1–45, doi:10.15585/mmwr.ss6713a1.
- Nash E et al., Policy trends in the states, 2017, New York: Guttmacher Institute, 2018, https://www.guttmacher.org/article/2018/01/policytrends-states-2017.
- Centers for Disease Control and Prevention, CDC's Abortion Surveillance System FAQs, 2018, https://www.cdc.gov/ reproductivehealth/data_stats/abortion.htm.
- Jones RK and Kooistra K, Abortion incidence and access to services in the United States, 2008, Perspectives on Sexual and Reproductive Health, 2011, 43(1):41–50, doi:10.1363/4304111.
- D'Almeida K, Telemedicine abortion care is coming to Maine, Rewire. News, 2016, https://rewire.news/article/2016/02/29/telemedicine-abortion-care-coming-maine/.
- **20.** Kohn JE et al., Medication abortion provided through telemedicine in four U.S. states, *Obstetrics & Gynecology*, 2019, 134(2):343, doi:10.1097/AOG.000000000003357.
- **21.** Grossman D et al., Change in distance to nearest facility and abortion in Texas, 2012 to 2014, *JAMA*, 2017, 317(4):437–439, doi:10.1001/jama.2016.17026.
- 22. Seitz A and Smythe JC, Abortions decline, clinics close under new Ohio restrictions, *Dayton Daily News*, 2016, https://www. daytondailynews.com/news/abortions-decline-clinics-close-under-new-ohio-restrictions/mj0xRMXB6056DkfaRbqPcl/.

- Grossman D et al., Self-induction of abortion among women in the United States, Reproductive Health Matters, 2010, 18(36):136–146, doi:10.1016/S0968-8080(10)36534-7.
- 24. Grossman D et al., Lifetime prevalence of self-induced abortion among a nationally representative sample of U.S. women, *Contraception*, 2018, 97(5):460, doi:10.1016/j.contraception.2018.03.017.
- **25.** Jones RK, How commonly do US abortion patients report attempts to self-induce?, *American Journal of Obstetrics and Gynecology*, 2011, 204(1):23.e1-23.e4, doi:10.1016/j.ajog.2010.08.019.
- Murtagh C et al., Exploring the feasibility of obtaining mifepristone and misoprostol from the internet, *Contraception*, 2018, 97(4):287–291, doi:10.1016/j.contraception.2017.09.016.
- **27.** Hearn RA et al., RE: Warning Letter to Aidaccess.org and Dr. Rebecca Gomperts dated March 8, 2019, letter submitted May 16, 2019.
- Jerman J, Jones RK and Onda T, Characteristics of U.S. Abortion Patients in 2014 and Changes Since 2008, New York: Guttmacher Institute, 2016, https://www.guttmacher.org/report/characteristics-us-abortion-patients-2014.html.
- 29. Tierney KI, Abortion underreporting in Add Health: findings and implications, *Population Research and Policy Review*, 2019, 38(3):417–428, doi:10.1007/s11113-019-09511-8.
- 30. Jones RK and Kost K, Underreporting of induced and spontaneous abortion in the United States: an analysis of the 2002 National Survey of Family Growth, Studies in Family Planning, 2007, 38(3):187–197, doi:10.1111/j.1728-4465.2007.00130.x.
- Guttmacher Institute, Contraceptive use in the United States, Fact Sheet, 2018, https://www.guttmacher.org/fact-sheet/contraceptiveuse-united-states.html.
- **32.** Special tabulations of data from the 2015–2017 National Survey of Family Growth, 2019.
- Sanders JN et al., Contraceptive method use during the communitywide HER Salt Lake Contraceptive Initiative, American Journal of Public Health, 2018, 108(4):550–556, doi:10.2105/AJPH.2017.304299.
- 34. Steenland MW et al., Association between South Carolina Medicaid's change in payment for immediate postpartum long-acting reversible contraception and birth intervals, *JAMA*, 2019, 322(1):76–78, doi:10.1001/jama.2019.6854.
- Markell J, This local health initiative has expanded birth control access, CNN, 2018, https://www.cnn.com/2018/05/16/opinions/delaware-birth-control-initiative-opinion-markell/index.html.
- **36.** Rewire.News, Medication abortion, 2018, https://rewire.news/legislative-tracker/law-topic/medication-abortion/.
- 37. Upadhyay UD et al., Comparison of outcomes before and after Ohio's law mandating use of the FDA-approved protocol for medication abortion: a retrospective cohort study, PLOS Medicine, 2016, 13(8):e1002110, doi:10.1371/journal.pmed.1002110.
- **38.** Baum SE et al., Rebound of medication abortion in Texas following updated mifepristone label, *Contraception*, 2019, 99(5):278–280, doi:10.1016/j.contraception.2019.01.001.
- New York Times, The abortion wars, part 1: the last clinic in Missouri, 2019, https://www.nytimes.com/2019/04/17/podcasts/the-daily/ abortion-missouri.html.



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