



Priority Roadmap for Policy-Ready Contraceptive Research Environmental Scan Report

Assessing the Impact of Major Policy Changes Related to Contraceptive Access

ABSTRACT

Federal and state policy related to contraceptive access can impact whether and how individuals obtain care and how providers and systems offer care by significantly expanding or reducing access to contraceptive services. This report presents an overview of the existing evidence in the published and grey literature related to the impact of major policy changes on contraceptive access that have been enacted at the state or federal level in the U.S. since 2010; identifies research gaps; and makes recommendations for future research. Twenty-three relevant articles were identified in the environmental scan, describing the impact of major policy change, such as the 2010 Enactment of the Patient Protection and Affordable Care Act, the 2011 Texas family planning budget cuts, and the 2018-2019 changes to federal family planning regulations under the Trump Administration. The environmental scan findings demonstrate that evidence of the impact across these policy changes often evaluates similar outcomes, including changes in program service delivery outputs, contextual outcomes, behavioral outcomes, fiscal outcomes, and health outcomes. Research gaps remain in understanding the impact of policy change on sexual and reproductive health equity, patient experience accessing services, and implementation and adoption of relevant policy change across care settings.

INTRODUCTION

The Coalition to Expand Contraceptive Access (CECA) is leading a collaborative process to create a **Priority Roadmap for Policy-Ready Contraceptive Research**. Building on the existing foundation of the coalition and leveraging its unique positioning and diverse collaborative relationships, CECA will:

- Craft a long-term, national-level research and policy agenda.
- Identify the rigorous evidence needed to influence policy, leverage federal processes, and set the stage for state-level implementation.
- Position funders, researchers, and clinical organizations to strategically invest in and carry out ongoing research to inform policies.

To begin the process of identifying existing needs and innovations in the field, CECA performed a series of six targeted and strategic environmental scans¹ to survey existing evidence on key priority topics related to contraceptive access and identify where gaps remain to build a solid foundation of research. The environmental scan findings and supplementary evidence sources will serve as the basis for CECA's Research Roadmap Workgroup's efforts to understand the current body of evidence around contraceptive access, identify research needs and innovation, prioritize research gaps and promising practices, and translate evidence into national research and policy priorities and actions.

This report describes the findings of the environmental scan on the impact of major policy changes related to contraceptive access. Federal and state policy related to contraceptive access can impact whether and how individuals obtain care, and how providers and systems offer care, by significantly expanding or reducing access to contraceptive services. For example, federal and state policy impacts public payment and funding through coverage as well as through cost regulation and reimbursement; defines what clinical

¹ The environmental scan topics were: (1) Definitions and measures of reproductive and sexual health-related constructs; (2) Measuring health, economic and social outcomes related to contraception; (3) Impact of major policy changes related to contraceptive access; (4) Implementation and evaluation of pharmacist-prescribed contraception; (5) Implementation and evaluation of statewide contraceptive access initiatives; and (6) Contraceptive care workforce.

organizations are eligible for funding; and affects the quality of care through the development and dissemination of clinical and programmatic guidelines. There is a need to understand the potential and actual impact of federal and state policy related to contraceptive access to effectively design, evaluate, and promote evidence-based strategy. CECA undertook this environmental scan to inform these discussions and future research efforts. For this environmental scan, the team sought to identify evidence to address the following key research questions:

1. What major policy changes related to contraceptive access have been enacted at the state or federal level in the U.S. since 2010?
2. How is the impact of policy changes related to contraceptive access measured in the literature?
3. How have these policy changes affected contraceptive access and use? Sexual and reproductive health equity? Other outcomes of interest?
4. What questions about the impact of contraceptive policy changes remain unanswered in the literature?

METHODS

The scope of the environmental scan focused on identifying peer-reviewed and grey literature that included impact assessments of policy changes related to contraceptive access in the U.S. For the purposes of this scan, policy of interest was broadly defined to include decisions, actions, or processes at the federal and state level that determine how contraceptive care is delivered and accessed. This encompassed federal or state legislative and administrative actions and government processes that influence contraceptive care, such as the development or modification of clinical guidelines. Policy changes related to the provision of pharmacist-prescribed and Over-the-Counter (OTC) contraception were excluded, as this evidence is synthesized in separate reviews of the literature that will be summarized for this project.

The team included both descriptive and experimental peer-reviewed publications in the environmental scan, as well as grey literature (e.g., commentaries, white papers, conference abstracts, blog posts, webpages) relevant to the topic. The criteria for inclusion and exclusion for this environmental scan were purposefully broad to identify and retrieve as much potentially relevant information as possible. Databases searched to identify relevant articles included PubMed, Google Scholar, Google Search, and Clinicaltrials.gov to identify any relevant research in progress. Search terms included phrases related to policy (e.g., “policy change”; “policy implementation”) combined with terms related to contraception access (e.g., “contraception”; “reproductive health”; “family planning”). The search was limited to literature published since 2010. The team acknowledges the formative evidence on the impact of state and federal policies, such as Medicaid and the Title X Family Planning Program, on contraceptive access that are excluded from this report due to the timeframe limiter, and summarized this evidence in a related review. The team consulted subject matter experts to provide guidance around research questions, scan methodology, seminal articles to include, research in progress, and conclusions drawn from the findings.

SUMMARY OF FINDINGS

Description of Search Results

The team identified **23 articles** relevant to the environmental scan:

- **9 articles** described the impact of the 2010 enactment of the Patient Protection and Affordable Care Act (Affordable Care Act, or ACA) on contraceptive access.
- **3 articles** described the impact of federal clinical guidelines related to contraceptive access published in 2010 and 2014.
- **7 articles** described the impact of the 2011 Texas legislation impacting family planning funding.
- **4 articles** described potential and actual impacts of changes to federal family planning regulations under the Trump Administration.

TABLE 1. Summary of Findings

Policy	Reference	Outcomes Assessed	Population	Key Findings
2010 Enactment of the Patient Protection and Affordable Care Act	Dalton et al., 2020	Change in birth rates	Commercially insured women aged 15 to 45 years, by income group	<ul style="list-style-type: none"> • Associated decrease in births in all income groups in the period after the elimination of out-of-pocket costs. • Probability of birth decreased most significantly among women in the lowest income group from 8.0% in 2014 to 6.2% in 2018, representing a 22.2% decrease (P < .001).
	Darney et al., 2020	Change in contraceptive use	Women aged 15 to 44 years seeking care at participating community health centers	<ul style="list-style-type: none"> • Absolute adjusted increase in use of LARC methods was 0.58 percentage points greater among women in expansion states, compared with non-expansion states in 2014 and 1.19 percentage points larger in 2016. The association was larger among adolescents.
	Early et al., 2018	Change in overall access to services	California women aged 18-44 years with incomes up to 138% of poverty	<ul style="list-style-type: none"> • While enrollment in the state’s Medicaid program (i.e., Medi-Cal) increased significantly, the proportion of women who received contraceptive counseling and prescription contraception remained stable during the study period.
	Johnston & McMorrow, 2020	Change in contraceptive use and insurance coverage status	Women aged 15 to 44 years, by race and ethnicity, who responded to the NSFG	<ul style="list-style-type: none"> • All groups experienced a decrease in un-insurance, but only Black women experienced a significant increase in prescription contraceptive use. As a result, the post-ACA Black–White difference in prescription contraceptive use narrowed to 3.9 percentage points.
	Lee et al., 2020	Change in women’s coverage, utilization, and health	Literature review of relevant studies focused on women ages 18 to 64 years	<ul style="list-style-type: none"> • After the ACA, women were more likely to be insured, to be able to afford health insurance and care, and to receive preventive care. • Expanded coverage of contraception improved its affordability and use. The ACA’s Medicaid and insurance expansions were also associated with increased use of prenatal care and improved neonatal outcomes.
	MacCullum-Bridges & Margerison, 2020	Change in unintended pregnancies	Women aged 18 to 44 years who responded to the NSFG	<ul style="list-style-type: none"> • Odds of experiencing unintended pregnancy decreased 15% from the pre-mandate to post-mandate period (OR: 0.85, 95% CI: 0.62, 1.17; p=0.32), with the greatest reduction in odds observed in

Policy	Reference	Outcomes Assessed	Population	Key Findings
				women with government-sponsored insurance (OR: 0.63, 95% CI: 0.41, 0.97; p=0.04).
	Moniz et al., 2018	Change in access to birth control and family planning services	Women aged 19 to 44 years enrolled in Michigan's Section 1115 Waiver Medicaid Expansion	<ul style="list-style-type: none"> • More than a third (35.5% (95% CI, 32.2%-39.0%)) of women reported increased access to family planning services. • Those most likely to report increased access were women without health insurance coverage in the year preceding Healthy Michigan Plan (HMP) enrollment, younger women, and women with a recent visit to a primary care clinician.
	Redd & Hall, 2019	Change in postpartum contraceptive use	Women who had a live birth during the study period and lived in a State Plan Amendment (SPA) state	<ul style="list-style-type: none"> • The odds of postpartum contraceptive use among women who were living in a state that transitioned to a State Plan Amendment (from a Section 1115 waiver) and gave birth after the transition were 1.14 times that of women who were living in a comparison state (that maintained Section 1115 waiver) and/or gave birth before the transition.
	Sumarsono et al., 2020	Change in contraceptive use	Women in 25 states that expanded Medicaid and 19 non-expansion states	<ul style="list-style-type: none"> • LARC use increased in both expansion and non-expansion states. • In a difference-in-differences analysis, states that expanded Medicaid had no appreciable increase in per-capita prescription rates of LARC (p = 0.26) or short-acting hormonal contraception (p = 0.09) when compared to non-expansion states.
Federal Clinical and Programmatic Guidelines Related to Contraception	Pujol et al., 2019	Change in contraceptive use	Women aged 15-44 years enrolled in Medicaid who had at least 1 condition listed in the US Medical Eligibility Criteria (MEC)	<ul style="list-style-type: none"> • Provision of family planning management services among the study population increased from 16.7% before the MEC was released, to 17.8% after the MEC was released, and varied by medical condition. • Highest efficacy methods claims increased among the study population from 4.1% to 5.7%.
	Simmons et al., 2016	Perceptions on implementing Quality Family Planning (QFP) recommendations	Family planning providers at Title X-funded sites in Indiana and Missouri	<ul style="list-style-type: none"> • Providers' values related to client-centered counseling and views are key factors influencing adoption of QFP recommendations. • Providers' identified structural and interpersonal barriers to implementation, including misinterpretation of the QFP and billing issues.

Policy	Reference	Outcomes Assessed	Population	Key Findings
	Zapata et al., 2019	Perceptions of contraceptive safety	Office-based physicians and Title X clinic providers	<ul style="list-style-type: none"> Following the release of the US MEC, a significantly ($p < 0.05$) high proportion of providers reported particular contraceptive methods as safe, compared to before the US MEC release.
2011 Texas Family Planning Budget Cuts	Coleman-Minahan, Hopkins & White, 2020	Change in provision of adolescent reproductive health services	Program administrators at Texas-based publicly funded family planning organizations	<ul style="list-style-type: none"> Program administrators reported a decrease in the access to and quality of care for teen clients after the state budget cuts. Availability of confidential family planning services for teens became inconsistent as the number of Title X-funded sites decreased.
	Fischer, Royer & White, 2017	Change in access to abortion and family planning services	Adolescent girls and women living in Texas during the study period	<ul style="list-style-type: none"> After the budget cuts, in-state abortions in Texas fell 20% and births rose 3% in counties that no longer had an abortion provider within 50 miles. Births in Texas increased 1% and contraceptive purchases rose 8% in counties without a publicly funded family planning clinic within 25 miles.
	Hopkins et al., 2015	Experiencing seeking family planning services	Adolescent girls and women living in Texas during the study period	<ul style="list-style-type: none"> Most participants were not aware of the legislative changes; however, participants often reported having to pay more for previously free or low-cost services, use less effective contraceptive methods, or forgo care.
	Packham, 2020	Changes in teen birth rate	Adolescent girls aged 15 to 19 years	<ul style="list-style-type: none"> Reducing funding for family planning services in Texas increased teen birth rates by approximately 3.4 percent over four years with effects concentrated 2-3 years after the initial cuts.
	Stevenson et al., 2016	Changes in contraceptive use	Texas-based Planned Parenthood affiliates	<ul style="list-style-type: none"> After the Planned Parenthood exclusion, there were estimated reductions in the number of claims from 1042 to 672 (relative reduction, 35.5%) for LARCs and from 6832 to 4708 (relative reduction, 31.1%) for injectable contraceptives ($P < 0.001$ for both comparisons).
	White et al., 2015	Operational and administrative changes for	Program administrators at Texas-based family	<ul style="list-style-type: none"> After the budget cuts, organizations served 54% fewer clients than they had in the previous period. Specialized family planning providers experienced the largest reductions in services.

Policy	Reference	Outcomes Assessed	Population	Key Findings
		family planning organizations	planning organizations	<ul style="list-style-type: none"> Clinic closures, reduced hours, and requiring a larger percentage of their clients to pay higher fixed fees for services have likely contributed to the smaller number of women receiving family planning and reproductive health care.
	Woo, Alamgir, & Potter, 2016	Experiences seeking family planning services	Women seeking care at Texas-based Planned Parenthood affiliates	<ul style="list-style-type: none"> A minority of DMPA users enrolled in the Texas Women’s Health Program who received a dose from Planned Parenthood in the quarter preceding the exclusion returned to Planned Parenthood for an injection after the exclusion.
Changes to Federal Family Planning Regulations Under the Trump Administration	NFPRHA, n.d.	Changes in number of Title X patients served	Women seeking care at Title X sites	<ul style="list-style-type: none"> Office of Population Affairs’ (OPA) 2019 Family Planning Annual Report showed that the total number of patients seen in Title X-funded health centers shrank from 3.9 million patients in 2018 to 3.1 million in 2019, a 21% decrease overall.
	Pace et al. 2019	Change in LARC use	Commercially insured women aged 18 to 45	<ul style="list-style-type: none"> Significant increase in LARC insertions among commercially insured women during the 30 business days after the 2016 presidential election. Adjusted difference-indifference rate was 2.1 insertions per 100 000 women per day (P<.001).
	Sridhar et al., 2020	Change in LARC use	Women seeking care a university student health center	<ul style="list-style-type: none"> Average number of LARC methods dispensed before November 2016 was 38/month and increased to 51/month post-presidential election. LARC dispense rate significantly increased each month until a breakpoint at 6 months post-election followed by slower decrease.
	Zolna, Finn & Frost, 2020	Changes in number of Title X service sites and patients served	Title X service sites and women seeking care at Title X sites	<ul style="list-style-type: none"> In 2019, an estimated 981 U.S. clinics receiving Title X funding—approximately one-quarter of all sites that received Title X funding as of June 2019—likely left the Title X network because of the gag rule. These changes reduced the network’s capacity to provide women with contraceptive services by at least 46%, translating to roughly 1.6 million patients.

Impact of the 2010 Patient Protection and Affordable Care Act on Contraceptive Access

The Patient Protection and Affordable Care Act (ACA) was enacted in March 2010 with the primary goals of expanding access to health insurance coverage, improving quality of care, and lowering health care spending (HHS, n.d.). The ACA contained numerous policies aimed toward these goals, including allowing states to expand Medicaid eligibility to include additional low-income individuals and various preventive care mandates, eliminating cost sharing. Particularly relevant for contraceptive access was the contraception mandate requiring eligible health plans to provide prescribed, FDA-approved contraceptive methods without cost sharing.

Evidence assessing the impact of the ACA on contraceptive access examines the following key outcomes: out-of-pocket spending for contraception, contraceptive use, access to contraception and family planning services, birth rates, and unintended pregnancy.

Out-of-pocket spending for contraception. A literature review summarizing the ACA's impact on women's health care was published in 2020 and synthesized the findings of seven studies reporting on changes in contraception access and out-of-pocket spending for contraception (Lee et al., 2020). Out-of-pocket spending on contraception decreased among privately insured women since the implementation of the ACA. The literature review highlighted one study that found that "mean out-pocket spending for an intrauterine device (IUD) fell from \$262.38 in January-June 2012 to \$84.30 in January-June 2013, while median out-of-pocket spending fell from \$40.59 to \$0.00" (Lee et al., 2020, *citing* Becker & Polsky, 2015). A second study cited in the literature review found that "87.6% of privately insured women had no-cost sharing for an IUD, compared to 47.0% in 2010" (Lee et al., 2020, *citing* Pace, Dusetzina, & Keating, 2016).

Contraceptive use. Available evidence on the impact of the ACA on contraceptive use demonstrated mixed results for the association. Based on the evidence assessed, the literature review described above found that removing cost sharing for contraception was associated with increased contraceptive use and continuation (Lee et al., 2020). The literature review cited two studies that demonstrated an increase in insurance claims for contraception among ACA-compliant health plans (*citing* Becker, 2018; Carlin, Fertig & Down, 2016); two cross-sectional claims-based studies that reported either no or small increases in Long-Acting Reversible Contraceptive (LARC) use among privately insured women (*citing* Pace et al., 2013; Snyder et al., 2015); and one study that found that the largest increase in LARC use after the ACA was among women who experienced the largest decreases in out-of-pocket spending for the devices (*citing* Dalton et al., 2018).

Another study identified in this environmental scan assessed the relationship between insurance coverage and prescription contraceptive use by race and ethnicity after implementation of the ACA (Johnston & McMorrow, 2020). Analyzing data on women ages 15 to 45 at risk for unintended pregnancy (defined as women who reported having intercourse with a man in the past three months and were not pregnant, seeking pregnancy, or postpartum) collected during the 2006-2010 and 2015-2017 National Surveys of Family Growth, Johnston & McMorrow found that while Black, Hispanic, and White women experienced decreases in un-insurance following ACA implementation, a significant increase in prescription contraceptive use was only observed among Black women, from 44.8% in 2006-2010 to 55.0% in 2015-2017. This change, according to the study, narrowed the prescription contraceptive use difference between Black and White women from 13.2% in 2006-2010 to 3.9% in 2015-2017; the difference between Hispanic and White women remained the same (9.9% in 2006-2010 vs. 8.9% in 2015-2017) (Johnston & McMorrow, 2020).

Access to contraception and family planning services based on changes to Medicaid. Two studies identified in the environmental scan assessed changes in access to contraception and family planning services among women in overall Medicaid expansion vs. non-expansion states (Darney et al., 2020; Sumarsono et al., 2020). Findings across the two studies are mixed.

Sumarsono et al. conducted a differences-in-differences analysis of data from the 2013-2018 Medicaid State Utilization Dataset to examine the impact of Medicaid expansion on the provision of contraception in 25 states that expanded Medicaid, compared to 19 non-expansion states (2020). The researchers found that while prescription contraceptive use increased overall (particularly for implants and DMPA), there were no significant differences in per-capita prescription contraception rates, either LARC or short-acting hormonal contraception, among Medicaid beneficiaries in expansion states compared to non-expansion states (Sumarsono et al., 2020).

In comparison, Darney et al. analyzed electronic health record data across a multistate network of community health centers to assess contraceptive use among women ages 15 to 44 in 12 Medicaid expansion states, compared to eight non-expansion states immediately after expansion and a two-year period after expansion. The researchers found that women seeking care in community health centers in these expansion states experienced an increase in use of LARC methods immediately after expansion and two years afterwards, from 4.4% in 2013, 5.3% in 2014, and 6.1% in 2016. This was compared to women in non-expansion states, where LARC use was 1.7 % in 2013, 2.2% in 2014, and 3.4% in 2016 (Darney et al., 2020).

Two studies assessed changes in access to contraceptive care after Medicaid expansion in two specific states—California and Michigan, respectively (Early et al., 2018; Moniz et al., 2018). Early et al. examined the impact of the ACA's Medicaid expansion on women's health care in the state of California (2018). California expanded eligibility for the Medicaid state plan in 2014 under the ACA after, resulting in approximately four million additional enrollees (Early et al., 2018). Using data collected from the California Health Interview Survey, the study compared women's receipt of health insurance and health care from 2013 (prior to Medicaid expansion) to 2016 (after Medicaid expansion). The study found that while insurance coverage increased between 2013 and 2016 among low-income women ages 18-44 residing in California, the proportion of women who received contraceptive counseling and prescription contraception remained stable (Early et al., 2018).

In Michigan, Moniz et al. fielded a survey among approximately 1100 women of reproductive age enrolled in Michigan's expanded Medicaid plan to assess self-reported changes in access to contraception and family planning services (2018). Michigan expanded their Section 1115 waiver program under the ACA. The study authors found that 35.5% of women surveyed reported experiencing increased access to birth control and family planning services, compared to 38.3% who reported that they did not know whether their access to services changed or that birth control and family planning access did not apply to them; 24.8% of women who reported no change in access; and 1.4% of women who reported that their access to care worsened. Women most likely to report increases in access included young women aged 19-24 and 25-34 years, women with a recent visit to a primary care provider, and women who did not have health insurance coverage in the year before Medicaid expansion enrollment in the state (Moniz et al., 2018).

One study specifically assessed changes in postpartum contraceptive use among women in states that transitioned from a Section 1115 waiver to a State Plan Amendment (SPA) under the ACA (Reed & Hall, 2019). The SPA was a provision of the ACA that allowed states to make permanent changes to the

state's Medicaid program to address program administration and service provision, including the provision of family planning services (Reed & Hall, 2019). Using Pregnancy Risk Assessment Monitoring System (PRAMS) data, the study compared outcomes in two states that had transitioned to SPA (i.e., Oklahoma and Wisconsin) to seven comparison states that maintained a Section 1115 waiver during the study period. Findings demonstrated that women in states that transitioned to SPA had an increased likelihood of postpartum contraceptive use, compared to women living in states that did not transition.

Changes in births and unintended pregnancy. One study identified in the environmental scan assessed trends in birth rates before (2008-2013) and after (2014-2018) the elimination of cost sharing for contraception under the ACA among an analytic sample of approximately 4.6 million commercially insured women aged 15-35 years using data from the Clinformatics Data Mart database (Dalton et al., 2020). Dalton et al. found a decrease in births among women in the sample across all income groups after the removal of out-of-pocket costs for contraception, particular among women with household incomes greater than or equal to 400% of the federal poverty line. Researchers observed a 22.2% decrease in births from 2014-2018, and among women with household income between 100-399% of the federal poverty line, researchers observed a 9.4% decrease in births from 2014-2018 (2020).

Another study assessed changes in unintended pregnancies following the ACA contraception mandate among women of reproductive age from the 2008-2010 and 2013-2015 National Survey of Family Growth (MacCallum-Bridges & Margerison, 2020). MacCallum-Bridges & Margerison found that the percentage of women experiencing unintended pregnancy decreased from 5.5% to 4.9%. The study also assessed that the percentage of pregnancies that were unintended decreased from 44.7% to 37.9%, and the odds of women experiencing an unintended pregnancy decreased 15% from the pre-mandate to post-mandate period (OR: 0.85, 95% CI: 0.62, 1.17; p=0.21), particularly among women covered by public insurance. However, the study authors note that the changes in unintended pregnancy might have been due to chance.

Impact of Federal Clinical and Programmatic Guidelines Related to Contraception

Within the timeframe of interest, several clinical and programmatic guidelines related to women's health care and contraceptive access were published by federal government agencies, such as the HRSA-supported Women's Preventive Services Guidelines, published in 2016, and the U.S. Selected Practice Recommendations (U.S. SPR) for Contraceptive Use, published by the Centers for Disease Control and Prevention (CDC) in 2016. This section focuses on two clinical and programmatic guidelines published by federal government agencies in this timeframe for which evidence on impact of the guidelines' implementation is publicly available: the 2010 U.S. Medical Eligibility Criteria for Contraceptive Use (updated in 2016) and the 2014 Quality Family Planning (QFP) guidelines.

US Medical Eligibility Criteria for Contraceptive Use (2010, 2016)

In 2010, the CDC released the *U.S. Medical Eligibility Criteria for Contraceptive Use* (US MEC), a set of evidence-based recommendations on the safety of contraceptive methods when used by individuals with specific medical conditions or characteristics (CDC, 2020). The recommendations assist health care providers when counseling on contraceptive options for their patients and were last comprehensively updated in 2016.

Provider attitudes towards contraceptive safety. One study analyzed cross-sectional surveys of a nationwide sample of office-based physicians specializing in obstetrics and gynecology, family medicine, and adolescent medicine and Title X clinic providers before and after release of the US MEC to assess changes in provider attitudes related to contraceptive safety (Zapata et al., 2019). They study found

positive changes in providers attitudes and knowledge of contraceptive safety. For example, the proportion of providers correctly reporting IUDs and DMPA as safe for many medical conditions increased in the follow-up survey.

CDC conducted a follow-up survey in 2019 to assess health care provider attitudes and practices related to the US MEC and US SPR (Curtis et al., 2020). The findings will focus on prevalence of clinical practices to improve access to contraception and are not yet published.

Implementation and use of clinical guidelines. The cross-sectional surveys fielded by Zapata et al. among physicians and Title X clinic providers after the release of the US MEC found that use of the guidelines was highest among Title X clinic providers (86.2%), office-based adolescent medicine physicians (83.5%), and providers who completed their formal clinical training within the past five years (89.9%) (2019). Use of the US MEC was lowest among office-based family medicine physicians (48.4%) and providers who completed their formal clinical training 15-24 years before the study period (51.9%). Use of the US MEC was significantly associated with provider attitudes about the safety of IUDs for immediately postpartum women, IUDs for women with HIV, and DMPA for women with history of bariatric surgery.

Contraceptive use. One study analyzed Medicaid claims for contraception among women of reproductive age with medical conditions before and after release of the US MEC to assess changes in contraceptive provision, specifically assessing the provision of family planning management (defined as a claim containing the overarching diagnosis code for “encounter for contraceptive management” and included contraceptive counseling and provision) and the provision of the highest efficacy methods by health condition (Pujol et al., 2019). The study found an increase in the provision of family planning management in the two-year period following US MEC publication. The study also found an increase in contraception claims for IUDs, contraceptive implants, and sterilizations in the same two-year period.

Providing Quality Family Planning Services (2014)

In 2014, the CDC and the Office of Population Affairs (OPA) published *Providing Quality Family Planning Services* (QFP), clinical recommendations that defined core family planning services, offered evidence-based and evidence-informed guidance for “how” to provide family planning services, and was intended for use in a broad array of reproductive health settings (OPA, n.d.). In relation to contraceptive access, these guidelines encouraged providers to offer the full range of FDA-approved contraceptive methods (preferably onsite), identified key steps in providing contraceptive care, and described how to provide contraceptive counseling.

A study conducted prior to the publication of the QFP demonstrated the need for areas of improvement of quality family planning services in publicly funded health centers providing family planning services (Carter et al., 2016). The study found that health centers frequently provided contraceptive services, although onsite provision of LARC methods were limited—of the 1615 health centers in the sample, 63% of health centers reported providing the levonorgestrel IUD in the past three months, 59% reporting providing the copper IUD, and 48% reported providing the implant. Out of 1290 health centers, approximately half had written protocols that included contraceptive counseling prior to QFP publication, with Title X-funded centers more likely to report having these protocols in place, compared to non-Title X-funded health centers.

Implementation and use of clinical guidelines. In one study identified in the scan, researchers conducted qualitative interviews with family planning providers at Title X-funded clinics in Indiana and Missouri in 2015, one year after QFP publication, to assess their perceptions of barriers and facilitators to implementing QFP recommendations at their sites (Simmons et al., 2016). The study found that adoption of recommendations was primarily influenced by the alignment of recommendations with providers' professional values and experiences. While providers perceived QFP as an improvement over previous guidelines, barriers to implementation existed when recommendations were not compatible with providers' values and current practices. In these instances, providers reported adapted recommendations to fit their clinical provision. Lack of clarity of the guidelines regarding how to implement recommendations and related logistical issues (e.g., limited time with clients during visits, limited access to full range of contraceptive methods in rural areas, and lack of QFP integration with electronic medical records systems) were also highlighted as barriers to adoption and implementation of guidelines.

Impact of the 2011 Texas Family Planning Budget Cuts

In 2011, the state of Texas passed reproductive health legislation that drastically reduced the state's family planning budget. Specifically, the three measures passed in the 2011 legislative session impacted the family planning budget in the following ways:

1. The state's family planning budget was cut by 67%, from \$111 million to \$37.9 million for the following two-year period.
2. Remaining funds were allocated through a three-tiered system that prioritized public agencies (e.g., public health departments, federally qualified health centers) as the highest priority tier and specialty family planning providers, such as Planned Parenthood facilities, as the lowest priority tier.
3. Organizations affiliated with abortion providers, such as Planned Parenthood affiliates, were excluded from receiving Medicaid reimbursements through the Texas Women's Health Program. (Packham, 2020; Stevenson et al., 2016; White et al., 2015).

As a result, over 160 clinics providing family planning services in Texas lost all funding, and 82 clinics were forced to close (Packham, 2020). Several studies were conducted to measure outcomes related to the family planning budget cuts in Texas, including changes in the provision of family planning services; contraceptive use and continuation; impacts on adolescent reproductive health, including changes in access to confidential services and teen birth rates; and access to abortions.

Changes in the provision of family planning services. Studies assessing the impact of the 2011 Texas family planning budget cuts examined changes in the provision of family planning services, including describing how clinics adapted their operations to accommodate budget cuts. One mixed-methods study involving surveys of family planning organizations and in-depth interviews with organizational leaders demonstrated that many Texas family planning clinics lost a significant amount of their funding. Methods used to adapt included reducing service hours; reducing availability of certain contraceptive methods (i.e., injectable contraception, LARCs) to cut costs; requiring patients to pay fixed fees for service, where contraceptive methods often incurred an additional cost; discontinuing providing family planning services at some locations; or closing altogether (White et al., 2015). White et al.'s analyses showed a 54% decrease from FY2011-FY2013 in clients who received state-funded family planning services.

One study focused on patients' perspectives on changes to the family planning services they received, including attitudes and experiences accessing publicly funded family planning services. Researchers

conducted focus groups with 95 adult women and 15 teenagers residing in nine Texas metropolitan areas one year after the 2011 reproductive health legislation was enacted (Hopkins et al., 2015). Participants experienced challenges accessing family planning services after the legislative changes. Although most study participants were unaware of the legislative changes, they reported an increase in out-of-pocket costs for family planning care and discussed the frustration of having to pay for contraceptive services that had previously been provided at no cost. Participants also discussed limitations in accessing the contraceptive methods they wanted due to cost barriers. The study authors also highlighted a major theme of the focus groups—that women and girls experienced difficulties obtaining family planning services even prior to the 2011 legislation. Challenges included difficulties qualifying for public family planning and other subsidized programs, limited appointment times at health centers that accept public insurance, needing parental consent for contraceptive services, and lack of continuity of care.

Contraceptive use and continuation. Two studies assessed the impact of excluding Planned Parenthood affiliates from receiving state family planning funding on contraceptive use and continuation (Stevenson et al., 2016; Woo, Alamgir & Potter, 2016). Both studies showed that the exclusion of Planned Parenthood affiliates from the Texas Women’s Health Program was associated with a reduced number of claims for prescription contraception, specifically injectable contraception and LARCs, as well as decreased contraceptive continuation among women using injectable contraception. Woo, Alamgir & Potter also conducted structured phone interviews with Planned Parenthood patients who had previously used DMPA and had not returned for a follow-up visit. (2016). The most common barriers patients reported facing were difficult finding a provider, difficulty making an appointment, and the cost of the injection.

Impact on adolescent reproductive health. Two studies included in the environmental scan assessed how the Texas family planning budget cuts impacted the provision of adolescent reproductive health and related outcomes (Coleman-Minahan, Hopkins & White, 2020; Packham, 2020). In one study, researchers conducted a qualitative analysis of in-depth interviews with program administrators from 47 publicly funded family planning organizations in Texas following the enactment of the state legislation (Coleman-Minahan, Hopkins & White, 2020). Study findings demonstrated that sites that lost Title X funding faced challenges in providing services to adolescents and often reported a decrease in the number of teen clients offered care. Study participants attributed this change in teen client volume to their site’s inability to provide confidential contraceptive services to teens without parental consent. Study participants reported decreased organizational efficiency as staff sought clarity on variability on parental consent requirements resulting from shifts in family planning programs guidelines and administrative guidance.

Another study assessed the impact of family planning budget cut on teen birth rates and estimated that reduced funding for family planning led to an approximate 3.4% increase in the teen birth rate over four years, with the increase concentrated in the 2-3 years following the initial family planning budget cuts (Packham, 2020).

Access to abortions. One study included in the scan examined the impact of family planning funding cuts in Texas on abortion access (Fischer, Royer & White, 2017). The study estimated that in counties that no longer had an abortion provider within 50 miles, abortions provided in-state fell by 20% (while abortions provided to non-residents in neighboring states increased) and births rose by 3%.

Changes to Federal Family Planning Regulations Under the Trump Administration

Several changes to federal family planning regulations were enacted under the Trump Administration, such as broadening the eligibility for religious and moral exemptions to the ACA contraceptive mandate for employers and insurers implemented in 2018 (Golstein, Eilperin & Wan, 2017). Changes to federal family planning regulations under the Trump Administration also included the 2019 regulation changes to the federal Title X Family Planning program that:

- Block the availability of federal funds to family planning providers that also offer abortion services with other funds.
- Prohibit sites that participate in Title X from referring clients to abortion providers.
- Eliminate current requirements for Title X sites to provide non-directive pregnancy options counseling that includes information about prenatal care/delivery, adoption, and abortion.
- Prioritize providers that offer comprehensive primary health care services over those that specialize in reproductive health services.
- Encourage participation by “non-traditional” organizations, such as those that only offer one method of family planning, such as fertility awareness-methods.” (Sobel, Salganicoff & Frederiksen, 2019)

Impacts of anticipated policy change on contraceptive use. Even anticipated policy changes can have an impact on contraceptive use. Two articles identified in the scan assessed the impact of the 2016 Presidential Election, when many expected that the new Administration would roll back contraceptive policies like Title X and the ACA contraceptive mandate. Both studies assessed changes in LARC use: one study looked across a sample of approximately 3.5 million commercially insured women (Pace et al., 2019) and the other analyzed trends at one student health center in California (Sridhar et al., 2020). Pace et al. found that, in the 30 days following the election, there was an adjusted increase in LARC use of 2.1 insertions per 100,000 women per day among commercially insured women ages 18-45, compared to 30 days before the election and the same period a year prior (2019). Within the California-based student health center, Sridhar et al. observed a similar trend, where the average number of LARC methods placed increased from 38 per month in the study period preceding the election to 51 per month in the study period following the election, with a significant increase in LARC initiation for six months following the election (2020). No studies measured whether this was a sustained change over time or a momentary blip.

Changes in the provision of family planning services. Evidence on the impact of recent changes to federal family planning regulations highlight potential impacts on access to services for clients, changes in quality of care delivery, and operational and administrative changes for family planning organizations. Assessments of the impact of federal family planning regulations also emphasize changes to the number of clinics funded and patients served to demonstrate changes in program service delivery. For example, the National Family Planning Reproductive Health Association (NFPRHA) highlighted that the 2019 Family Planning Annual Report released by the Office of Population Affairs (OPA) showed that the total number of patients seen in Title X-funded health centers decreased from 3.9 million patients in 2018 to 3.1 million in 2019, representing a 21% decrease overall since the Title X regulation change (n.d.). The Guttmacher Institute found similar changes in program service delivery. Based on their analysis that nearly one in every four Title X service sites likely left the network in 2019 because of changes to Title X regulations, they estimated that these changes reduced the Title X network’s service provision capacity by at least 46%, impacting roughly 1.6 million patients (Zolna, Finn & Frost, 2020). The Kaiser Family

Foundation also tracks the [status of participation in the Title X program](#) as an evaluation of the policy's impact. None of these resources were peer-reviewed.

In the absence of long-term data on the impact of changes in federal family planning regulations under the Trump Administration, commentaries and analyses also often reference evidence on the impact of reproductive health legislation in Texas that drastically reduced the state's family planning budget, as a proxy for potential implications of federal family planning budgets cuts on reproductive health service access and contraceptive use.

RESEARCH GAPS AND IMPLICATIONS

The environmental scan findings highlight the various approaches for evaluating the intended and unintended consequences of major policy changes impacting contraceptive access at the federal and state levels, specifically the 2010 Enactment of the ACA, the release of federal clinical and programmatic guidelines related to contraceptive service provision in 2010 and 2014, the 2011 Texas family planning budget cuts, and the Trump Administration's changes to federal family planning regulations from 2017-2019. Evidence of the impact across these policy changes often evaluated similar outcomes, including changes in program service delivery outputs (e.g., number of clinics impacted by policy changes, number of patients served in clinics impacted by policy changes), contextual outcomes (e.g., how changes in insurance coverage impact access and use of contraceptive services), behavioral outcomes (e.g., contraceptive use and continuation), fiscal outcomes (e.g., out-of-pocket spending), and health outcomes (e.g., births and unintended pregnancy).

Overall, the evidence on how policy changes affected contraceptive access and other outcomes of interest varied based on the policy change. For the ACA, evidence demonstrated that reduced out-of-pocket spending for contraception among women was associated with increased contraceptive use and continuation. While studies showed that Medicaid expansion under the ACA increased insurance coverage overall, result were mixed on its impact on prescription contraception rates. Studies examining changes in births and unintended pregnancy found decreases in both outcomes following ACA implementation. For the 2011 Texas reproductive health legislation and the Trump Administration's changes to federal family planning regulations, evidence demonstrated that the number of clinics in the public family planning network decreased and fewer clients were served in the network. For the 2011 Texas family planning budgets cuts—where long-term evidence for the policy is available—evidence demonstrated reductions in contraceptive use and continuation, access to confidential family planning services for adolescents, and access to in-state abortions while also finding increases in the overall birth rate, teen birth rate, and out-of-state abortions. The limited evidence exploring the uptake and implementation of federal clinical and programmatic guidelines related to contraceptive service provision demonstrated positive health care provider attitudes toward the guidelines while highlighting barriers to implementation influenced by whether the recommendations aligned with providers' professional values and experiences. Evidence also exists on the impacts of relevant state and federal policy, such as impacts of Medicaid and the Title X family planning program on contraceptive access, implementation – however, that evidence is not reflected in this scan due to the established timeframe of interest, and is documented in part in a related CECA environmental scan on the health, economic, and social outcomes related to contraception and contraceptive access.

While the impacts of certain policy changes appear to be well studied (e.g., ACA, 2011 Texas family planning budget cuts), gaps in the evidence still remain for other policy changes, such as the release of federal clinical guidelines (e.g., Women's Preventive Services Guidelines) and more recent changes to federal family planning regulations under the Trump Administration. For more recent policy change

where long-term impact is not yet available, the evidence shows that analyses tend to highlight potential short-term changes in service delivery and quality of care or draw on evidence from similar past policy changes as a proxy, such as in the example of leveraging evidence from Texas to draw inferences about the potential implications of the 2019 Title X regulation changes. Outstanding research questions still remain on the impact of major federal and state policy changes. First, there are many areas of policy that have not received rigorous evaluations of their outcomes. For example, questions remain regarding the implementation of federal clinical recommendations for contraceptive provision across care settings as well as the factors that support or impede implementation and the impact on care delivery and patient experience. In the example of the Quality Family Planning (QFP) recommendations, published evidence describes baseline data of quality in care delivery in public family planning care contexts and evidence on provider perspectives of care in two states one year after release of the guideline. Further exploration to evaluate the impact of implementing the recommendations, as well as the impact of adopting the recommendations, on patient experiences, provider perspectives, and quality of care might further the evidence base in this area. There is also a lack of evidence on the impact of state policies impacting contraceptive access, such as Contraceptive Equity laws. Likewise, little evidence exists comparing impacts and key outcomes across state policy environments.

Relatedly, questions remain regarding how patients experience changes in access to contraceptive services due to policy change. Studies demonstrate that compelling personal experience and anecdotal evidence often resonate with legislators and influence their policy positions (Dodson, Geary & Brownson, 2015; Woodruff & Roberts, 2019; Woodruff & Roberts, 2020). A qualitative study summarized in this scan highlighted the personal experiences of women and adolescent girls seeking family planning services in Texas one year after the state's family planning budget cuts (Hopkins et al., 2015). Key findings from the study demonstrated that many women were not aware of the legislative changes and reported experiencing difficulties accessing contraceptive services even before the policy was enacted. Further emphasis on patients' experience of contraceptive access due to policy change might further explain the nuances observed in the existing quantitative evidence. Qualitative inquiry of patient experiences might also supplement the evidence on impact of recent policy change while long-term implications continue to be studied, such as in the case of the recent changes to federal family planning regulations under the Trump Administration.

Finally, little evidence on the impact of policy changes related to contraceptive access on sexual and reproductive health equity emerged in the environmental scan. Additional research on policy changes might consider including race, insurance status, and other important demographic variables in analyses and highlight how policy and systems change can reduce or further exacerbate inequities in access to services and resources in historically underserved communities. Further research is needed to understand how evidence can be effectively leveraged to impact policy change.

Key Takeaways from the Environmental Scan

- Major federal and state policy changes that emerged in the environmental scan included: the 2010 Enactment of the ACA, the release of federal clinical guidelines related to contraceptive service provision in 2010 and 2014, the 2011 Texas family planning budget cuts, and the Trump Administration's changes to federal family planning regulations.
- Evidence of the impact across these policy changes often evaluated similar outcomes, including changes in program service delivery outputs, contextual outcomes, behavioral outcomes, fiscal outcomes, and health outcomes.

Key Takeaways from the Environmental Scan

- Evidence on the ACA demonstrated that decreased out-of-pocket spending for contraception was associated with higher contraceptive use and continuation; evidence also highlighted decreases in births and unintended pregnancies following ACA implementation.
- Regarding the 2011 Texas reproductive health legislation and the Trump Administration's changes to federal family planning regulations, evidence demonstrated that the number of clinics in the public family planning network decreased and fewer clients were served in the network following the policy changes.
- Long-term evidence on the 2011 Texas family planning budget cuts demonstrated reductions in contraceptive use and continuation, access to confidential family planning services for adolescents, and access to in-state abortions as well as increases in the overall birth rate, teen birth rate, and out-of-state abortions.
- Research gaps remain in understanding the impact of policy change on sexual and reproductive health equity, patient experience accessing services, and implementation and adoption of relevant policy change across care settings.

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