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The impacts of reduced access to abortion and family planning services on abortions, births, and contraceptive purchases☆

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ABSTRACT

Between 2011 and 2014, Texas enacted three pieces of legislation that significantly reduced funding for family planning services and increased restrictions on abortion clinic operations. Together this legislation creates cross-county variation over time in access to abortion and family planning services, which we leverage to understand the impact of family planning and abortion clinic access on abortions, births, and contraceptive purchases. In response to these policies, abortions to Texas residents fell 16.7% and births rose 1.3% in counties that no longer had an abortion provider within 50 mi. Changes in the family planning market induced a 1.2% increase in births for counties that no longer had a publicly funded family planning clinic within 25 mi. Meanwhile, responses of retail purchases of condoms and emergency contraceptives to both abortion and family planning service changes were minimal.

1. Introduction

Access to abortion and family planning services has declined precipitously over the past decade. Between 2008 and 2014, the number of facilities providing abortions in the United States fell 6.8%, continuing a long decline since the early 1980s. In some states, including Texas, this drop has been even more dramatic: the number of abortion-providing clinics shrunk by at least 25% in 10 states over the 2008 to 2014 period (Jones and Jerman, 2014, 2017).[1] Coinciding with this, the abortion rate is at its lowest level since the adoption of Roe v. Wade.[2]

In parallel, the funding of family planning services, which primarily include the dispensary of contraceptives, pregnancy testing, sexually transmitted infections (STIs) testing and treatment, primary care, cancer screenings, and preconception and prenatal care, has similarly decreased (Zolna and Frost, 2016). Per capita funding levels of Title X, the federal program devoted solely to the provision of family planning services and targeted to low-income women, hit their peak in 2010 and have fallen subsequently.[3] At its apex of funding, one in four women (and nearly half of poor women) who received contraceptive services did so at a publicly funded clinic.[4] Funding cuts to family planning services, including Title X, are likely to continue given the current health care discussions. In 2017,

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[1] Note, while the change in Texas is large, it is not an outlier. There are seven states with at least as large of a decline in abortion-providing clinics over this time period.
[2] See http://www.latimes.com/nation/la-na-abortion-rate-2017-story.html.
[3] See https://www.hhs.gov/opa/title-x-family-planning/about-title-x-grants/funding-history/index.html.
[4] Source: https://www.guttmacher.org/fact-sheet/publicly-funded-family-planning-services-united-states.

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President Trump signed legislation allowing states to withhold Title X funds from family planning clinics that are affiliated with abortion providers.[5]

In this study, we exploit three recent policy changes in Texas to separately understand the effects of reductions in access to abortion and family planning services. Over the 2011 to 2014 period, the Texas legislature implemented legislation that both limited the ability of non-abortion family planning providers to receive government funding and placed more stringent requirements on the operation of abortion clinics. In the aftermath of these policies, over half of abortion clinics closed by 2015, family planning providers experienced funding cuts of 66% and one-quarter of publicly funded family planning clinics closed (White et al., 2015).

As access to these services may affect fertility decisions on multiple margins, we focus on three sets of outcomes to better understand how they affect fertility behavior: abortions, births, and contraceptive purchases. Our analysis leverages spatial and temporal variation in access to reproductive services across counties in Texas using a difference-in-differences design with county fixed effects. Using data on the location of abortion providers and publicly funded family planning clinics over time, we operationalize the changes in access by focusing on changes in distance to the nearest abortion or publicly funded family planning provider. We define a publicly funded family planning clinic as one that receives state or federal funding. For abortion providers, our measure of access exploits closures whereas for family planning clinics, it leverages both closures and changes in the source of funding (e.g., from public funding to non-public funding). Overall, due to the reduced funding, the number of family planning clinics fell and, for many of those that remained open, so did their ability to serve their customer base. As the impacts of distance are unlikely to be linear, our measures of access are dichotomous — whether or not there is an abortion or family planning clinic within a pre-specified driving distance. For abortion access, much of the action operates on whether or not there is an abortion provider within 50 or 100 mi. For family planning, not surprisingly, the most impactful distance is shorter: 25 mi. In 2015, 24% of the Texas population had no abortion clinic within 50 mi and 11% had no publicly funded family planning clinic closer than 25 mi.

How might the reductions in abortion and family planning access impact fertility outcomes such as abortions and births? A priori, the effects are ambiguous. Reduced access to abortion clinics could cause a woman to have a child when she otherwise would not have, leading to fewer abortions and an increase in births. Alternatively, forward-looking individuals may practice safer sex or abstain, resulting in fewer abortions and potentially lower fertility rates.[6] If the increased distance is not prohibitive, one might expect no alteration in either births or abortions. Similarly, the effect of reduced access to family planning services may also be ambiguous. Reduced access may lessen the frequency of contraceptive use, such as IUDs and condoms, which are often dispensed for free or reduced cost at such clinics. As a result, the incidence of unintended pregnancy may rise, possibly leading to either increased abortions, increased births, or both. The impact of family planning services may also operate through sexual education and family planning practice knowledge. In this case, it would be reasonable to expect fertility rates to increase with more restricted access to family planning services.

Several features make Texas an interesting and useful setting for studying access to abortion and family planning. First, the policies examined here are reflective of those currently on the policy agenda nationwide. Second, estimated effects in Texas are likely more informative about the effects of nationwide policy changes compared to the analysis of other states. Because of Texas' size, travel across state lines to other states is less feasible for most residents. Third, unlike in most other states, by law, family planning services are administered separately from abortion services, and thus, we can separately estimate effects of changes in access to abortion and family planning services.[7] Fourth, Texas maintains a consistent and high-quality set of data on abortions by county and age. National abortion data are limited and the quality (i.e., completeness) of state-level data vary significantly (Jacobson and Royer, 2011).

At first glance, the effects of this legislation look dramatic as seen in Fig. 1. This figure displays the time-series patterns of births in Texas alongside a synthetic control for Texas. Note though that our primary identification strategy exploits quasi-experimental variation in access across counties within Texas rather than statewide variation shown in this figure. The three vertical bars in Fig. 1 represent the three pieces of legislation we exploit — first, the Texas Department of State Health Services (TDSHS) cuts in 2011 reduced funding for family planning clinics by 67%; second, the Women's Health Program (WHP) effectively eliminated Medicaid fee-for-service reimbursement of family planning services for Planned Parenthood affiliates in early 2013; and third, later that year, House Bill 2 (HB2) imposed significant regulations on the operation of abortion providers. The fertility rates for Texas and its synthetic control begin to diverge slightly after the enactment of the TDSHS cuts and the pace of separation accelerates with the WHP legislation and HB2.[8]

Our findings suggest that restrictions in abortion access have economically-significant effects on fertility-related outcomes. Having no abortion provider within 50 mi reduces the observed number of abortions by 16.7%. Although the estimate may not capture the effect on the total number of abortions, our estimates suggest that these policies increase the cost of seeking an abortion. It is possible some women may travel to another state or country for an abortion or self-administer one (i.e., they receive the abortion they intended to obtain) — behaviors we cannot observe in our data. These actions can be costly and thus, should be considered part of the burden of these policies.[9] For this reason, the impact of the reduction in abortion access on births, a 1.3% increase, is more informative of the total effect on fertility-related behaviors. The effect of reduced family planning access on births, as measured by whether or not there is a funded clinic within 25 mi, is similar. Overall, not having a funded clinic within 25 mi increases births by 1.2%. The effects are heterogenous across different demographic groups, and the groups most impacted by reduced access to family planning services are distinct from those most affected by reduced abortion access which highlights the importance of separately estimating the effect of access to each type of clinic.

While it is standard in the abortion and family planning literature to focus on the outcomes of abortions and births, such analyses miss impacts on precautionary behaviors (e.g., contraceptive use).

[5] Title X funding has never been available for abortion services.

[6] This is the basic finding of Kane and Staiger (1996) for teenagers in the response to the closing of abortion clinics and declines in Medicaid funding.

[7] The other states with similar policies include Arizona, Arkansas, Colorado, Indiana, Ohio, and Wisconsin. Source: https://www.guttmacher.org/state-policy/explore/state-family-planning-funding-restrictions.

[8] The TDSHS cuts impact births with a delay. In our later analysis, the effects of the changes in family planning services act with a 1-year delay. There are two possible explanations for this. First, given the length of time between conception and birth of 40 weeks, there is a delay between the policy's enactment and the observed effect of the policy. Second, one of the most common services of family planning providers is the insertion of intrauterine birth control devices (IUDs), which have lifespans of several years. Thus, while a reduced ability to provide IUDs will affect the flow of women receiving IUDs, the effect on the stock of women with IUDs, the relevant at-risk group, takes longer to manifest.

[9] The Texas Policy Evaluation Project at The University of Texas at Austin estimates that at least 100,000 women in Texas have attempted a self-induced abortion. This statistic is likely higher in Texas than in other states due to the close proximity of Texas with Mexico where misoprostol, an abortion-inducing drug, is available at pharmacies without a prescription. See http://liberalarts.utexas.edu/txpep/news/article.php?id=10043.