Access to High Quality Contraceptive Care at Community Health Centers: Current Practices, Barriers, and Facilitators for Providing a One-Year Supply of Oral Contraception On-Site

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Abstract of Dissertation

Access to High Quality Contraceptive Care at Community Health Centers: Current Practices, Barriers, and Facilitators for Providing a One-Year Supply of Oral Contraception On-Site

Introduction. High quality family planning services help women achieve their preferred family size and birth spacing. Optimal birth spacing leads to improved health outcomes, better quality of life, and higher economic and educational achievement. Despite being a wealthy, developed nation, the United States consistently falls short in providing high quality contraceptive care and achieving optimal reproductive health outcomes. In particular, low-income women face substantial challenges in obtaining family planning care that could be easily accessible and beneficial. Equally important is ensuring that family planning services meet or exceed quality standards.

Community Health Centers provide high quality primary care services, including contraceptive care, to millions of patients every year, regardless of their ability to pay. Six million women of reproductive age receive care at health centers every year, the vast majority of whom are low-income and either publicly insured or uninsured. Although health centers provide 30% of all publicly funded family planning care, they face substantial challenges in providing such care, including workforce shortages, threats to funding levels, and insufficient insurance reimbursement.

Oral contraceptives (OCs) are the most common non-permanent method of contraception among health center patients and across the US. Women must use OCs continuously and correctly in order for them to be effective, but many women, especially low-income women, face barriers in obtaining a consistent supply of OCs. The Centers for Disease Control and Prevention (CDC) recommends providing or prescribing a one-

year supply of OCs at a single visit. Similarly, the Providing Quality Family Planning Services (QFP) recommendations – jointly issued by the CDC and the Office of Population Affairs – include offering a broad range of FDA-approved contraceptive methods available on-site and ideally providing a full year's supply of OCs. However, actual contraceptive practice patterns for dispensing OCs on-site and dispensing a one-year supply vary by provider type within the family planning safety net.

This study focuses on both access and quality issues related to oral contraceptives for low-income women seeking care at Community Health Centers. It seeks to answer two research questions:

Research Question 1: What proportion of health centers provide a one-year supply of oral OCs on-site, and what are the characteristics associated with providing a one-year supply of OCs on-site?

Research Question 2: What are the barriers and facilitators for providing a one-year supply of OCs on-site at CHCs at the health center level and at the policy level?

Methodology. This study employed a concurrent, mixed-methods approach. The primary source of quantitative data for this study was a survey conducted by researchers at The George Washington University and the Henry J. Kaiser Family Foundation in 2017. All 1,345 federally funded community health center grantees operating in the 50 states and the District of Columbia were invited to participate. The survey was conducted using SurveyMonkey between May and July 2017. Statistical analyses were conducted using Stata version 13 to examine the proportion of health centers meeting these two practices, as well as various characteristics associated with doing so.

The first phase of qualitative data collection and analysis was a point-in-time environmental scan of state-level policies that may serve as either barriers or facilitators to providing a one-year supply of OCs. These policies included Medicaid coverage and private insurance coverage for OCs, including any recent state legislation.

The second phase of the qualitative data collection and analyses was a series of semi-structured, in-depth interviews with key staff in four health centers located in three states, sampled using a maximum variation strategy. Interview transcripts were analyzed using thematic content analysis in QSR NVivo version 12.

Results. Only one-half of health center sites surveyed provide OCs on-site, and of these, less than one-third offer a one-year supply at a time. In other words, approximately one-sixth of health centers provide a one-year supply on-site. Health centers are more likely to provide OCs on-site if they: receive Title X funding; participate in 340B; are large; are located in urban areas; or have a high proportion of women of reproductive age in their patient population. Health centers are more likely to offer a one-year supply on-site if they: participate in 340B; are large; or are located in states with policies that require coverage for a one-year supply under at least one coverage mechanism.

Interviews with health center staff also provided insight into the barriers and facilitators at the health center level. Clinician and pharmacist preferences for providing OCs drive many of the policies and practices for dispensing OCs on-site. Often, these preferences reflected the leadership's attitudes about family planning and the overall organizational approach to incorporating family planning into their other primary care services. The health centers that provided a one-year supply on-site included a leadership team and clinicians who prioritized family planning and made it a central part of their

practice. In addition to the top-down effect from leadership, clinicians' perceptions of the patient population and patient needs also influenced their preferences for providing a one-year supply on-site. When clinicians perceived that patients were less responsible or less likely to keep track of a full year of contraception at once, they did not express much enthusiasm for providing it, whereas clinicians who believed that a one-year supply would help their patient population to avoid an unintended pregnancy sought out ways to provide a one-year supply. In addition to these factors at the health center level, state and federal policy played a role in determining health centers' practices, although the relationship between favorability of state policy and provision of a one-year supply was not always clear-cut.

This study finds a rapidly shifting state policy environment for coverage of a one-year supply of OCs. While several states have recently passed legislation or implemented regulations requiring insurers to cover a one-year supply, the majority of states do not have such a requirement. In addition, most state Medicaid plans limit the supply of OCs to either one or three months. Only three states require coverage for a one-year supply under all coverage mechanisms examined here, with another 11 requiring coverage under at least one coverage mechanism. These findings reveal that women in most states do not have access to coverage for a one-year supply of OCs, whether through private insurance or Medicaid.

Discussion. Although no previous studies have examined this exact topic, the majority of the findings presented here concur with existing research on related topics. Analyses of the QFP guidelines indicate that actual practice patterns vary significantly within the family planning safety net. Furthermore, other research suggests that providers

base practice patterns on their own values and preferences, even when these contradict clinical guidelines.

While the CDC and OPA have issued guidelines for family planning services that health centers *may* follow, there are very few practices that health centers *must* follow. As a condition of receiving Section 330 funding from the Health Resources and Services Administration (HRSA), health centers much provide "voluntary" family planning services. Yet the exact scope of these services, or even a set of quality guidelines for these services, is open to interpretation at the health center level. As a result, there are gaps in quality between best practices and actual practices among health centers. To remedy these gaps, HRSA could establish performance criteria for health centers, either through an independent process or by requiring adherence to existing guidelines, such as those outlined by the CDC or ACOG. Although this change would likely be effective in improving quality of care, it is not likely to manifest in the near future, as HRSA has not opted to impose specific requirements on family planning services since the initiation of the health center program.

In the absence of specific requirements or guidance at the federal level, policy and practice change could instead take place at the regional, state, or health center level. As only 17 states (including DC) have instituted policies requiring private insurance coverage for a one-year supply, the remaining 34 would have to follow suit in order achieve coverage across the country. States with fee-for-service Medicaid could implement changes through updates to their provider manuals, and states with managed care could require coverage for a one-year supply in all managed care contracts. For health centers, Primary Care Associations (PCAs) could focus upcoming training efforts

on implementing this practice or could offer technical assistance to health centers for doing so. In addition, addressing individual provider preferences and attitudes through continuing medical education and tailored provider training could change uptake of this practice.

In the current political environment, threats to the family planning safety net persist and continue to develop. If family planning providers such as Planned Parenthood are either forced to close or to decrease services because of lost funding, health centers would be left to meet the increased demand among this population. However, health centers have indicated that most cannot absorb significant increases in patient load, and existing gaps in quality of family planning care between health centers and specialty family planning providers – such as the one explored in this study – will be exacerbated.

Future research should monitor this practice over time. Additional research could also include examining this issue from the patient perspective, assessing health outcomes related to providing a one-year supply of OCs on-site, and updating/maintaining the state-by-state policy analysis as the policy environment continues to shift.

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Chapter 1: Introduction

High quality family planning services help women achieve their preferred family size and birth spacing. Optimal birth spacing leads to improved health outcomes, better quality of life, and higher economic and educational achievement. Despite being a wealthy, developed nation, the United States consistently falls short in providing high quality contraceptive care and achieving optimal reproductive health outcomes. In particular, low-income women face substantial challenges in obtaining family planning care that could be easily accessible and beneficial. Equally important is ensuring that family planning services meet or exceed quality standards. High quality care consists of evidence-based practices that emphasize the needs and preferences of the patient and offer a wide range of contraceptive methods.

Community Health Centers provide essential primary care services, including contraceptive care, to millions of women every year. Originally developed in the 1960s, these health centers improve access to care for low-income patients, regardless of their ability to pay. Family planning care at health centers includes both contraceptive counseling and contraceptive methods, but the exact scope of these practices varies across health centers. Access to oral contraceptives, the most common non-permanent method of contraception in the US, represents a key aspect of high quality family planning care for health center patients.

This study focuses on both access and quality issues related to oral contraceptives for low-income women seeking care at Community Health Centers. In particular, this study measures the proportion of health centers providing a one-year supply of oral

contraceptives on-site and examines barriers and facilitators for doing so at both the health center level and policy level.

Public Health Problem

When women have access to high quality family planning services, the benefits last throughout their lives. These benefits include higher attainment of post-secondary education and employment, higher earning power, and narrower gender gaps in pay (Sonfield, Hasstedt, Kavanaugh, & Anderson, 2013). Conversely, if they do not have access to these services, they may experience an unintended pregnancy, which is associated with a cascading set of events that may reduce their quality of life. Unintended pregnancies that result in births are associated with depression, anxiety, and decreased relationship satisfaction (Sonfield et al., 2013). In addition to decreased quality of life, several adverse health outcomes are associated with unintended pregnancy. Women who experience unintended pregnancies are less likely to seek prenatal care, more likely to experience adverse birth outcomes such as preterm labor, and less likely to breastfeed; children of unintended pregnancies are more likely to have low birth weights and physical and mental health problems later in life (Axinn, Barber, & Thornton, 1998; Dott, Rasmussen, Hogue, Reefhuis, & Study, 2010; Dye, Wojtowycz, Aubry, Quade, & Kilburn, 1997; Hellerstedt et al., 1998; Kost & Lindberg, 2015; Orr, Miller, James, & Babones, 2000).

In the US, nearly half of all pregnancies are unintended, at a rate of almost 3 million unintended pregnancies per year (Finer & Zolna, 2016). This rate is significantly higher than those in other developed nations (Sedgh, Singh, & Hussain, 2014). Women of

color and low-income women are more likely to experience an unintended pregnancy. Sixty percent of pregnancies among women below 100% of the federal poverty level (FPL) are unintended, compared with 30% among women at or above 200% FPL (Finer & Zolna, 2016). American taxpayers spend $21 billion on unintended pregnancies, including $14.6 billion at the federal level and $6.4 billion at the state level, in costs related to care and services for low-income women (Sonfield & Kost, 2015). Although family planning services have the potential to address this problem, low-income women face substantial barriers in accessing family planning services. As of 2014, 15.5 million low-income women were in need of contraceptive services and had income levels below 250% of the federal poverty level (Zolna & Frost, 2016).

Community Health Centers

Community Health Centers (also called CHCs, Federally Qualified Health Centers, or health centers) serve as an important source of family planning services, as well as other primary care services, to millions of low-income patients across the country. The Community Health Center program began in the 1960s as part of President Lyndon Johnson's "War on Poverty" (NACHC, 2019). Originally called Neighborhood Health Centers, the first health centers set out to deliver a new model of care that would provide services for patients regardless of their ability to pay (NACHC, 2019).

This mission remains today, and modern health centers provide care for patients who are largely either uninsured or publicly insured. Nearly 1,400 health center grantees currently exist in the US, with over 9,800 services sites that provide care for over 27

million patients (Health Resources and Services Administration, 2017; NACHC, 2017). The vast majority of health center patients are low-income, with 92% living at or below 200% of the Federal Poverty Level (FPL) and 71% living at or below 100% of FPL. Almost half of health center patients (49%) have coverage through Medicaid, and another 24% have no insurance (NACHC, 2019). Health centers also serve a high proportion of racial and ethnic minority patients. As of 2016, nearly 60% of health center patients were from racial or ethnic minority groups, with Latinx/Hispanic patients representing 30% of all patients and Black/African American patients representing 22% of all patients (Rosenbaum, Tolbert, et al., 2018).

To cover the cost of services, health centers receive federal grant funding. Aside from insurance reimbursements, the largest source of federal funding comes from the Health Resources and Services Administration (HRSA) Bureau of Primary Health Care (BPHC). This funding stream was created through Section 330 of the Public Health Service Act (42 USC 254b, Public Health Service Act, n.d.), and has recently been augmented through a section of the Affordable Care Act (ACA) that created a health center trust fund (Rosenbaum et al., 2017). In 2015, CHC revenues totaled $21 billion dollars (Rosenbaum et al., 2017), and preventive care offered at health centers resulted in $24 billion in savings to the healthcare system (NACHC, 2017).

Women make up 58% of all health center patients, and six million women of reproductive age receive care at health center every year (Health Resources and Services Administration, 2017; NACHC, 2017). Although health centers represent a critical source of family planning care, they face substantial challenges in providing such care. These challenges include workforce shortages, threats to funding levels, insufficient insurance

reimbursement, and competition from other providers (Rosenbaum et al., 2017; Shin & Sharac, 2012). In spite of these challenges, the scope and volume of family planning services provided at health centers have increased dramatically in recent years. In 2015, 5,829 health center clinic sites provided family planning care for almost 1.9 million patients, up from 1,712 clinics providing care for just under 700,000 patients in 2001 (Zolna & Frost, 2016). CHCs now provide 30% of all publicly funded family planning care; in 2001, CHCs provided 10% (Zolna & Frost, 2016).

Publicly Funded Family Planning

Health centers form a part of a larger family planning safety net. Publicly funded family planning consists of two major funding sources: Medicaid and the Title X Family Planning program. Title X of the Public Health Service Act (Title X) was enacted in 1970 and remains the only federal grant program dedicated solely to providing comprehensive family planning services (Fowler, C. I., Gable, J., Wang, J., & Lasater, 2016). Administered by the Office of Population Affairs in the US Department of Health and Human Services, the Title X program funds a network of over 4,000 family planning centers across the country and provides services to millions of men and women (Fowler, C. I., Gable, J., Wang, J., & Lasater, 2016). The Medicaid program also covers family planning services for low-income women. Family planning is a mandatory benefit through Medicaid, and states receive an enhanced federal matching assistance percentage (FMAP) of 90% for providing family planning services (Ranji, Bair, & Salganicoff, 2016).

Publicly funded family planning care is both highly effective and cost-effective. Various studies have found that Title X and Medicaid prevent thousands of unintended pregnancies and result in substantial cost-savings (Gerstein & Markus, 2013; NFPRHA, 2017). A 2014 analysis found that publicly funded family planning services prevented 2.2 million unintended pregnancies, tens of thousands of sexually transmitted infections, 410 cases of HIV, and 3,680 cases of cervical cancer (Frost, Sonfield, Zolna, & Finer, 2014). These add up to a gross public savings of $15.8 billion, with a net savings of $13.6 billion, or $7.09 saved for every $1 spent (Frost et al., 2014).

Medicaid family planning expansions are particularly effective at preventing unintended pregnancies and reducing healthcare costs. In addition to traditional Medicaid, some states expand coverage for family planning services through Section 1115 Demonstrations (also called waivers) or state plan amendments (SPAs). Although states develop waivers and SPAs through different administrative processes,[a] they operate similarly in terms of coverage. Both waivers and SPAs provide coverage for family planning services only, not for general primary care, and eligibility for these expansions may depend on income and other factors. For example, several states allow women to enroll in waivers or SPAs only if they are losing coverage after their postpartum Medicaid coverage ends; one state only allows women to enroll if they are losing general Medicaid coverage (Guttmacher Institute, 2017). Women who receive care

[a] Waivers are designed as temporary programs and are generally approved for five years, with an option to renew at the end of the five-year period. SPAs, on the other hand, are permanent changes to the state plan, which is a required document that states must submit when they apply to participate in the federal-state partnership that is Medicaid. The state plan details the way that services will be covered, among many other issues, and can be amended as needed. SPAs may be completely new programs or may be based off of successful waivers (i.e., converted from a waiver into a SPA).

that is covered by family planning expansions are more likely to obtain routine check-ups, Pap tests, Chlamydia testing, and contraceptive counseling (Adams, Kenney, & Galactionova, 2013). These expansion programs also reduce unintended pregnancy rates, overall birth rates, and teen birth rates, and produce either cost-neutrality or cost-savings for state governments (Foster et al., 2009; Lindrooth & McCullough, 2007; Yang & Gaydos, 2010).

Oral Contraceptives

In the family planning safety net and beyond, many women use oral contraceptives (OCs). OCs are highly effective at preventing pregnancy (Centers for Disease Control and Prevention, 2017), are the most common non-permanent method of contraception in the US (Daniels, Daugherty, Jones, & Mosher, 2015; Guttmacher Institute, 2018), and are highly cost-effective (Foster, Biggs, et al., 2011). A recent study from the Guttmacher Institute estimates that 15.6% of all women ages 15-44 and 25.3% of contraceptive users use OCs; over 9 million women used OCs as their contraceptive method in the previous month (Guttmacher Institute, 2018).

Women must use OCs continuously and correctly in order to prevent unintended pregnancy. Sporadic users of contraceptive methods such as OCs are much more likely to experience an unintended pregnancy than consistent users (Frost, Singh, & Finer, 2007). A national survey of women's contraceptive use found that nearly 25% of sexually active women reported being at risk of unintended pregnancy for at least one month in the previous 12 months, including 8% of women who used no contraceptive method and 15% who had a gap in contraceptive method use (Frost et al., 2007). On average, the gap in

use was five months long. Forty percent of women with gaps in contraceptive use reported that gaps were due to problems accessing or using their preferred method. Of the women with a gap in contraceptive method use, 22% used OCs (Frost et al., 2007). These findings suggest that, even when women are able to obtain a prescription for OCs, they may still find themselves at risk of unintended pregnancy within the 12-month period following the initial prescription and that this gap in use may persist for several months. A separate study found that "no new pill pack" was the third most common reason that women identified for missing pills (J. Smith & Oakley, 2005). In addition to being at risk for unintended pregnancy, women may also experience anxiety or fear about missing pills, or may miss days at work or school because of concerns of missed pills (Lete et al., 2008). Health professionals have also expressed concerns about the need to visit a clinic and then make a separate trip to a pharmacy to receive OCs. A recent survey of health professionals found that 80% consider the prescription-only model "too restrictive," and suggested that direct pharmacy access would improve women's access and adherence to their dosage regimens (Rafie, Haycock, Rafie, Yen, & Harper, 2012).

Current Guidance on Provision of Oral Contraceptives

Several national entities have developed guidelines or recommendations for providing OCs in publicly funded family planning settings. For example, Healthy People 2020 goal FP-3.1 is to "Increase the proportion of publicly funded family planning clinics that offer the full range of FDA-approved methods of contraception onsite," from a baseline of 53.6% in 2010 to a goal of 67% in 2020 (Healthy People, 2010). In the most recent Centers for Disease Control and Prevention (CDC) Selected Practice

Recommendations for Contraceptive Use, the CDC recommends providing or prescribing a one-year supply of OCs and notes that "Restricting the number of pill packs distributed or prescribed can result in unwanted discontinuation of the method and increased risk for pregnancy" (Curtis et al., 2016). These recommendations serve as guidance for all providers in the US. The American College of Obstetricians and Gynecologists' (ACOG's) recommendations extend even further and advocate for making all OCs available over-the-counter (American College of Obstetricians and Gynecologists, 2016).

In addition, the CDC and Office of Population Affairs recently developed guidelines for family planning providers to improve the quality of care. Issued in 2014, the "Providing Quality Family Planning Services" (QFP) recommendations delve more deeply into the issues of providing OCs on-site and of providing multiple cycles. Based on systematic reviews of the literature and input from an expert panel, the QFP recommends: (1) making a "broad range" of FDA-approved contraceptive methods available on-site, and (2) providing or prescribing multiple cycles – "ideally a full year's supply" – of OCs (Gavin et al., 2014).

Preliminary analyses of the QFP find inconsistent adoption across sites and that providers may continue to practice based on their own values and preferences, even if they contradict the guidelines (Simmons, Guerra-Reyes, Meyerson, Adams, & Sanders, 2016). Additionally, actual contraceptive practice patterns for dispensing OCs on-site and dispensing a one-year supply vary by provider type within the family planning safety net. While family planning clinics may engage in these practices more commonly, other safety net providers may be slower to adopt these recommendations (Goldberg et al., 2015; Wood et al., 2014, 2013).

Medicaid

Family planning is a mandatory benefit through Medicaid, and states receive an enhanced federal matching assistance percentage (FMAP) of 90% for providing family planning services (Ranji et al., 2016). However, there are few specifications on what services must be covered (Sonfield, 2015). Most traditional Medicaid programs provide coverage for family planning, as well as other services, through contracts with private organizations. These managed care organizations (MCOs) enter into contracts with state Medicaid agencies, and the contracts dictate which services are covered and how. Therefore, there is significant state-to-state variation in the types of services that are covered through Medicaid managed care (Sonfield, 2015). For example, some states may limit the number of months of a prescription that a patient may pick up at a time, including a one-month supply or a three-month supply (Kaiser Family Foundation, 2012). Further complicating this issue is a state-level option to cover services through managed care agreements but cover prescription drugs through a fee-for-service arrangement. The specifics of these arrangements are not readily available, and even the Centers for Medicare & Medicaid Services (CMS) has stated that "it is not always possible to identify the specific benefit coverage features of managed care arrangements with complete confidence" (Centers for Medicare and Medicaid Services, 2014).

Women may also receive coverage for family planning services though a waiver or SPA (see above), or a state-run program similar to state Medicaid. As of the beginning of this study, May 2017, about half of states had such an expansion; these include 11 states with a waiver, 15 states with a SPA, and four with a state-run program (Guttmacher

Institute, 2017). Coverage for family planning may be better under these family planning expansions than under traditional Medicaid because these are optional, targeted programs, and states have made a strategic decision to create them in the first place. Medicaid family planning expansions have been shown to improve use of contraception, and specifically, to improve continuity of contraceptive use, particularly for short-acting methods such as OCs (Sonfield & Gold, 2011).

Private Insurance

While most patients in health centers are not covered by private insurance plans (Health Resources and Services Administration, 2017), reimbursement policies may nonetheless play an important role in determining how OCs are provided and how many can be provided. Before passage of the Affordable Care Act (ACA), insurers could choose what level of coverage to provide for contraception. With the preventive services benefit of the ACA taking effect in 2012, all non-grandfathered[b] health plans now must cover all FDA-approved contraceptives without cost-sharing; these regulations apply to health plans sold in the individual or employer group market (Becker & Polsky, 2015; Kaiser Family Foundation, 2015b; Public Law 111–148. Patient Protection and Affordable Care Act, 2010). Private insurance plans may also limit the number of months that a patient can obtain at any one time. Although plans have generally set this limit between one and three months, some states have recently passed legislation that requires

[b] To be considered grandfathered (and therefore exempt from this coverage requirement), a plan must have existed prior to passage of the ACA and cannot have made significant changes in premiums, benefits, terms of coverage, or cost-sharing.

insurers to cover a 12-month supply. The first of these laws went into effect in 2016, with others following in recent years. As these laws are fairly new, there is little data yet on their effectiveness. However, a study of a California law requiring insurers to cover a 12-month supply of OCs estimated that the law would result in 15,000 fewer unintended pregnancies and a cost savings of $43 million to the state (McMenamin et al., 2017).

Pharmacy Benefit Managers (PBMs)

Under both private and public insurance plans, pharmacy benefit managers (PBMs) may serve as entities that administer pharmacy benefits. PBMs develop contracts with both pharmacies and insurance plans, and these contracts include provisions on patient cost-sharing, prior authorization, and other dispensing policies (National Community Pharmacists Association, 2015). PBMs commonly incentivize patients to use a mail-order pharmacy to reduce costs for ongoing medications, and these mail order pharmacies generally can fill prescriptions for 90 days, rather than 30 (National Community Pharmacists Association, 2015). Before passage of the ACA, PBMs also placed limits on OCs specifically by classifying them as "lifestyle" drugs and excluding them from formularies (Emanuel, Burton, Randel, & Titlow, 2001). The ACA ended this practice for contraceptives through the preventive services benefit, which requires plans to cover all FDA-approved methods without cost-sharing (Ranji et al., 2016). Despite the significant role that PBMs play in determining prescription policy, they are subject to few state or federal regulations. While most insurance plans must comply with state-level regulations, PBMs must only comply with a few policies that mostly affect licensing and pharmacy audits (National Community Pharmacists Association, n.d., 2015). No federal

laws or regulations specifically apply to the PBM industry (National Community Pharmacists Association, 2015).

Title X

Title X of the Public Health Service Act (Title X) is a federal grant program dedicated to providing comprehensive family planning services (Office of Population Affairs, 2016). Although Title X provides coverage for services, it does not operate like Medicaid or private insurance plans. Title X funds may be used for health services and supplies, as well as staff training and infrastructure costs for family planning clinics (Office of Population Affairs, 2014). These regulations allow clinics to have more flexibility in providing OCs on-site and/or providing a one-year supply. However, the overall pool of funds for Title X is relatively small, especially in comparison to Medicaid. The most recent federal budget process funded Title X at $286.5 million (NFPRHA, 2019). Title X accounts for 10% of public expenditures on family planning services, while Medicaid accounts for 75%, and state-level sources account for 12% (Sonfield & Gold, 2012).

CHC Pharmacies and 340B

CHCs can purchase discounted drugs, including contraceptives, through the 340B Drug Discount Program, and may save 25-50% on drug costs (Health Resources and Services Administration, 2019; Stencel, 2014). Entities that participate in 340B can then provide these drugs through several different mechanisms, including providing in-house pharmacy services, administering drugs directly to patients, and contracting with other

pharmacies, such as retail pharmacies like CVS, Walgreens, and others (Health Resources and Services Administration, 2019; Stark & Laudato, 2012). Both in-house pharmacies and contract pharmacies can bill insurance plans and Medicaid for drugs prescribed to patients covered by these services, in addition to providing drugs purchased through the 340B program. In addition, certain drugs – including OCs – can be provided directly from the clinic as a "physician-administered drug," which bypasses the need for an on-site pharmacy (MACPAC, 2017; Wisconsin Department of Health Services, 2008).

State Pharmacy Regulations

All pharmacies, including those at health centers, must comply with state and federal laws for dispensing and refilling prescriptions. State pharmacy boards determine many of these policies at the state level. For example, 33 states and Washington, DC have existing laws that place a limit on the amount (i.e., monthly supply per patient) of a "dangerous drug" that a pharmacist may supply at any one time (National Association of Boards of Pharmacy, 2012). OCs may fall into this category for some states. In California, a recently enacted law specifically changes the amount of OCs that can be dispensed at once by amending the section of the Business and Professions code that prohibits pharmacists from dispensing more than a 90-day supply of "dangerous drugs," including OCs (2017 Lawbook for Pharmacy, 2017; S.B. 999, 2016). Furthermore, most states place a time limit on prescription refills, ranging from six months to two years. Only nine states do not have such a law in place (National Association of Boards of Pharmacy, 2012). Finally, each state sets its own policy for dispensing authority based on clinician type; some states may allow nurse practitioners and other advanced practice

clinicians to dispense prescription drugs, while others limit this ability to physicians (National Association of Boards of Pharmacy, 2012).

Significance of the Research

This study can inform practices that would improve access to care and quality of care. Oral contraceptives are the most common type of birth control method in the US, and failing to provide a full supply at the point of service can pose an unnecessary barrier for women seeking to obtain family planning care. To improve quality of care, it is especially important to eliminate this barrier among low-income women, who face particular challenges obtaining OCs.

This research may also have important policy implications, especially given a shifting policy landscape around family planning. In the current political environment, free-standing family planning clinics, such as Planned Parenthood clinics or state family planning departments, may become targets for reduced service provision through newly imposed limits on public funding mechanisms, causing the family planning safety net to contract. If family planning providers cannot meet current demand for low-income women seeking contraceptive care, health centers may need to expand family planning services to meet increased demand among this population.

Chapter 2: Existing Literature

Providing a One-Year Supply of OCs

While there are no studies in the peer-reviewed literature on this exact topic, several studies have examined health outcomes related to providing OCs in supplies larger than one month. Some studies have measured the impact of providing multiple cycles at a time on method continuation and on unintended pregnancy rates. One study compared women who received either four cycles at once or one cycle initially, followed by three cycles of refill packs. This study found no differences in the rates of continuation between the two groups (Steenland, Rodriguez, Marchbanks, & Curtis, 2013). Another study looked at the difference between providing seven cycles at a time and providing three cycles at a time. Slightly more than half of women who received seven cycles (51.2%) had continuously used OCs, compared to only 35.4% who had received three cycles (Steenland et al., 2013). These studies suggest that providing a supply of at least six months may represent an important threshold for improving continuity of contraceptive method use.

Two studies in California examined differences between women receiving one year, or 13 cycles, compared to women receiving either one or three cycles. Women who received 13 cycles were more likely to have enough OCs on hand to take them continuously one year after the initial prescription, more likely to receive gynecological screening services, and had lower expenditures from the state than women receiving fewer cycles (Foster et al., 2006). Nineteen percent of women who received three cycles and 16% of women who received one cycle experienced a gap in contraceptive use, compared with 4% of women who received 13 cycles (Foster et al., 2006). Although

women who received 13 cycles had fewer office visits, they were more likely to receive a Pap test and *Chlamydia* test than women receiving fewer cycles, and less likely to receive a pregnancy test. Almost half of women who received three cycles or one cycle received a pregnancy test (46% and 45%, respectively), compared with 25% of women who received 13 cycles (Foster et al., 2006).

The study also measured oversupply wastage (i.e., switching to another brand of OCs or losing pills). Women who received 13 cycles wasted more than women who received smaller amounts, with an oversupply rate of 6.5%, compared with 2% among women who received three cycles and 2.4% among women who received one cycle. In spite of the higher wastage rates, the state actually paid less in reimbursements to providers, pharmacies, and labs for women who received 13 cycles, with $99 more spent per year on women who received three cycles and $44 more per year spent on women who received one cycle (Foster et al., 2006).

In a separate study of California Family PACT clients, researchers found that providing 13 cycles reduced the chance of both unintended pregnancy and induced abortion. Nearly 3% of women who received OCs had a pregnancy covered by state Medicaid in the subsequent year, resulting in either a birth, induced abortion, ectopic pregnancy, or spontaneous abortion. These rates were lower among women who received 12-13 cycles (1.2%) than either among women who received one cycle (2.9%) or women who received three cycles (3.3%). Furthermore, providing a one-year supply was associated with a 46% reduction in the odds of an abortion, after controlling for age, race/ethnicity, and previous OC use (Foster, Hulett, Bradsberry, Darney, & Policar, 2011).

In both of the California studies, the authors note differences in prescribing and dispensing practices both by provider type and by patient type. Women who received pills through a pharmacy were slightly less likely to be protected against unintended pregnancy at 15 months (OR 0.93) (Foster et al., 2006). As the authors note, only providers who dispense on-site (e.g., Planned Parenthood clinics, health departments, student health centers) can dispense a one-year supply and may have better contraceptive counseling than sites that do not (Foster, Hulett, et al., 2011). In addition, clinicians may selectively provide a one-year supply to women who they believe will continue OC use (Foster et al., 2006; Steenland et al., 2013). In both studies, certain demographic groups were less likely to receive a one-year supply. While 12% of white non-Hispanic women received 13 cycles, only 8% of Hispanic women did; this disparity held true for both English speakers and Spanish speakers (Foster, Hulett, et al., 2011; Foster et al., 2006).

Although there is only a limited body of existing evidence, these studies suggest that providing women with a one-year supply improves the likelihood of continuous OC use and reduces the likelihood of unintended pregnancy.

Providing OCs On-Site at Clinics

Two relevant studies examined the impact and implications of providing OCs on-site. One compared a school-based health center that provided both counseling and contraceptive methods on-site with a school-based health center that provided only counseling on-site. At the first site, 100% of teens at the health center kept their appointments for receiving OCs, while only 50% of teens at the other health center kept their appointments. Furthermore, the pregnancy rate at the health center with on-site

access was 6%, compared with 20% at the other health center (P. Smith, Novello, & Chacko, 2011).

A qualitative study of low-income women accessing family planning services in Massachusetts after the state's healthcare reform initiative found that going to a pharmacy for contraception, both initially and for refills, presents a barrier for women (McIntosh, Tsikitas, & Dennis, 2012). Both patients and providers in the study noted differences in the number of cycles that could be provided at once based on where patients obtained their pills. Pharmacies could generally provide only one month of a contraceptive method at a time, whereas publicly funded family planning providers could provide between three months and one year of contraception at a single visit (McIntosh et al., 2012). One patient stated "it was really convenient to be able to get the whole year's worth right then so then I wouldn't have to go back" (McIntosh et al., 2012). Providers seemed to account for these challenges by offering OCs on-site only to certain patients and offering prescriptions to others. In an interview, one provider noted: "If I meet with somebody, if I pick up on any sense of a problem, like that they can't get to the pharmacy, then we're able to give [the prescription to] them here" (McIntosh et al., 2012). Providers also expressed the belief that returning to pharmacies for refills was more convenient than returning to the clinic for refills (McIntosh et al., 2012). Providing OCs on-site is particularly important for low-income women, who may face particular challenges interacting with insurance providers and maintaining the use of prescription contraception (McIntosh et al., 2012), as well as logistical challenges in getting to a pharmacy to pick up pills on a regular basis.

These studies suggest that providing OCs on-site at a clinic improves the likelihood of patients receiving their pills and reduces the chances of unintended pregnancy.

Providing OCs On-Site at CHCs

In 2011, the George Washington University (GWU) conducted the first study of family planning services in health centers (Goldberg et al., 2015; Wood et al., 2014, 2013). The study included an electronic survey of the full field of health centers and site visits at selected health centers (Wood et al., 2013). The survey was sent to medical directors and chief executive officers (CEOs) at all 1,130 health center grantees, of which 959 had current contact information available. Over 400 grantees responded, for a response rate of 44% (Wood et al., 2013). In addition to asking detailed questions in the survey about health center practices, researchers also created a composite measure that they called a "comprehensiveness index." This index measured the availability of certain services, based on the CDC definition of comprehensive family planning, which included: OCs (general and extended regimen), intrauterine devices (IUDs), injectables, patch and ring, barrier methods, emergency contraception, and natural family planning; additional points were awarded for on-site delivery of all services except natural family planning (Wood et al., 2013). Researchers also conducted site visits at six health centers and targeted reviews at an additional three health centers, using a maximum variation sampling strategy. Site visits and targeted reviews involved interviews with clinical and administrative staff (Wood et al., 2013).

The study found that that just over half of health centers provide OCs on-site, with significant differences by Title X funding status. Sixty-two percent of all health centers provide OCs on-site, with 36% providing OCs by prescription only. Seventy-five percent (75%) of health centers receiving Title X funding provide OCs on-site, with 44% of health centers not receiving Title X providing OCs on-site (Wood et al., 2014, 2013). The comprehensiveness index, developed uniquely for this study, included a measure of on-site provision of OCs. Health centers were more likely to score higher on the comprehensiveness index if they received Title X or were large or medium size; located in the Western region of the country; or located in a suburban area (compared to urban or rural). Major barriers identified during the site visits included funding, staffing, and political and cultural hurdles (Goldberg et al., 2015; Wood et al., 2014, 2013)

Through the site visits, researchers examined different models of the way that health centers organize and provide family planning services (Goldberg et al., 2015). The site visits revealed two general models of organization: family planning services operating as a separate group of services, sometimes with different clinic hours and different staffing, or fully integrated services within primary care. The key roles that researchers identified in determining how these services were organized included: leadership philosophy, organizational structure, commitment to providing family planning services, funding, cultural environment, and patient demand (Wood et al., 2013). This study did not measure the amount of OCs available, either on-site or through prescription.

CDC and OPA Studies (2009-10 and 2013-14)

In 2009-10, CDC conducted a survey of family planning services in the US (Centers for Disease Control and Prevention, 2011). This study included 2,000 office-based physicians and 2,000 Title X providers and found that a greater proportion of Title X providers than office-based physicians provided contraceptive methods on-site. Nearly all Title X providers (92.1%) in this sample offered OCs on-site, compared with only 48.8% of office-based physicians (Centers for Disease Control and Prevention, 2011). The study did not examine the number of cycles available.

In 2013-14, CDC and the Office of Population Affairs (OPA) conducted a survey of 4,000 publicly funded family planning providers, including health centers, Planned Parenthood clinics, health departments, and others. Most respondents in the study (88%) reported providing OCs on-site, and clinics receiving Title X funds were more likely than others to provide OCs on-site (96% vs. 79%). Eighty-one percent of CHCs provided OCs on-site (Carter et al., 2016). This study did not measure the number of cycles available.

Guttmacher Studies (2010-11 and 2015)

The Guttmacher Institute conducts regular studies of publicly funded family planning providers, including health centers, Planned Parenthood clinics, health departments, hospitals, and others. In a 2010-11 survey of 664 clinics, the Institute found that 63% of clinics provided OCs on-site (Frost, Gold, Frohwirth, & Blades, 2012). Clinics with Title X funding were more likely to provide OCs on-site (86% vs. 39%). Only 37% of health centers provided OCs on-site, compared with 86% of health departments and 92% of Planned Parenthood clinics. Thirty-four percent of health centers

provided or prescribed more than a six-month supply at the initial visit, compared to 61% at Planned Parenthood clinics (Frost et al., 2012).

In 2015, the Guttmacher Institute conducted an update to the previous study and included 867 clinics, of which 244 were health centers (Zolna & Frost, 2016). In this updated study, researchers found that 34% of health centers provided both an initial supply and refills of OCs on-site, compared with 83% of Planned Parenthood clinics and 76% of health departments, and 36% provided more than a 6-month supply at the initial visit and 72% at the refill visit (Zolna & Frost, 2016). In this study, the amount of the supply included both OCs available on-site and OCs available by prescription but did not provide data on the availability of a one-year supply on-site.

Conclusions from Existing Literature

When examined in combination, these studies suggest substantial variation in access to OCs by provider type, both within the family planning safety net and beyond. Furthermore, there is significant support for the effect of providing a larger supply on health outcomes and expenditures. This project fills an important void in the research literature, as there are no existing studies examining access to a one-year supply of OCs on-site at health centers.

Chapter 3: Study Design and Methodology

This study employed a concurrent, mixed-methods approach. Mixed methods research allows the strengths of one type of data to add balance to the weaknesses in another type of data. Using different data sources on the same topic can add depth and analytical rigor and may also provide validation of and credibility for the study findings (Green & Thorogood, 2014). With a concurrent mixed methods design, data collection and analysis occur at the same time, rather than as two distinct phases (Creswell & Clark, 2011). For this project, the quantitative research took place in a single phase, and the qualitative research took place in two phases.

The overall approach for this project follows the applied, pragmatic tradition. Applied research centers on the study of a problem "rooted in practice," rather than a purely academic exercise, and the pragmatic approach focuses on the practical implications of the research, without adhering to a particular philosophy or set of theories (Creswell & Clark, 2011; Green & Thorogood, 2014). Given the research question and goals, an applied, pragmatic approach is most fitting. This study aims to produce conclusions that are real-world relevant and practical, while being flexible to social and political contexts, rather than tied to a specific theory.

Research Questions, Specific Aims, and Hypotheses

This study seeks to answer two primary sets of research questions. Research question 1 draws mainly on the quantitative data, and research question 2 on the qualitative.

Research Question 1: What proportion of health centers provide a one-year supply of oral contraception (OCs) on-site, and what are the characteristics associated with providing a one-year supply of OCs on-site?

Research Question 2: What are the barriers and facilitators for providing a one-year supply of OCs on-site at CHCs at the health center level and at the policy level?

The *a priori* hypothesis for research question 1 was that a minority of health centers provide a one-year supply on-site and that health centers would be more likely to do so if they (1) were large (2) were urban (3) received Title X funding and/or (4) participated in the 340B program. For research question 2, the first proposition was that certain factors would serve as either facilitators or barriers; specifically, restrictive third party reimbursement policies (under both private insurance and Medicaid) would serve as a barrier and that favorable third party reimbursement policies, receipt of Title X funding, and participation in 340B would serve as a facilitator. The second proposition was that attitudes among health center leadership and among clinical staff would serve as both a barrier and a facilitator.

Theoretical Framework

A new theoretical framework guided this research effort (see Figure 2.1). This framework draws upon two existing frameworks: Aday and Andersen's access to care framework (Aday & Andersen, 1974) and Donabedian's quality of care framework (Donabedian, 1988).

In the established Aday and Anderson framework, access "may be conceptualized as proceeding from health policy objectives through the characteristics of the health care system and of the populations at risk (inputs) to the outcomes or outputs: actual utilization of health care services and consumer satisfaction with these services" (Aday & Andersen, 1974). The healthcare delivery system includes service delivery sites where patients can access care (including hospitals, private physicians, etc.), and the corresponding resources and organization of the delivery system are what determine access. Resources include both physical structures as well as personnel, and organization describes the ways in which service delivery sites use those resources. The outcome indicators are utilization and satisfaction (Aday & Andersen, 1974). For the modified framework, many of these concepts are directly applicable, but the study did not focus on characteristics of the population, consumer satisfaction, or utilization. Instead, it focused on health policy and the characteristics of the health delivery system. Health policy (see Figure 2.1, section [1]) regarding both health centers and family planning services is likely to have a direct effect on characteristics of the health system. Within the concept of health policy are both state (1a) and federal (1b) policies. The health delivery system (2) includes both health centers (3) and other providers of family planning services, such as family planning clinics (4) and hospitals or other private providers (5). This study focused on characteristics of CHCs and the policies that affect their practices.

Within the CHC system, the structure (3a), process (3b), and outcome (3c) derive from Donabedian's model for quality of care. In the Donabedian model, structure describes both material and human resources, such as facilities and staff. Process describes the processes of care, both from the patient perspective and the provider

perspective. Outcome describes health outcomes or knowledge-based outcomes. In this model, “good structure increases the likelihood of good process, and good process increases the likelihood of a good outcome” (Donabedian, 1988). The modified framework maintains the idea that structure leads to process which leads to outcomes, while modifying these concepts slightly from their original usage. The concept of structure is fairly similar in the new framework and the original, encompassing both physical infrastructures in the health center and staffing. In the modified framework, the outcome in question is providing OCs on-site, and the processes are those that connect the structures with that outcome.

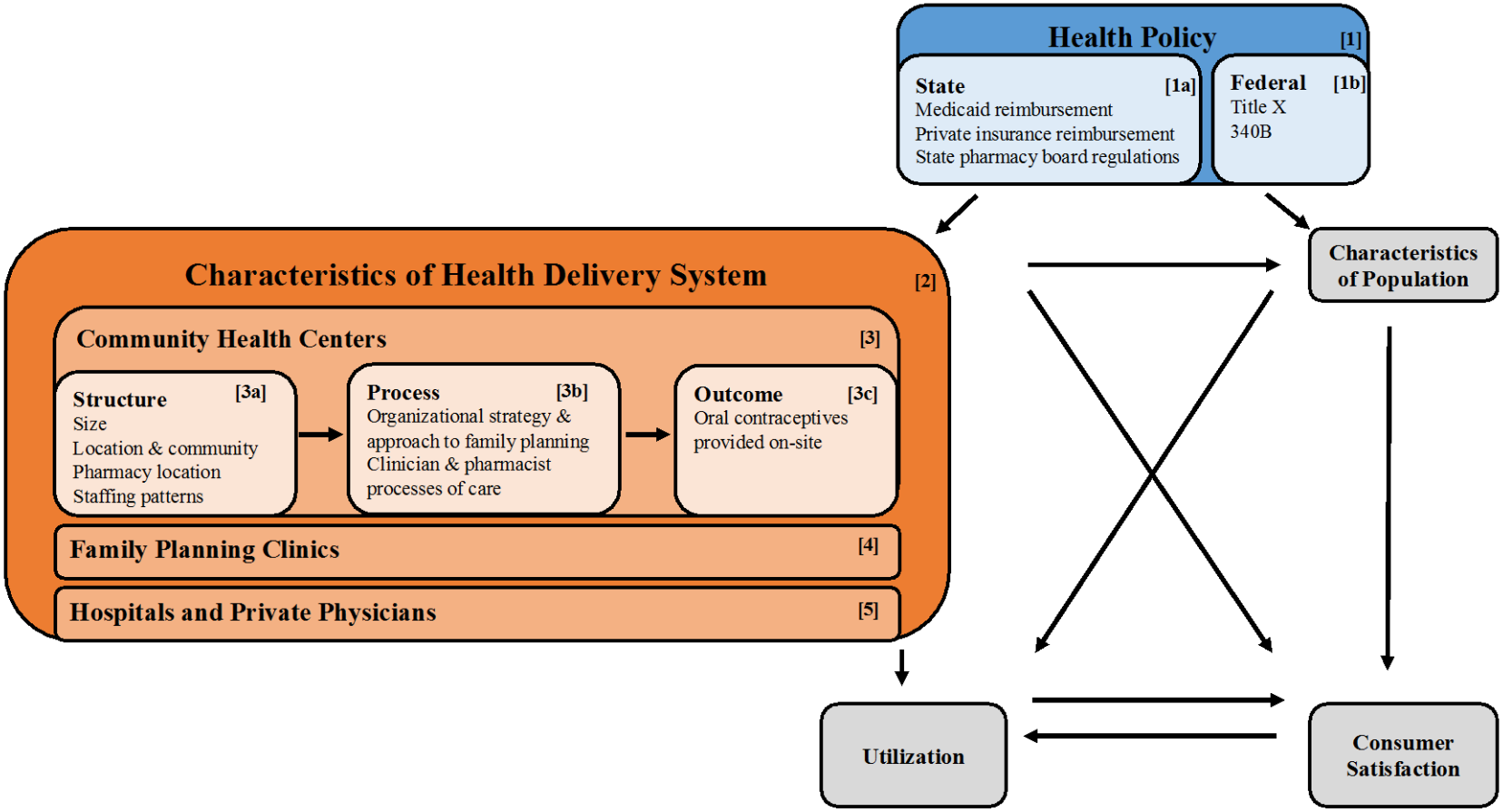


Figure 2.1 Theoretical Framework for On-Site Provision of Oral Contraception at Community Health Centers

Quantitative Research Methodology

The primary source of quantitative data for this study was a survey conducted by researchers at GWU and the Henry J. Kaiser Family Foundation (KFF) in 2017 (Wood et al., 2018). The research team contacted all 1,345 federally funded community health center grantees operating in the 50 states and the District of Columbia based upon data drawn from the federal 2015 Uniform Data System (UDS), the most recent year for which data were available at the time of the survey. To be eligible for this study, health centers had to receive funding from the HRSA BPHC (i.e., Section 330 funding). Look-a-Like health centers, Rural Health Centers, and family planning clinics were excluded from the study. The survey was conducted using SurveyMonkey between May and July 2017. Respondents were asked a small number of questions about the availability of family planning services across all sites, and the focus of the questionnaire was the practices and policies of their largest comprehensive medical site at which family planning services were available. The full survey instrument is available in Appendix A.

All survey results were analyzed using Stata (version 13). To ensure representativeness in terms of size and location, survey results were weighted by US Census region and health center size using the svy command. A finite population correction (FPC) factor was also used, as the survey sampled from more than 5% of a finite population without replacement. The FPC factor was calculated by taking the square root of the response rate divided by the total population minus 1, yielding a value of 0.77.

Using the survey weights and FPC factor, bivariate logistic regression models examined (1) health centers offering any on-site provision of OCs and (2) health centers

providing one year of pills (compared with less than one year) if they were offered on-site. For both outcomes, independent variables included: Title X funding, participation in 340B, health center size, proportion of patients in certain demographic groups (e.g., women of reproductive age out of total patients, patients with Medicaid out of total patients, etc.), staffing patterns (e.g., number of OB/GYN staff, number of pharmacy staff, etc.), and health center location (e.g., urban, located within 30 miles of a family planning clinic), and state level policies (e.g., ACA Medicaid expansion state). In addition, as discussed below, several additional variables account for state coverage policies for OCs; these variables were derived from the findings of the qualitative research. Finally, using the factors that were statistically significant in the bivariate analyses, a multivariate logistic regression model examined factors associated with providing a one-year supply on-site. Table 3.1 shows definitions and notes for independent variables. Most were treated as dichotomous in the bivariate analyses and continuous in the multivariate analysis.

The survey also asked health centers that do not provide a one-year supply of OCs to categorize five potential barriers as a major barrier, minor barrier, not a barrier, or not applicable. For each potential barrier, the proportion of health centers falling under each of the four categories was calculated. To conduct bivariate analyses for characteristics associated with each barrier, the categories were collapsed into major barrier vs. minor barrier/not a barrier/not applicable, and regression models were estimated using the independent variables discussed above and in Table 3.1.

Table 3.1 Independent Variable Names and Descriptions			
Variable	**Type**	**Definition/Notes**	**Source**
Title X	Dichotomous	Receiving any Title X funding	Survey data
340B	Dichotomous	Participating in the 340B program	Survey data
Size	Dichotomous (bivariate) Continuous (multivariate)	Large site: at or above the median number of patient visits (15,000) reported at the site in calendar year 2016	Survey data
Rural, urban, or suburban	Dichotomous	Rural/suburban vs urban	Survey data
Located within 30 miles of free-standing family planning clinic	Dichotomous	Largest health center site located within 30 miles	Survey data
Proportion women of reproductive age	Dichotomous (bivariate) Continuous (multivariate)	High proportion: at or above the median proportion of women of childbearing age (15-44) out of total patients (24.9%)	2017 UDS
Proportion of Medicaid patients	Dichotomous (bivariate) Continuous (multivariate)	High proportion: at or above the median proportion of patients with Medicaid out of total patients (44.7%)	2017 UDS
Proportion of private insurance patients	Dichotomous (bivariate) Continuous (multivariate)	High proportion: at or above the median proportion of patients with private insurance out of total patients (17.1%)	2017 UDS
High proportion of Black patients	Dichotomous (bivariate) Continuous (multivariate)	High proportion: at or above the median proportion of Black patients out of total patients (8.6%)	2017 UDS
Proportion Latinx patients	Dichotomous	At or above the median proportion of Latinx patients out of total patients (16.4%)	2017 UDS
At least 1 FTE OBGYN	Dichotomous	At least 1 FTE OBGYN reported	2017 UDS
At least 1 FTE CNM	Dichotomous	At least 1 FTE CNM reported	2017 UDS
At least 1 FTE pharmacy staff	Dichotomous	At least 1 FTE pharmacy staff reported	2017 UDS

At least 1 FTE OBGYN and at least 1 FTE pharmacy staff	Dichotomous	At least 1 FTE OBGYN and at least 1 FTE pharmacy staff reported	2017 UDS
At least 1 FTE CNM and at least 1 FTE pharmacy staff	Dichotomous	At least 1 FTE CNM and at least 1 FTE pharmacy staff reported	2017 UDS
ACA Medicaid expansion state	Dichotomous	Adopted Medicaid expansion as of January 2017	Survey data and policy analysis
State with Medicaid coverage for one-year supply	Dichotomous	(see policy analysis)	Survey data and policy analysis
State with private insurance coverage for one-year supply	Dichotomous	(see policy analysis)	Survey data and policy analysis
State with favorable OCs coverage policy	Ordinal	(see policy analysis)	Survey data and policy analysis

Qualitative Research Methodology: Policy Analysis

As described in Chapter 1, Medicaid and private insurance policies vary significantly at the state level, and this study examined state-level policies that may serve as either barriers or facilitators to providing a one-year supply of OCs. The primary methodology for this policy analysis was a point-in-time environmental scan.

The environmental scan, a concept that originally developed in the business community, examines factors that may affect an organization or institution, such as political and social contexts (Graham, Evitts, & Thomas-MacLean, 2008). They "allow the researcher, clinician, or policy maker to account for diverse types of knowledge. These types of knowledge are codified knowledge (data collected from clinical reviews, policy documents, or statistics) and tacit knowledge (data collected from face-to-face meetings or focus groups, or by e-mail or telephone)" (Graham et al., 2008). Although they are a useful tool for understanding an external environment (such as health insurance reimbursement policy), environmental scans are less common in health policy, and there are few guidelines for how to conduct them effectively (Graham et al., 2008; Markus, Andres, West, Gerstein, & Lyons, 2013; Morrison, 1992). Markus and colleagues (2013) outline a methodology for a scan of Medicaid reimbursement policies for asthma educator services that served as a useful model for the scan conducted here (Markus et al., 2013). They conducted an analysis of: (1) peer-reviewed literature, (2) policy briefs, white papers, and other grey literature, (3) Medicaid provider manuals, managed care contracts, and similar documents available online, and (4) calls or in-person meetings with state officials and other experts; after collecting the data, multiple researchers analyzed the data to determine key themes across sources of data (Markus et al., 2013).

This study followed a similar process, focusing on Medicaid provider manuals, state legislature websites, and grey literature, with some email and phone follow-up to experts when no information could be found for a particular policy.

Before searching for information on coverage for OCs, it was important to document each state's Medicaid system, including: whether the state operated fee-for-service, managed care, or both; whether the state had adopted the ACA Medicaid expansion; and whether there was a state-level family planning coverage expansion, either through an 1115 waiver, a SPA, or a state-run program (i.e., a Medicaid-like program). Existing grey literature and policy documents provided summaries of the number of Medicaid managed care plans in a state, the percentage of enrollees in managed care plans, the percentage of enrollees in fee-for-service, and the state's status on both ACA Medicaid expansion and family planning expansions. Combining the information from these disparate sources served as the first phase of this policy analysis.

Once all the state-level documentation for the different types of Medicaid coverage had been analyzed, the second phase focused on coverage policies related to OCs. For Medicaid policies, publicly available Medicaid documents were closely examined. These documents included provider manuals for: fee-for-service Medicaid, managed care plans, all providers, health centers, family planning providers, and pharmacies. Documentation for family planning waivers and SPAs were also examined; details of state-run family planning programs were also searched when available. For state legislation, the search strategy initiated with a review of existing grey literature providing an overview of states that had recently passed legislation (Kaiser Family Foundation, 2017). To confirm the details for each state's policy, the state legislature's

website was searched using either an exact bill or law number (when states were listed as having passed legislation) or keywords (when states were not listed as such). If no information was readily available, the state's Lawbook for Pharmacy, which describes any restrictions on providing pharmaceutical drugs, was also scanned for any additional information. Once the information had been gathered from these various sources, it was cross-checked with a survey conducted in 2015 that included data from 40 states on Medicaid coverage for a one-year supply of OCs (Kaiser Family Foundation, 2015a). In cases where the survey found no coverage but a more recent policy document (e.g., Medicaid provider manual or legislation) indicated that there was coverage, the more recent documents were considered more accurate; in this way, the survey results provided a "check" on the reliability of the environmental scan but did not serve as a primary data source. The scan and analysis took place from July to November 2018.

Qualitative Research Methodology: In-depth Interviews

To provide deeper insight into barriers and facilitators at the health center level, in-depth interviews were conducted with key informants in four health centers located in three states. The sampling strategy for these interviews was a purposeful sampling strategy. With purposeful sampling, participants are chosen deliberately based on their ability to answer the research questions, as opposed to a random or convenience sample, which would be less appropriate for this study (Maxwell, 2013). Health center staff are best equipped to answer questions about barriers and facilitators for providing a one-year supply of OCs on-site, and systematic recruitment of health centers is most appropriate for this study.

The sampling strategy was heterogeneous to account for both health centers that provide a one-year supply of OCs on-site and those that do not. Maximum variation sampling was also used to account for health centers that varied on a number of factors, including types of locations (e.g., urban, rural, suburban), geographic regions, family planning funding sources (e.g., Title X), state policy environments, and health center pharmacy configurations (e.g., in-house on-site vs. no pharmacy). Health centers were eligible for this component of the study if they had completed the survey and provided some type of family planning services. Health centers were excluded if they did not provide any type of family planning services. There were no other exclusion criteria (e.g., size of health center, location, etc.).

To recruit health centers to participate, target states were first identified that would meet the maximum variation criteria. As a part of the survey, respondents could indicate whether they would be willing to be contacted for follow-up interviews. Health centers within the three target states that answered yes to this question were contacted. Once a health center expressed interest in participating, the primary contact in the health center was asked to identify staff members with relevant knowledge who would be willing to participate in interviews. Eligible staff members included but were not limited to: medical director, CEO, COO, clinicians, pharmacy staff, and family planning/reproductive health specialists.

Key staff members participated in semi-structured, in-depth interviews. This approach allowed for exploration of pre-determined research questions and themes derived from the theoretical framework and quantitative survey results, while allowing for new and unanticipated concepts to arise through the conversation (Green &

Thorogood, 2014). In-depth interviews create space for both the participants and the researcher to engage in a dialogue, rather than a one-sided question-and-answer session. An initial interview guide was developed using broad themes from the conceptual framework and then modified throughout the process to reflect additional issues that arise during previous interviews (see Appendix B).

Before each interview, participants received an information sheet describing the study and provided a verbal consent to participate and to have the interview recorded. The George Washington University Institutional Review Board (IRB) deemed this study exempt and approved the information sheet and study protocols. All interviews except one were conducted in person; one interview was conducted on the phone. All interviews were recorded and transcribed for accuracy.

Interview transcripts were analyzed using thematic content analysis in QSR NVivo (version 12). Using the conceptual framework described above, a codebook was developed that included those themes as well as new themes that arose during interviews (see Appendix C). Interview transcripts were then coded for key themes within each health center, as well as similarities and differences among the health centers. After all transcripts had been coded, a second coder who had not participated in the interviews coded a subset of 12 transcripts (three from each of four health centers) for comparison. There was a high degree of overlap between the coders; any areas of disagreement were discussed in detail until consensus could be reached on the most appropriate code.

Triangulation of Quantitative and Qualitative Data

The final phase of the data analysis was triangulating the quantitative and qualitative data. Using the codebook from the interview transcripts, open-ended responses to the survey question about barriers were analyzed using thematic content analysis. There was significant overlap between the themes from both types of data. In addition, many of the barriers and facilitators that arose during interviews were captured as independent variables in the quantitative analysis, which lends strong support for the validity of the conclusions and the convergence of the different data sources.

Chapter 4: Results

Policy Analysis

This study examined policies related to coverage for a one-year supply of OCs at a single point in time (July-September 2017). Table 4.1 shows an overview of relevant coverage policies for all 50 states and DC.

As of July 2019, 17 states had passed legislation or implemented regulations requiring insurance plans to cover a one-year supply. Of these, ten took effect after the survey (2018 or later). Two additional states had passed legislation in one body of the state legislature but not both. Although there is some variation in the specific terms of each policy, all policies require insurers to cover a 12-month supply, following an initial three-month supply. Some policies specify the types of insurers affected by the policy. For example, the Nevada legislation states that “Health care plan means a policy, contract, certificate or agreement offered or issued by an insurer, including without limitation, the State Plan for Medicaid, to provide, deliver, arrange for, pay for or reimburse any of the costs of health care services” (SB 233, 2017). Some states, such as New Hampshire, further specify that “An insurer shall not impose utilization review requirements or other limitations to control the prescribing or dispensing of contraceptives to an amount that is less than a 12-month supply" (SB 421, 2018). Few policies directly address the issue of on-site provision. One exception is Washington state, where the legislation specifies that the "health plan must allow enrollees to receive the contraceptive drugs on-site at the provider's office, if available” (HB 1234, 2017).

Most states’ Medicaid fee-for-service or managed care limit coverage to between one and three months. For purposes of this analysis, a one-month limit included the

terms: one month, 30 days, 31 days, and 34 days, and a three-month limit included the terms: three months, 90 days, and 100 days. Under these definitions, 31 states impose such a limit on provision of OCs. Three states allow up to a six-month supply (between 180-185 days). Of note, Texas allows for six months coverage under fee-for-service plans and certain managed care plans, but at least one managed care plan limits coverage to one month. Nine states require coverage of a 12-month supply. Most of these coverage requirements apply to managed care plans, without specifying coverage under fee-for-service. Eight states do not provide any language in publicly available Medicaid documents specifying coverage limits or allowances. In states that (1) are silent (i.e., offer no guidance) on this issue and (2) operate with at least some managed care plans, the state is effectively delegating coverage decisions to the plans themselves.

To provide further context for the extent to which policies for different Medicaid coverage mechanisms may impact the state's population, Table 4.2 shows an overview of these coverage mechanisms. In Hawaii, for example, there is virtually no fee-for-service system; over 99% of Medicaid enrollees receive coverage through managed care plans. As shown in Table 4.1, Hawaii's coverage for 12 months only applies to managed care plans, which means that the vast majority of Medicaid enrollees have access to the 12-month coverage allowance. By contrast, as mentioned above, different managed care plans in Texas have different coverage limits. Texas had 19 managed care plans in 2018, with 91.7% of the population enrolled in managed care, and details were not readily available for all plans. Therefore, there is likely to be some variation among the actual coverage limits that enrollees experience within the state.

As of early 2017, 33 states (including DC) had opted into the ACA Medicaid expansion, and 18 states had not. States that have adopted the Medicaid expansion provide coverage for women of reproductive age at increased income limits and women who may not have previously qualified for coverage as childless adults. These states are therefore likely to have larger patient populations for whom coverage of family planning services represent an important category of coverage. Furthermore, in these states, the ACA requires that Medicaid covers OCs without cost-sharing. However, there is no specific requirement on the amount of OCs covered, so even in states that have adopted the expansion, there is not necessarily a one-to-one correlation with coverage for a 12-month supply.

In addition to state-by-state variation in general Medicaid coverage, some states provide expanded state-level coverage for family planning services only, either through a Section 1115 waiver, State Plan Amendment (SPA), or state-run family planning program. Twenty-eight states employ such state-level expansions (see Table 4.2). Table 4.1 shows the coverage limits specified under these expansions, if specific details are available; 18 states did not specify coverage limits for these expansions in publicly available documents. Of the remaining 10 states, five limit coverage to one-three months, and five allow for 12-month dispensing.

Taking into account the supply limits under the three primary categories of coverage (general Medicaid, family planning expansion, and private insurance), the final column in Table 4.1 shows a categorical determination of the state's overall policies for a 12-month supply as of the end of the survey (July 2017). The definitions for each category are as follows: (A) 12 months covered under all coverage mechanisms (B) 12

months covered under either private insurance or any Medicaid coverage mechanism (C) limited to less than 12 months under all coverage mechanisms, and (D) inconclusive and/or details missing from documentation. Only three states fall into category A. Eleven fall into category B. The majority of states – 31 – fall into category C; these 31 include five that have passed legislation with an effective date after the survey timeframe. Six states fall into category D. In addition to providing a summary of state policy, these categories also informed quantitative analysis of the survey data (see next section).

Table 4.1 Coverage Policies for 12-Month Supply of Oral Contraceptives. Source: author's analysis (as of November 2018).					
	Legislation or Regulatory Action Requiring Coverage for One-Year Supply in Private Insurance Plans		**Coverage Limits on Supply of OCs Under Medicaid and/or State Coverage Programs**		**Category Determination as of July 2017**
State	**Status of Recent Legislation or Regulatory Action**	**Effective Date**	**Traditional Medicaid (Fee-for-Service and/or Managed Care)**	**Waiver/SPA/State-Run Family Planning Program**	
Alabama	-	-	1-3 months	12 months [(c) (d)]	B
Alaska	bill passed in House but not in Senate	-	no relevant policies identified	N/A	C
Arizona	-	-	1-3 months [(a)]	N/A	C
Arkansas	-	-	1-3 months	N/A	C
California	legislation passed	January 1, 2017	12 months [(b)] ‡	12 months	A
Colorado	legislation passed	January 1, 2019	no relevant policies identified	N/A	D
Connecticut	legislation passed	January 1, 2019	1-3 months	no relevant policies identified	C*
DC	legislation passed	January 1, 2017	12 months [(b)] ‡	N/A	A
Delaware	legislation passed	July 11, 2018	1-3 months	N/A	C*
Florida	-	-	no relevant policies identified	no relevant policies identified	D
Georgia	-	-	1-3 months	N/A	C
Hawaii	legislation passed	January 1, 2017	12 months [(b)] ‡	N/A	A
Idaho	-	-	1-3 months	N/A	C
Illinois	legislation passed	January 1, 2017	1-3 months	N/A	B

Indiana	-	-	12 months	no relevant policies identified	B
Iowa	-	-	1-3 months	no relevant policies identified	C
Kansas	-	-	1-3 months	N/A	C
Kentucky	-	-	no relevant policies identified	N/A	D
Louisiana	-	-	1-3 months	no relevant policies identified	C
Maine	legislation passed	January 1, 2019	no relevant policies identified	no relevant policies identified	D
Maryland	legislation passed	January 1, 2020	6 months	12 months	B
Massachusetts	legislation passed	January 1, 2018	1-3 months	N/A	C*
Michigan	-	-	6 months	N/A	C
Minnesota	-	-	1-3 months	no relevant policies identified	C
Mississippi	-	-	1-3 months	1-3 months	C
Missouri	-	-	12 months	no relevant policies identified	B
Montana	-	-	1-3 months	no relevant policies identified	C
Nebraska	-	-	1-3 months	N/A	C
Nevada	legislation passed	January 1, 2018	12 months	N/A	B
New Hampshire	-	-	1-3 months	no relevant policies identified	C
New Jersey	-	-	1-3 months	N/A	C

New Mexico	bill passed in House but not in Senate	-	no relevant policies identified	no relevant policies identified	D
New York	regulation implemented[†]	January 1, 2017	no relevant policies identified	1-3 months	B
North Carolina	-	-	1-3 months	1-3 months	C
North Dakota	-	-	1-3 months	N/A	C
Ohio	-	-	1-3 months	N/A	C
Oklahoma	-	-	1-3 months	no relevant policies identified	C
Oregon	legislation passed	January 1, 2016	1-3 months	no relevant policies identified	B
Pennsylvania	-	-	no relevant policies identified	no relevant policies identified	D
Rhode Island	legislation passed	April 1, 2019	1-3 months	no relevant policies identified	C[*]
South Carolina	-	-	12 months [(d)]	no relevant policies identified	C
South Dakota	-	-	12 months	N/A	B
Tennessee	-	-	1-3 months	N/A	C
Texas	-	-	6 months [(a)(b)] 1-3 months [(b)]	12 months	C
Utah	-	-	1-3 months	N/A	C
Vermont	legislation passed	October 1, 2016	1-3 months	no relevant policies identified	B
Virginia	legislation passed	January 1, 2018	1-3 months	1-3 months	C[*]
Washington	legislation passed	January 1, 2018	12 months [(a)(b)]	12 months	B

West Virginia	-	-	1-3 months	N/A	C
Wisconsin	-	-	1-3 months	no relevant policies identified	C
Wyoming	-	-	1-3 months	1-3 months	C
Source(s)	*State legislature website, unless otherwise noted.* *† Source = state insurance commission website*		*Medicaid provider manual and/or pharmacy manual, unless otherwise noted* *‡ Source = legislation*		
Definitions & Notes	*Legislation or regulation requires coverage for a 12-month supply, following an initial 3-month supply.* *Coverage for 1-3 months = 30-100 days.* *Coverage for 6 months = 180-185 days.* *Coverage limit applies to specific coverage type: (a) fee-for-service, (b) managed care* *Coverage limit applies to specific type of pharmacy/site: (c) CHC (d) Health Department (e) Medicaid pharmacy* *State coverage policy categories:* *(A) 12 months covered under all coverage mechanisms* *(B) 12 months covered under either private insurance or any Medicaid coverage mechanism* *(C) limited to less than 12 months under all coverage mechanisms* *(D) inconclusive and/or details missing from documentation* ** Indicates states where legislation has been passed but the effective date is after the survey date*				

Table 4.2 Overview of State Medicaid Systems					
State	**Percentage of Enrollees in Fee-for-Service**	**Percentage of Enrollees in Managed Care**	**Number of Managed Care Plans in State**	**Adoption of ACA Medicaid Expansion (as of January 2017)**	**Family Planning Coverage Expansion (as of June 2017)**
Alabama	13.6%	86.4%	N/A	Not Adopted	waiver
Alaska	100.0%	0.0%	N/A	Adopted	-
Arizona	6.9%	93.1%	11	Adopted	-
Arkansas	-	-	N/A	Adopted	-
California	21.1%	78.9%	22	Adopted	SPA
Colorado	16.9%	83.1%	2	Adopted	-
Connecticut	100.0%	0.0%	N/A	Adopted	SPA
DC	22.0%	78.0%	2	Adopted	-
Delaware	5.8%	94.2%	4	Adopted	-
Florida	8.0%	92.0%	17	Not Adopted	waiver
Georgia	27.0%	73.0%	4	Not Adopted	-
Hawaii	<0.1%	99.9%	5	Adopted	-
Idaho	5.0%	95.0%	N/A	Not Adopted	-
Illinois	26.2%	73.8%	9	Adopted	-
Indiana	20.0%	80.0%	4	Adopted	SPA
Iowa	7.4%	92.6%	3	Adopted	state-run FP program
Kansas	5.0%	95.0%	3	Not Adopted	-
Kentucky	9.0%	91.0%	5	Adopted	-
Louisiana	8.0%	92.0%	5	Adopted	SPA

Maine	-	-	N/A	Adopted	SPA
Maryland	10.8%	89.2%	8	Adopted	waiver
Massachusetts	31.0%	69.0%	6	Adopted	-
Michigan	25.5%	74.5%	11	Adopted	-
Minnesota	24.0%	76.0%	8	Adopted	SPA
Mississippi	30.0%	70.0%	2	Not Adopted	waiver
Missouri	24.2%	75.8%	3	Not Adopted	state-run FP program
Montana	28.0%	72.0%	N/A	Adopted	waiver
Nebraska	0.4%	99.6%	3	Not Adopted	-
Nevada	22.0%	78.0%	3	Adopted	-
New Hampshire	4.1%	73.0%	2	Adopted	SPA
New Jersey	4.2%	95.8%	5	Adopted	-
New Mexico	11.3%	88.7%	4	Adopted	SPA
New York	17.3%	82.7%	23	Adopted	SPA
North Carolina	10.0%	90.0%	N/A	Not Adopted	SPA
North Dakota	35.0%	65.0%	1	Adopted	-
Ohio	11.5%	88.5%	5	Adopted	-
Oklahoma	24.9%	75.1%	N/A	Not Adopted	SPA
Oregon	11.0%	89.0%	16	Adopted	waiver
Pennsylvania	17.7%	82.3%	9	Adopted	SPA
Rhode Island	9.6%	90.4%	3	Adopted	waiver
South Carolina	24.0%	76.0%	5	Not Adopted	SPA

South Dakota	20.0%	80.0%	N/A	Not Adopted	-
Tennessee	0.0%	100.0%	4	Not Adopted	-
Texas	8.1%	91.7%	19	Not Adopted	state-run FP program
Utah	15.1%	84.9%	4	Not Adopted	-
Vermont	37.0%	63.0%	N/A	Adopted	state-run FP program
Virginia	24.0%	76.0%	6	Not Adopted	SPA
Washington	13.0%	87.0%	5	Adopted	waiver
West Virginia	20.0%	80.0%	4	Adopted	-
Wisconsin	33.0%	67.0%	19	Not Adopted	SPA
Wyoming	99.8%	0.2%	N/A	Not Adopted	waiver
Source(s)	("Share of Medicaid Population Covered under Different Delivery Systems," 2017)	("Share of Medicaid Population Covered under Different Delivery Systems," 2017)	("Total Medicaid MCOs," 2017)	("Status of State Action on the Medicaid Expansion Decision," 2017)	("States That Have Expanded Eligibility for Coverage of Family Planning Services Under Medicaid," 2017)
Definitions & Notes		*Percentage includes both MCOs and PCCMs.*	*N/A: Not applicable. The state had no contracts with MCOs.*		*SPA = State Plan Amendment*

Survey Results: Overview

Health centers in all 50 states and DC responded to the survey for a total of 546 responses (41% response rate). The health centers that responded to the survey are generally similar to non-responding health centers in terms of size and location; there were no significant differences between health centers that responded to the survey and non-responders for rural vs. urban location, number of patients served, or number of patient visits. Table 4.3 shows descriptive results for all survey respondents. All results presented in this section are weighted percentages or means.

Health centers were roughly evenly divided between urban locations (48.1%) and either rural (42.4%) or suburban (9.5%); for bivariate and multivariate analyses, rural and suburban health centers are grouped together. Nearly two-thirds of respondents (64.6%) were located in states that had opted into ACA Medicaid expansion as of July 2017. Over half (59%) were located within 30 miles of a free-standing family planning clinic.

The mean number of sites within a health center grantee organization providing comprehensive medical care was 5.45 and the mean number providing family planning care was 5.02. The mean number of annual patient visits was 26,640, and the median number of visits was 15,000 (data not shown); in bivariate analyses, health centers are grouped into small (below median number of visits) and large (at or above median number of visits).

Just over one-fourth of health centers responding to the survey receive Title X funding (28.1%), and the vast majority participate in the 340B program (93.5%).

Table 4.3 Characteristics of Survey Respondents (2017)	
	Proportion of Health Centers
Location	
Urban	48.1%
Rural	42.4%
Suburban	9.5%
In ACA Medicaid Expansion State (as of July 2017)	64.6%
Family Planning Clinic Located within 30 Miles of Health Center	59.0%
Size	**Mean**
Number of Sites Providing Comprehensive Medical Care	5.45
Number of Sites Providing Family Planning	5.02
Number of Annual Patient Visits	26,640
Participation in Public Financing Programs	**Proportion of Health Centers**
Receives Title X	28.1%
Participates in 340B	93.5%
Staffing†	**Proportion of Health Centers**
At Least 1 FTE OB/GYN	22.5%
At Least 1 FTE CNM	14.9%
At least 1 FTE pharmacy staff	39.4%
Patient Population†	**Mean Proportion of Total Patients**
Proportion Women of Reproductive Age	25.0%
Proportion Black	18.8%
Proportion Latinx	27.3%
Proportion Covered by Medicaid	43.0%
Proportion Covered by Private Insurance	19.9%
Provision of Contraceptive Medications‡	**Proportion of Health Centers**
Dispensed by provider	35.4%
On-site pharmacy	47.6%
Off-site contract pharmacy	79.2%
Don't know	1.2%
† Survey data supplemented with 2017 UDS data for the indicated variables	
‡ Survey instructed respondents to "check all that apply" (percentages sum to >100%)	

Under one-fourth (22.5%) employ at least one full-time OB/GYN, under one-fifth employ one certified nurse midwife (CNM) (14.9%), and over one-third employ at least one pharmacy staff (39.4%) (all defined by total FTE).

On average, one-quarter (25%) of patients are women of reproductive age (15-44), one-fifth (18.8%) are black, one-fourth are Latinx (27.3), nearly half (43%) are covered by Medicaid, and one-fifth are covered by private insurance (19.9%).

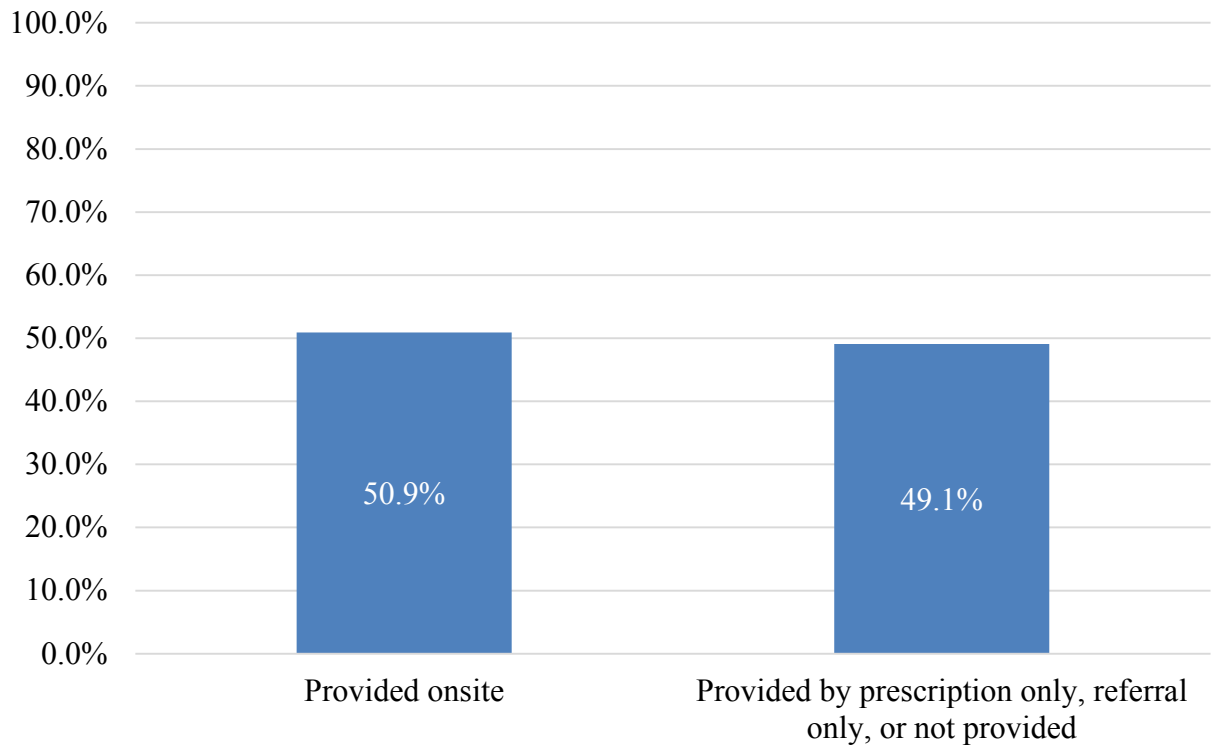
Finally, health centers provide contraceptive medications through a combination of dispensing by provider (35.4%), on-site pharmacies (47.6%), off-site contract pharmacies (79.2%), or combinations thereof.

Survey Results: Health Centers Offering OCs On-Site

The survey asked health centers to identify practices at their largest site providing family planning services; all results reported below refer to practices at this site and are statistically significant at $p<0.05$ unless otherwise noted. One-half of sites (50.9%) provide OCs on-site, and 49.1% provide OCs either by prescription only, by referral, or do not provide OCs at all (see Figure 4.1).

Table 4.4 shows the results of bivariate analyses for selected health center characteristics associated with providing OCs on-site (vs. by prescription, referral, or not providing). Health centers that receive Title X funding are significantly more likely to provide OCs on-site than health centers that do not receive Title X funding (78.4% vs. 40.8%). Similarly, health centers that participate in the 340B program are more likely to

Figure 4.1 Proportion of Health Centers Providing OCs On-Site



provide OCs on-site than health centers that do not (52.2% vs. 26.4%). However, it is important to note that the vast majority of health centers participate in 340B, so this finding does not apply to a large number of sites overall; health centers that do not participate in 340B are significantly more likely to be small, rural/suburban, and not to

receive Title X funding. Large health centers are more likely to provide OCs on-site than small health centers (55.6% vs. 44.1%), and urban health centers are more likely to provide OCs on-site than rural or suburban health centers (55.1% vs. 47.3%). Finally, health centers with a high proportion of women of reproductive age (out of total patients) are more likely to provide OCs on-site than health centers with a low proportion (54.5% vs. 47.5%). Additional bivariate analyses examined on-site provision by: proportion of Medicaid patients; proportion of private insurance patients; location in an ACA Medicaid expansion state; and location within 30 miles of a free-standing family planning clinic, but these results were not statistically significant.

Table 4.4 Health Center Characteristics Associated with Providing OCs On-Site			
	OCs Provided On-Site	OCs Not Provided On-Site	Chi-squared
Title X †	78.4%	21.6%	**p < 0.001**
Not Title X	40.8%	59.2%	
340B	52.2%	47.8%	**p < 0.001**
Not 340B	26.4%	73.6%	
Small	44.1%	55.9%	**p < 0.001**
Large	55.6%	44.4%	
Rural or suburban	47.3%	52.7%	**p < 0.001**
Urban	55.1%	44.9%	
Low proportion women of reproductive age	47.5%	52.5%	**p < 0.01**
High proportion women of reproductive age	54.5%	45.5%	
† Note: 28.1% of health centers receive Title X funding			

Survey Results: Health Centers Offering a One-Year Supply of OCs On-Site

The survey asked health centers offering OCs on-site to identify the maximum supply that a patient could pick up at a single visit. Among health centers offering OCs on-site, only 29.9% offer up to a one-year supply at a time. The most common practice is offering a three-month supply (43.6% of health centers). Very few (6.9%) limit supply to one month, and about one-fifth allow (19.6%) allow a six-month supply (see Figure 4.2).

Figure 4.2 Maximum Supply of OCs Available Among Health Centers Providing OCs On-Site

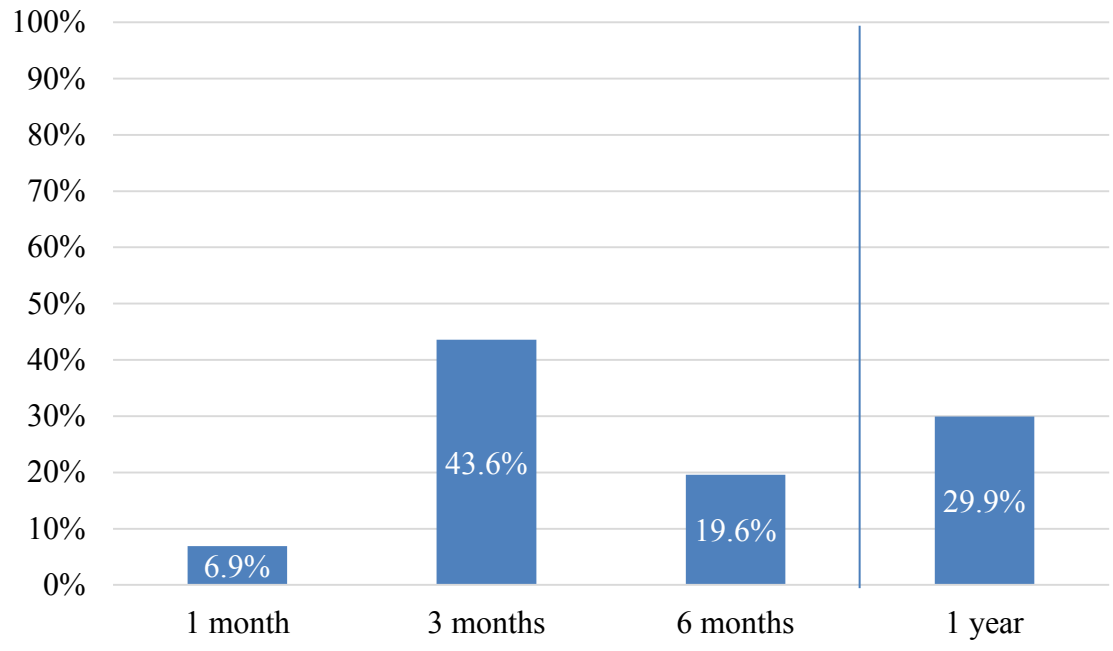


Table 4.5 shows the results of bivariate analyses for health center characteristics related to health center structure and funding that are associated with providing a one-year supply of OCs on-site (vs. one, three, or six months). There were no statistically significant differences between health centers that receive Title X funding and health

centers that do not. Health centers that participate in the 340B program are substantially more likely to provide a one-year supply on-site than health centers that do not (31.2% vs. 6.3%). Large health centers are more likely to provide a one-year supply on-site than small health centers (32.1% vs. 26.3%), and rural or suburban health centers are more likely to provide a one-year supply on-site than urban health centers (37.6% vs. 22.6%). Health centers that are not located within 30 miles of a freestanding family planning clinic are more likely to offer a one-year supply on-site than health centers that are (33.6% vs. 27.4%).

Table 4.5 Health Center Characteristics Associated with Providing a One-Year Supply of OCs On-Site: Structure and Funding

	One Year	1/3/6 months	Chi-squared
Title X	28.8%	71.2%	p = 0.27
Not Title X	31.8%	68.2%	
340B	31.2%	68.8%	**p < 0.001**
Not 340B	6.3%	93.7%	
Small	26.3%	73.8%	**p < 0.05**
Large	32.1%	67.9%	
Rural or suburban	37.6%	62.4%	**p < 0.001**
Urban	22.6%	77.4%	
Family planning clinic w/in 30 miles	27.4%	72.6%	**p < 0.05**
No family planning clinic w/in 30 miles	33.6%	66.4%	

Note: Bolded p-values indicate results statistically significant at p <0.05

Table 4.6 shows the results of bivariate analyses for health center characteristics related to patient demographics. There were no statistically significant differences between health centers that have a: high proportion of women of reproductive age, high

proportion of Medicaid patients, or a high proportion of Black patients (all compared with low proportions). Health centers with a *high* proportion of private insurance patients are more likely to provide a one-year supply on-site than health centers with a low proportion (34.6% vs. 24.5%), and health centers with a *low* proportion of Latinx patients are more likely to provide a one-year supply on-site than health centers with a high proportion (36.7% vs. 23.1%).

Table 4.6 Health Center Characteristics Associated with Providing a One-Year Supply of OCs On-Site: Patient Demographics

	One Year	1/3/6 Months	Chi-squared
Low Proportion Women of Reproductive Age	32.4%	67.7%	p = 0.06
High Proportion Women of Reproductive Age	27.6%	72.4%	
Low Proportion Medicaid	30.2%	69.8%	p = 0.82
High proportion Medicaid	29.6%	70.4%	
Low Proportion Private Insurance	24.5%	75.5%	**p < 0.001**
High Proportion Private Insurance	34.6%	65.4%	
Low Proportion Black	28.6%	71.5%	p = 0.28
High Proportion Black	31.3%	68.7%	
Low Proportion Latinx	36.7%	63.3%	**p < 0.001**
High Proportion Latinx	23.1%	76.9%	

Note: All variables defined as below median proportion of population of interest (i.e., low proportion) vs. at or above median proportion of population of interest (i.e., high proportion).
Note: Bolded p-values indicate results statistically significant at p <0.05

Table 4.7 shows the results of bivariate analyses for health center characteristics related to staffing. There were no statistically significant differences between health

centers that have at least one FTE certified nurse midwife (vs. less than one FTE) or between health centers that have at least one FTE pharmacy staff. Health centers with at least one OBGYN are *less* likely to provide a one-year supply on-site than health centers with less than one OBGYN (24.4% vs. 32.0%), and health centers with at least one OBGYN plus at least one pharmacy staff were *less* likely to provide a one-year supply on-site (24.0% vs. 31.3%). Similarly, health centers were more likely to provide a one-year supply on-site if they had at least one pharmacy staff and less than 1 FTE OBGYN or at least one pharmacy staff and less than 1 FTE CNM (data not shown).

Table 4.7 Health Center Characteristics Associated with Providing a One-Year Supply of OCs On-Site: Staffing

	One Year	1/3/6 Months	Chi-squared
At least 1 FTE OBGYN	24.4%	75.6%	**p < 0.01**
Less than 1 FTE OBGYN	32.0%	68.0%	
At least 1 FTE CNM	25.2%	74.8%	p = 0.10
Less than 1 FTE CNM	30.8%	69.2%	
At least 1 FTE Pharmacy Staff	31.7%	68.3%	p = 0.12
Less than 1 FTE Pharmacy Staff	27.7%	72.3%	
At least 1 FTE OBGYN and at least 1 FTE Pharmacy Staff	24.0%	76.1%	**p < 0.05**
Less than 1 FTE OBGYN and/or less than 1 FTE Pharmacy Staff	31.3%	68.7%	
At least 1 FTE CNM and at least 1 FTE Pharmacy Staff	30.2%	69.8%	p = 0.46
Less than 1 FTE CNM and/or less than 1 FTE Pharmacy Staff	27.2%	72.8%	

Note: Bolded p-values indicate results statistically significant at p <0.05

Table 4.8 shows the results of bivariate analyses for health center characteristics related to state policy. There were no statistically significant differences for health centers that are located in ACA Medicaid expansion states (vs. non-expansion states), states with Medicaid coverage for a one-year supply (vs. states without Medicaid coverage, irrespective of private insurance coverage), or states with category A policy (vs. states with category B, C, or D, as described above).[c] Health centers located in states with private insurance coverage for a one-year supply are more likely than states without private coverage (irrespective of Medicaid coverage) to offer a one-year supply (33.8% vs. 28.3%). Health centers in states with policies in category A or B are more likely than health centers in states with policies in category C or D to offer a one-year supply on-site (31.6% vs. 28.3%), but this finding was not statistically significant. However, it is important to note that, even in category A or B states, providing a one-year supply is still not the norm (i.e., the majority of health centers do not provide it).

Table 4.9 shows the full multivariate logistic regression model for providing a one-year supply on-site. This model includes all factors that were statistically significant in the bivariate analyses, with the addition of the variable for at least one FTE pharmacy staff because this variable serves as a proxy for the presence of an on-site pharmacy. For the state policy categories, category C serves as the reference because it is the most common: three states were category A, 11 were category B, 31 were category C, and 6

[c] State coverage policy categories are as follows: (A) 12 months covered under all coverage mechanisms; (B) 12 months covered under either private insurance or any Medicaid coverage mechanism; (C) limited to less than 12 months under all coverage mechanisms; and (D) inconclusive and/or details missing from documentation.

were category D. Variables for size and proportions of patient population were treated as continuous in this model.

Table 4.8 Health Center Characteristics Associated with Providing a One-Year Supply of OCs On-Site: State Policy			
	One Year	1/3/6 Months	Chi-squared
ACA Medicaid Expansion State	28.1%	71.9%	p = 0.06
ACA Medicaid Non-expansion State	33.1%	66.9%	
State Medicaid coverage for one-year supply	29.6%	70.4%	p = 0.86
No state Medicaid coverage for one-year supply	30.1%	69.9%	
State private insurance coverage for one-year supply	33.8%	66.2%	**p < 0.05**
No state private insurance coverage for one-year supply	28.3%	71.7%	
State Policy Category A	26.6%	73.4%	p = 0.31
State Policy Category B, C, or D	30.5%	69.6%	
State Policy Category A or B	31.6%	68.4%	p = 0.19
State Policy Category C or D	28.3%	71.7%	
State Policy Category A	26.6%	73.4%	**p < 0.01**
State Policy Category B	33.5%	66.5%	
State Policy Category C	31.5%	68.5%	
State Policy Category D	18.9%	81.1%	

Note: Bolded p-values indicate results statistically significant at p <0.05

State policy category definitions:
(A) 12 months covered under all coverage mechanisms
(B) 12 months covered under either private insurance or any Medicaid coverage mechanism
(C) limited to less than 12 months under all coverage mechanisms
(D) inconclusive and/or details missing from documentation

Table 4.9 Multivariate Regression Model for Health Center Characteristics Associated with Providing a One-Year Supply of OCs On-Site			
	Odds Ratio	SE	p-value
340B [a]	6.12	3.12	**< 0.001**
Size	1.03	0.01	0.05
Urban [b]	0.50	0.08	**< 0.001**
Family planning clinic within 30 miles [c]	0.97	0.15	0.85
Proportion Medicaid	1.33	0.78	0.63
Proportion private insurance	0.61	0.47	0.53
Proportion Latinx patients	0.46	0.17	**0.04**
Proportion Black patients	1.39	0.49	0.35
At least 1 FTE OBGYN [d]	0.98	0.27	0.95
At least 1 FTE pharmacy staff [e]	1.40	0.23	**0.04**
At least 1 FTE OBGYN and at least one FTE pharmacy staff [f]	0.53	0.17	0.06
Medicaid expansion state	0.67	0.14	0.06
State private insurance coverage for one-year supply	1.66	0.36	**0.02**
State policy category A	0.89	0.27	0.71
State policy category B	1.01	0.19	0.97
State policy category D	0.65	0.15	0.07
a Reference group: not 340B *b Reference group: rural/suburban* *c Reference group: no family planning clinic within 30 miles* *d Reference group: less than 1 FTE OBGYN* *e d Reference group: less than 1 FTE pharmacy staff* *f Reference group: less than 1 FTE OBGYN and/or less than 1 FTE Pharmacy Staff* *g Reference group: state policy category C*			

In this model, health centers that participate in 340B are about six times as likely to offer a one-year supply on-site, although (as noted above) the vast majority of health centers participate in 340B. Health centers located in urban areas and health centers with higher proportions of Latinx patients are about half as likely to offer a one-year supply on-site. Health centers with at least one FTE pharmacy staff are 40% more likely to provide a one-year supply on-site. Lastly, health centers located in states with private

insurance coverage for a one-year supply are 66% more likely to offer a one-year supply on-site. No other factors are statistically significant.

Survey Results: Barriers Reported by Health Centers for Not Offering A One-Year Supply of OCs On-Site

Health centers that do not provide a one-year supply on-site were asked to categorize five potential barriers as a major barrier, minor barrier, not a barrier, or not applicable. The potential barriers were: Medicaid reimbursement, private insurance reimbursement, grant funding, stocking medications, and lack of on-site pharmacy

Figure 4.3 shows the proportion of health centers reporting Medicaid reimbursement as a barrier. The most common responses were not a barrier (32.8%) and major barrier (29.6%). Health centers were more likely to report Medicaid reimbursement as a major barrier (vs. minor barrier, not a barrier, or N/A) if they: participated in 340B; were a large health center; had a low proportion of Medicaid patients; had a high proportion of private insurance patients; were not located in an ACA Medicaid expansion state; or were located in a state without Medicaid coverage for a one-year supply or a state in policy category C or D as listed in Table 4.1 (data not shown).

Figure 4.3 Proportion of Health Centers Reporting Medicaid Reimbursement as a Barrier to Providing a One-Year Supply of OCs On-Site

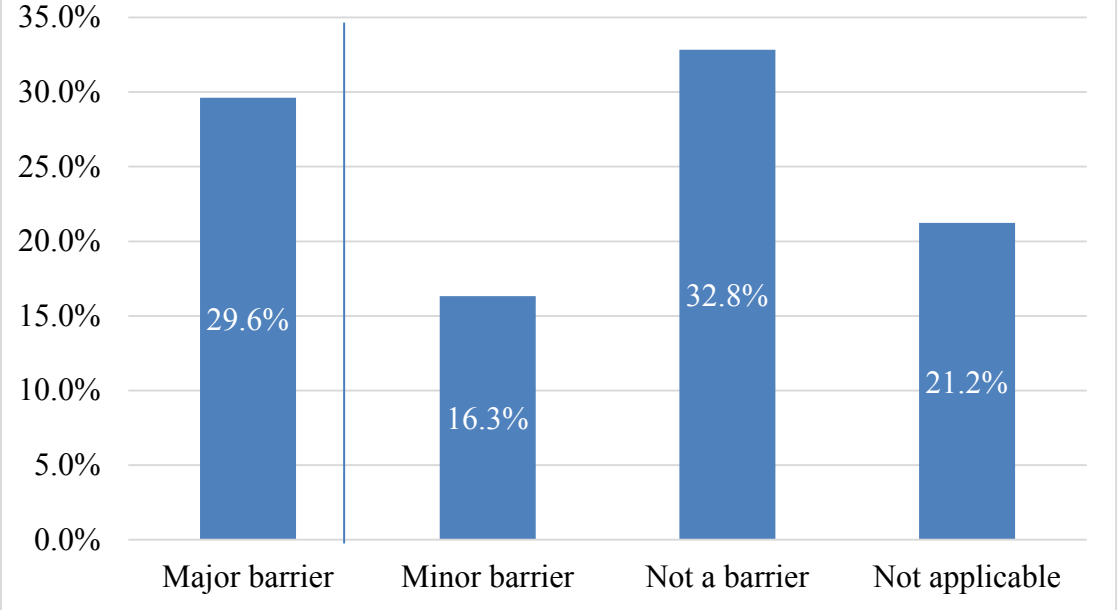


Figure 4.4 shows the proportion of health centers reporting private insurance reimbursement as a barrier. The most common responses again were not a barrier (31.0%) and major barrier (27.5%). Health centers were more likely to report private insurance reimbursement as a major barrier (vs. minor barrier, not a barrier, or N/A) if they: participated in 340B; had a low proportion of Medicaid patients; had a high proportion of private insurance patients; were not located in an ACA Medicaid expansion state; or were located in a state without private insurance coverage for a one-year supply or a state in policy category C or D as listed in Table 4.1 (data not shown).

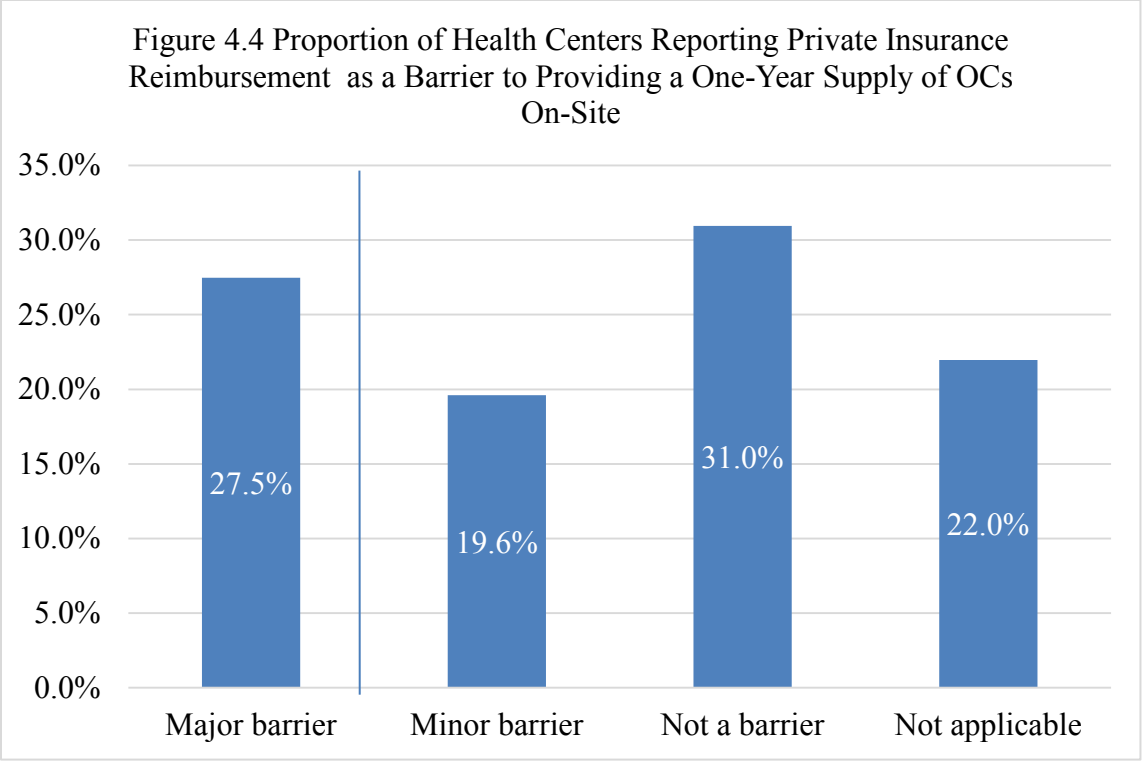


Figure 4.5 shows the proportion of health centers reporting grant funding as a barrier. The most common responses were major barrier (30.2%) and N/A (28.1%). Health centers were more likely to report grant funding as a major barrier (vs. minor barrier, not a barrier, or N/A) if they: did not receive Title X funding; or were located in a rural or suburban area (data not shown).

Figure 4.5 Proportion of Health Centers Reporting Grant Funding as a Barrier to Providing a One-Year Supply of OCs On-Site

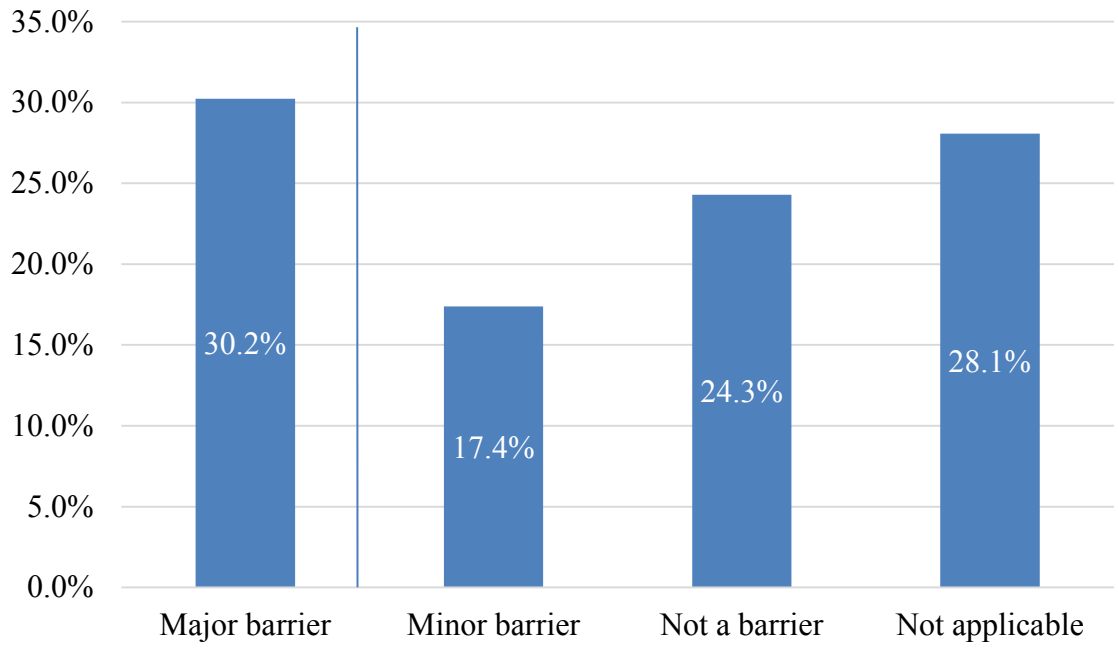


Figure 4.6 shows the proportion of health centers reporting stocking as a barrier. The most common responses were not a barrier (32.7%) and minor barrier (25.7%). Health centers were more likely to report stocking medications as a major barrier (vs. minor barrier, not a barrier, or N/A) if they: did not participate in 340B; were a small health center; or were located in a rural or suburban area (data not shown).

Figure 4.6 Proportion of Health Centers Reporting Stocking Medications as a Barrier to Providing a One-Year Supply of OCs On-Site

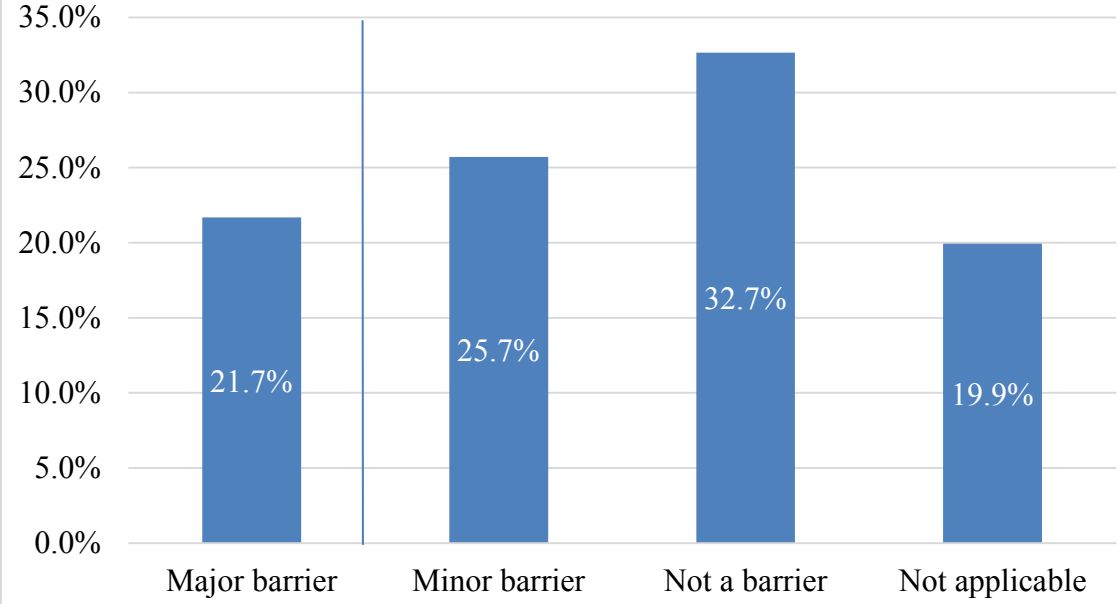
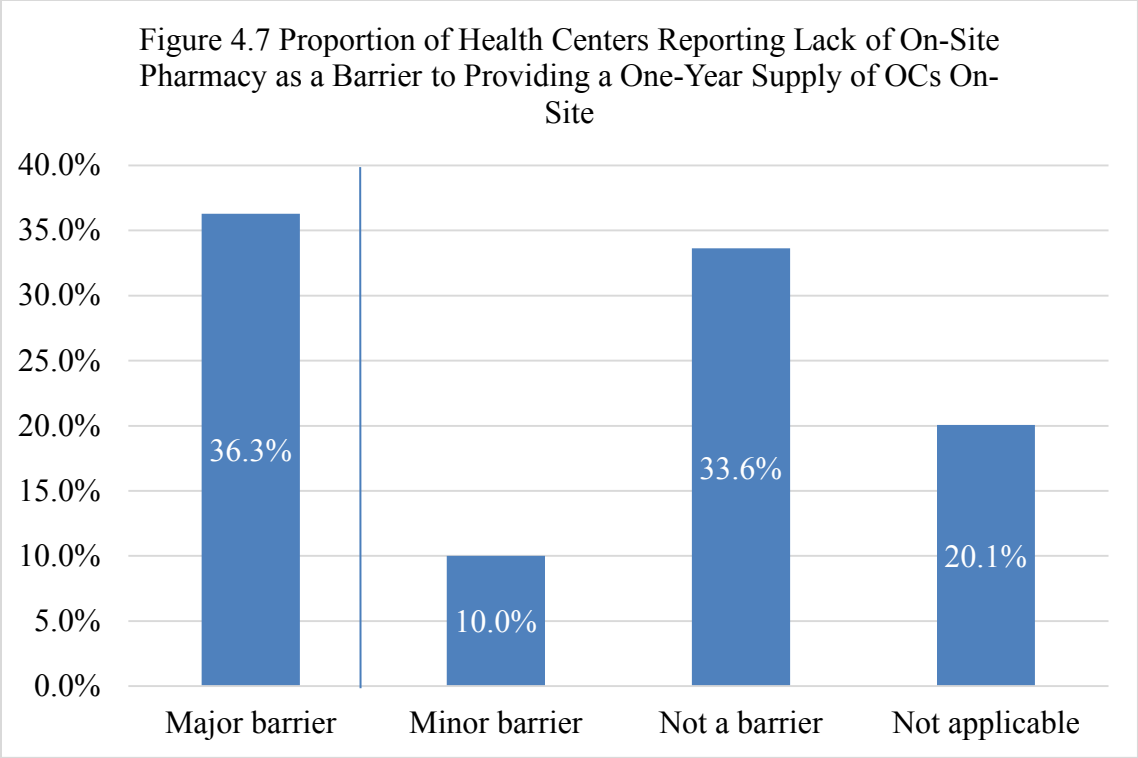
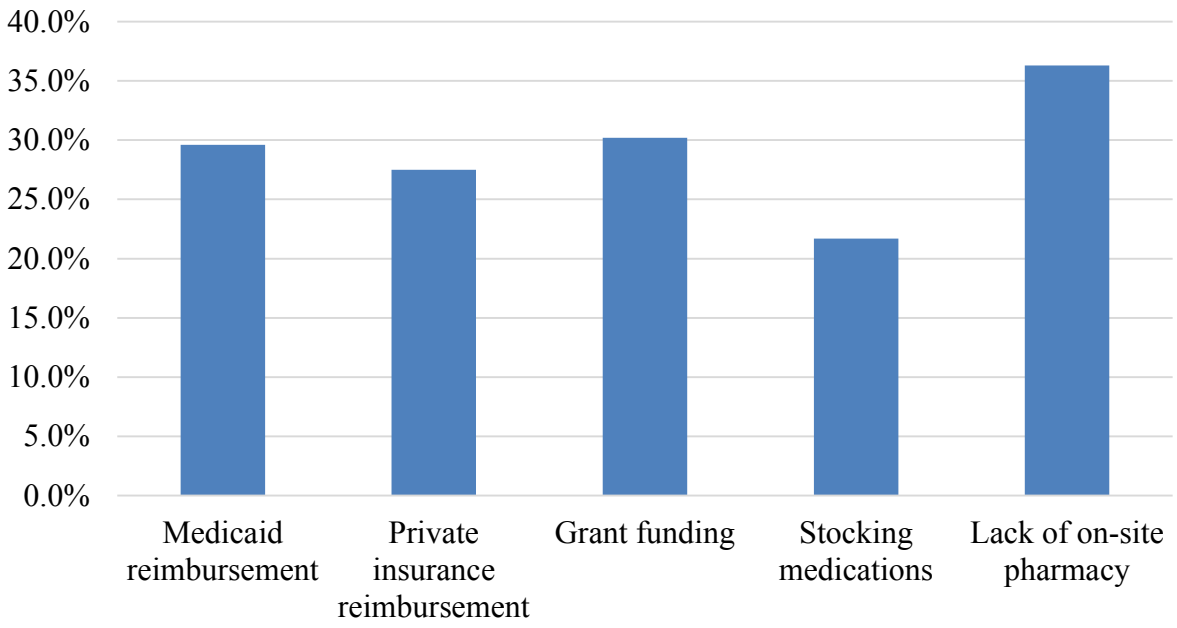


Figure 4.7 shows the proportion of health centers reporting lack of an on-site pharmacy as a barrier. The most common responses were major barrier (36.3%) and not a barrier (33.6%); this barrier was the one with the highest proportion of health centers reporting it as a major barrier. Health centers were more likely to report lack of an on-site pharmacy as a major barrier (vs. minor barrier, not a barrier, or N/A) if they: did not receive Title X funding; did not participate in 340B; were a small health center; were located in a rural or suburban area; or did not have at least one FTE pharmacy staff; had a low proportion of women of reproductive age as patients; had a low proportion of Medicaid patients; or had less than one FTE pharmacy staff (data not shown).



For comparison across categories, Figure 4.8 shows the proportion of health centers categorizing each potential barrier as a major barrier.

Figure 4.8 Proportion of Health Centers Reporting Major Barriers to Providing a One-Year Supply of OCs On-Site



Survey respondents could also write in other barriers not identified above. Sixty-eight respondents provided some type of response to this question, with a range of detail provided. Most responses related to either clinician/pharmacist preferences, existing policies within the organization, and perceptions of patient demand. A few respondents also mentioned reimbursement policy, either through private insurance or Medicaid policy. These responses generally reflect the types of barriers identified during the in-depth interviews (discussed in the next section). Table 4.10 shows selected verbatim responses to the open text field in the survey.

Table 4.10 Selected Open Text Responses for Other Barriers to Providing a One-Year Supply	
1	We are a primary care provider and do not want our patients to only ask for RX refills. We ask to see our patients on a regular preventative basis.
2	Provider comfort level
3	Providers want to do 6 month refills
4	staff attitudes that patients will not return for subsequent visits if given a year of pills, and that we can't afford to provide that for patients without insurance
5	Provider wants to see the patient for follow-up before a twelve month period
6	Pharmacist in charge will not allow to dispense more than 6 months at a time
7	Our primary provider in this area has set a 3 month refill for most patients. Some, due to need can be up to six months. Most patients are not long established to assure tolerance of a year. More a best practice to care rather than other reason.
8	We want to see the patient at least once every 6 months to ensure that all is well. If patient is unable to come in, we still give them additional contraceptives.
9	Provider preference
10	patients lose their meds often
11	There is insufficient demand; and we don't charge for medications, so we can't afford to stock them and have them go out of date
12	Patient loss of prescriptions/stolen medications
13	Practice protocol to see patient at least twice per year.
14	Payers only allow a max 90 day script.
15	Most patients cannot afford a years supply

Findings from In-Depth Interviews: Overview

Twenty-two interviewees at four health centers in three states participated in in-depth, semi-structured interviews. Participants included clinicians (MD, DO, and NP); clinic leadership (CEO, CFO, and CMO); and other staff knowledgeable about family planning practices (pharmacy staff, reproductive care coordinator, family planning team

members, and quality improvement staff). The three states included one policy category A state (12 months covered under all coverage mechanisms); one category B state (12 months covered under either private insurance or any Medicaid coverage mechanism); and one category C state (limited to less than 12 months under all coverage mechanisms). The category B state had recently passed legislation allowing a one-year supply under private plans but the legislation had not gone into effect when the interviews were conducted. Two health centers were located in urban areas, one was located in a suburban area, and one was located in a rural area; two were located on the East Coast, one was located in the Midwest, and one was located in the Pacific Northwest. Two were small, and two were large.

Findings from In-Depth Interviews: Policies and Practices for Providing a One-Year Supply On-Site

Although two health centers reported providing a one-year supply and two reported providing a three-month supply in their survey responses, interviews revealed more variation in the actual policies and practices of the health centers. Table 4.11 shows selected quotations from staff members describing these practices within each health center.

At Health Center 1, the survey response indicated that a one-year supply was available. However, staff members either indicated that they were not sure what the true practice was (see Table 4.11, quotations 1 and 2) or that providing less than a one-year supply was the common practice at their internal pharmacy. Several interviewees

suggested that the insurance dictated how many packs a patient could pick up (see quotation 3), which is consistent with the state being a policy B state.

Staff at Health Center 2 stated that patients could generally pick up three months, which matched the survey response, or six months in special cases (see quotation 4). However, without an on-site pharmacy, staff noted that most patients obtained their prescriptions at outside pharmacies; the remaining patients could obtain supplies on-site covered by Title X through provider dispensing (see quotation 5). Health center leadership indicated that they would be open to considering providing a one-year supply in the future (see quotation 6).

Health Center 3 had previously dispensed family planning medications on-site but had since stopped. Staff noted that patients either opted for outside pharmacies (see quotation 7), where dispensing depended on insurance, or for their internal pharmacies, where patients could pick up no more than three months (see quotations 8-10); these responses corresponded with their survey response (maximum of three months).

Health Center 4 indicated on their survey that a one-year supply was available, but staff members suggested that most patients picked up prescriptions at outside pharmacies, and that at internal (contract) pharmacies, the common practice was to provide three months (see quotations 11 and 12). Several staff members indicated that being able to provide three months at a time represented an improvement from the previous practice of providing a single month at a time (see quotations 13 and 14).

Table 4.11 Selected Quotations on Practices and Policies of Providing a One-Year Supply		
	Staff Type	**Quotation**
	Health Center 1: small site, rural, state policy category B	
1	**Leadership**	About a year ago I was doing that and I never heard whether they really were getting the years supply or not. We never withhold refills for an oral contraceptive.
2	**Clinician**	When I first got here I was saying I wanted that to happen, you know, 'cause that seems to be the best way to do it and the most effective in terms of people preventing an unintended pregnancy. I haven't checked into it recently but I thought it had been corrected so we could do that. I think it's not an issue - it was routinely done for a time period - I have not routinely done that, I have to say. Not that I don't want to, but I just, I haven't checked into it recently.
3	**Pharmacist**	Interviewee: Well, we don't generally have the space to stock an entire year of contraceptives, but we have had a few requests so we do that, it's usually the next day they have to pick up the remainder of whatever. We don't see that a lot, but yes they are able to on some plans. Interviewer: Most of the time they just get one month or a few months? Or what's the usual -? Interviewee: Well, Medicaid, some of them it seems they want us to do a month at a time. Some of them want a year at a time. But most of the time it's one month.
	Health Center 2: small site, urban, state policy category A	
4	**Clinician**	We do know there's this [state] law that lets people get up to 12 months, but the pharmacies often don't respect that. We just decided we're going to print copies of the law to give to the patient to take, because yeah. But, when we dispense them here, we usually give them three months, and sometimes six months, just because we're kind of making sure we're utilizing these resources most effectively and if someone is not sure they're going to stick with it, or something like that then we might have them back in three months. But I definitely have some patients who live out in [another] county I'll give them six months at a time.
5	**Other staff**	If it's an uninsured patient, it's hard for me to be able to give six months to a year's worth of birth control just because depending on the pricing and the 340B pricing that I get and depending on the method.
6	**Leadership**	Interviewer: And do you think providing the one-year supply on-site ... is that something that you guys would ever consider in the future? Interviewee: Yeah, I think so. Yeah, I think we definitely could. Particularly if we put it in advance and just bought more pills at the beginning. And yeah, I don't think it's out of the question to do.

	Health Center 3: large site, suburban, state policy category C	
7	**Clinician**	Interviewer: And for the pills specifically, are you able to provide more than a month at a time, or do they have to come back in every month to pick up a new pack? Interviewee: No, I just write them a prescription. They go to Walgreens and they get a special rate.
8	**Leadership**	As far as picking up a year's worth, most patients aren't going to pay for a year's worth.
9	**Clinician**	I don't think we've done that. I don't know ... I'm not aware that we've even considered doing that 'cause then we have lots of drugs that we're handing out.
10	**Pharmacist**	We usually limit our patients to three months at a time, max, similar to what typically you find in a retail environment.
	Health Center 4: large site, urban, state policy category A	
11	**Clinician**	Because the majority of our patients have insurance, they're getting - their ongoing access to pills would be at a pharmacy. So, we have it available for patients without insurance. But for them, our protocol is that it's dispensed through a provider appointment. … We can give up to like three or four months at a time. We don't have that many patients who are requiring that because they have access elsewhere. … but they can definitely get it from us, on an ongoing basis, they can get it from us. It's just that within [this state] the access is just different. So, we haven't tried to make that available, we haven't - there isn't a tremendous need for that.
12	**Clinician**	If the patient doesn't have insurance, we'd dispense three packs at a time. If the patient is a minor and doesn't feel comfortable going to the pharmacy, wants to maintain confidentiality or a patient of any age who is interested in maintaining confidentiality and not going to the pharmacy, I would dispense up to three packs of whatever, pill/patch/ring, at a time and then give them a prescription.
13	**Clinician**	Interviewee: It's a contract pharmacy. Interviewer: And they're only doing one month at a time? Interviewee: I have had a frustration trying to work even with the ones that are co-located with us to try and get them. Unfortunately, we have not been able to make that a priority. We have so many competing priorities even among family planning. It's certainly on our radar, but it's not something that we've been able to really advocate to the pharmacies that that is important. In general, I think the three to six months is sometimes easier for patients to manage, but heck, if somebody wants a year, I don't care.

14	**Clinician**	I don’t know if anyone got it yet. They definitely are able to get three months and that used to not be the case. That was just exciting, three months. I have tried, and I have not followed-up to see if anyone got twelve months. But the three months is a huge difference than one month. One month, the chance that you’re going to go back is hard.

Findings from In-Depth Interviews: Clinician and Pharmacist Processes and Preferences for Providing OCs

A lot of the variation and discrepancies in the policies and practices for dispensing OCs seems to derive from clinician (or pharmacist) preferences around providing OCs. In this way, clinician preferences could serve as either a barrier or a facilitator, depending on the health center.

Clinicians, including those in leadership positions, at Health Center 1 talked about their preferences for long-acting reversible contraceptive (LARC) methods instead of providing pills (see Table 4.12, quotations 1 and 2). This preference seemed to shift their focus away from meeting best practices related to pills, and many did not in fact know whether their health center could provide more than a single month of pills at a time when patients picked them up onsite. In addition, the pharmacy staff did not believe that there was an advantage to providing a full year's supply at once and expressed concerns about wasting pills (see quotation 3).

Although Health Center 2 did not routinely provide a one-year supply, most staff seemed amenable to changing their practices in the future (see quotations 4 and 5). Because they did not have an on-site pharmacy, all OCs are dispensed through provider dispensing, which allowed them the flexibility to take unopened pills back in case a patient wanted to switch methods or stop using them mid-year (see quotation 5).

At Health Center 3, clinicians and pharmacy staff expressed a lack of trust in the patients' ability to return to the clinic for follow-up appointments (i.e., a lack of "personal responsibility") or to keep track of multiple packs of pills at once (see quotations 6, 7, and 9). Clinical staff and pharmacy staff did not anticipate future changes to their

practices in this area. Furthermore, both clinical staff and pharmacy staff expressed negative experiences with their previous practices of direct provider dispensing for family planning supplies (see quotation 8); one clinician called the process "a pain," and pharmacy staff expressed concerns about staff who are not trained in pharmacy protocols to provide medication.

Clinicians at Health Center 4 expressed enthusiasm for both their health center's stated policy and the recent state law allowing a one-year supply, even if most patients were not actually able to pick up a full year at once. Most clinicians left it up to the patient to determine how much supply they chose to pick up at a time, whether it was a single month at a time or a full year (see quotation 10), and did not require a follow-up visit to obtain more pills (see quotation 11). In addition, one clinician expressed interest in determining the point at which certain patients taking OCs would sometimes come back to the health center with unintended pregnancies and using that information to change their practices around providing a larger supply when possible (see quotation 11).

Table 4.12 Selected Quotations on Clinician and Pharmacist Processes and Preferences for Providing OCs		
	Staff Type	**Quotation**
	Health Center 1: small site, rural, state policy category B	
1	**Clinician**	I think most of the providers actually try to encourage the LARCs as opposed to birth control pills just because they're so much more effective.
2	**Leadership**	Most patients are an open book and they're interested in learning about what methods there are available. I am a huge LARC fan and so I push the IUDs and the Nexplanon, especially if I know the patient, and I know they're not going to be reliable to take a pill.
3	**Pharmacist**	I have another pharmacist, and we've talked about this before, but having an entire year's worth of your medication at your house to me doesn't seem like a great idea because a lot of these people are younger women, maybe students, maybe they move twice a year. You're going to lose it. I've actually have that happen where they lose it, and then it's a little harder to get it, and maybe you're not going to wait around for the phone call that the pharmacy has to make. I am not a real great supporter of that because I know myself, you know that's 12 packets of stuff, it's about that big. You've got to remember where you put it and all that business.
	Health Center 2: small site, urban, state policy category A	
4	**Other staff**	I think the reason why we don't give a year's worth for various reasons is if we know that this patient might not come back for an abnormal pap for a follow-up, so having that be an initiative. I don't think any of our providers would ever want to deny birth control, do you know what I mean?
5	**Leadership**	I think most providers would probably say, "Go for it." I think there's some that might be concerned of side effects, but if the package is unopened, it's our supply. We can take it back. It's not - because it's not a prescription that has someone's name on it that's specific. I don't see why we couldn't just put it back on our shelf if it was untampered with and the packaging was still closed.
	Health Center 3: large site, suburban, state policy category C	
6	**Clinicians**	Interviewee 1: There's a certain percentage of that, in all things I think there's a certain percentage of personal responsibility. Interviewee 2: And lack of personal responsibility.

7	**Pharmacist**	What we found is, there is a lot of issues with lost medications, number one, and, number two, with providers changing what a patient's medications are so when you are providing large amounts at one time, people lose money that way because of those reasons.
8	**Pharmacist**	I think one of the big concerns for me was you had non-pharmacy personnel providing medications to patients and you worry about people that aren't specifically trained in that area, they didn't go to school in that area, they aren't certified or get degreed in that area, providing those medications and then you worry about errors, number one, you worry about patients not being properly informed also for side effects, what to look for.
9	**Clinician**	I mean, I understand it's OCPs or whatever but that's not something that we've ever considered really doing 'cause we do want patients to follow-up periodically and things like that.
	Health Center 4: large site, urban, state policy category A	
10	**Clinician**	I talk to patients about you can get your birth control pill/patch/ring. I was like, "There's a new law in [this state]. You can get up to a year's worth of whatever your method is at a time. You can get that in three, six, a whole year at the same time." Some women prefer to get three months at a time if they're worried about losing them or whatever the case. I'm happy to prescribe them however you want. I have had a really hard time getting the pharmacies to dispense more than three packs at a time.
11	**Clinician**	Anecdotally, the number of times those women come back with positive pregnancy tests tells me that the continuation rates are low, but where that breakdown is happening, is it at four months, is it because they can only get three packs at a time, so it's month four; is it six months? I can't speak particularly to those drivers.
12	**Clinician**	Sometimes I will make them come in and check their blood pressure, if there's some reason for that, but usually not. It's interesting, our population who travel back and forth to Central America, a lot of them buy birth control over the counter. Sometimes if they don't have a refill, they'll go to the *tienda*, like a store in [the area], and you can buy OTC.

Findings from In-Depth Interviews: Organization-Level Strategy & Overall Approach to Family Planning

Preferences at the individual provider level often reflected the organization's overall approach toward family planning and leadership's attitudes about family planning. As with clinician preferences, the organization's approach served as either a barrier or a facilitator, depending on the health center.

At Health Center 1, most clinicians and leadership staff integrated family planning into their regular primary care practices but also did not consider themselves leaders in providing these services within their community. At least one of the eleven providers did not provide any contraception (see Table 4.13, quotation 1). Interestingly, one member of the leadership team suggested that the local Planned Parenthood might be able to provide services more easily for uninsured patients and would therefore suggest that patients obtain services there instead of at the health center (see quotation 2). At the same time, one member of the leadership team did consider that, unlike other clinics where she had previously worked, this health center would not impose unnecessary restrictions on obtaining OCs, such as withholding refills until the patient came in for a follow-up visit (see quotation 3).

Leadership and clinical staff at Health Center 2 stressed their integration of family planning services into their primary care practices and their interests in meeting best practices for providing these services. In contrast to the attitude at Health Center 1 about the local Planned Parenthood clinic being able to provide easier access to care, one clinician noted that their health center might be able to provide a better quality of service because they provide full primary care services in addition to family planning (see

quotation 4). Members of the leadership team also described clinicians' desires to meet best practices for family planning, such as including a discussion about it during every visit, even when family planning had not been the primary reason for the visit (see quotation 5).

Leadership at Health Center 3 considered the organization a center of excellence for primary care (see quotation 7) and expressed support for family planning, but at the same time, both leadership and clinicians described family planning as of secondary importance to their overall approach. For example, clinicians described family planning services as a "limited" part of the family medicine practice (see quotation 6). One member of the leadership team called family planning "desperately needed" within the state but cited state-level policies and lack of consistent funding as impediments to the health center being able to prioritize family planning care within their organization (see quotation 9).

Health Center 4 employed a family planning team that included clinical staff, leadership staff, and other staff focused on quality improvement around family planning care. Multiple members of the team described the quality improvement projects related to family planning care, including creating a manual of family planning services, and talked about using data from their electronic health record (EHR) to drive their efforts in continuing to meet best practices for family planning (see quotations 9, 10, and 12). Family planning was therefore fully integrated into overall primary care practices as an essential component of primary care. Members of the family planning team further characterized health centers leadership as "supportive" of the team's work, including one who noted that "they do recognize us as the expert in that area" (see quotation 10).

Table 4.13 Selected Quotations on Organization-Level Strategy & Overall Approach to Family Planning		
	Staff Type	**Quotation**
	Health Center 1: small site, rural, state policy category B	
1	**Leadership**	[A patient] could see any provider with the exception of one who has religious objections to providing contraception, and he would make an internal referral if that topic came up. So any other provider, so 10 of our 11 would be happy to provide education and a method of her choice, an appropriate, safe method of her choice. And they could have a same day appointment, same week appointment, or schedule out up to five weeks in advance.
2	**Leadership**	We do not have funding, per se, like Planned Parenthood does, to provide services without going through insurance unless they had the ability to pay cash and do a sliding scale based on their own income, which would be probably nothing. But they would have to set that up ahead of time. That's a significant amount of work. So in that case if I really knew what they needed, I would say, "Go to Planned Parenthood because they can get it for you faster than we'll be able to."
3	**Leadership**	We never withhold refills for an oral contraceptive. In the past I've been at clinics where they would say, "You've got to come in for a visit, otherwise we're not refilling your birth control pill." We have an internal policy, I don't know if it's written or not, but we never withhold refills for a woman who's desiring contraception.
	Health Center 2: small site, urban, state policy category A	
4	**Clinician**	Well, I think having the confidential chart, having the on-site treatment, the fact that we can integrate reproductive health with the full scope of services means that people don't have to take themselves to a separate clinic just for their reproductive health services, it can be part of their whole full scope of care. And then, I have a friend who worked at the Planned Parenthood, who's a family nurse practitioner, and the person came in with high blood pressure because they weren't allowed to manage that there, she [thought it] was very frustrating, you know all I can say is "I can't give you this pill because your pressure's high and you have to go see your primary provider." We can take care of the whole thing here, because we're aware of people's, all of their health history, I think it also makes us very safe prescribers of you know like pills, estrogens can have some risks associated with them if you have certain underlying medical conditions. We're in the position to help manage those at the same time as we're prescribing the contraception.

5	**Leadership**	I think some of the successes have been our ease of access. I think in all of the providers, long gone are the days of, "Well, you've gotta have a physical and a pap and all these things to get reproductive care." And so I think - and regardless of the visit type - and particularly [one of our providers], in general, she'll bring up contraception to everybody at every visit. And we're trying to all follow suit with that. So I think that's become a best practice of being able to talk about family planning.
	Health Center 3: large site, suburban, state policy category C	
6	**Clinician**	Interviewee: We have four main sites, but sometimes our family medicine sites provide some limited family planning as well. Interviewer: And when you say "limited", what is that? Interviewee: It's not a big part of what they do. Interviewer: Sure. Interviewee: But on occasion they do. Interviewer: Yeah, someone walks in and needs something. Interviewee: Correct. Interviewer: They are able to provide it there on site.
7	**Leadership**	Our patient experience was not where we wanted it to be, is still not where we want it to be, but it's 10 points higher than where we started. So, within the next two to three years we should crack really probably the top 10% of organizations in the country. We don't compare ourselves to safety net institutions. We compare ourselves to the biggest institutions around those.
8	**Leadership**	I mean, it is desperately needed when you talk about all of the things that are much harder to fix the protracted things when you talk about poverty, when you talk about children living in poverty, when you talk about the ability to have a livable wage, and support a family and all of these other things. I mean, family planning is an essential component of that. We like to think about it as a third world thing, and it's not, it's really not. It's as simple as being able to get information, two people when they needed to make choices that affect the rest of their lives, and while it's not a panacea, obviously for all of those things, it would be truly helpful I think in terms of women's self-determination in [this state] to have good comprehensive program that allowed them to take care of themselves, and their families longitudinally. We don't have that.
	Health Center 4: large site, urban, state policy category A	

9	**Other staff**	Sitting at my desk before I came over here, we're working on a family planning manual trying to get all of our family planning resources at least indexed into what we have and when they're updated and a guide for ourselves and for clinical staff, so not just providers but medical systems about dispensing of contraceptives and family planning medications and policies and everything all in one place. But also updating our EHR to make it easier to get structured so that the data that I'm trying to analyze later is higher quality, which is where the EHR specialist came in. Because originally, I had been brought onto the family planning team to try and work on updating our EHR. We have been moderately successful in updating our EHR, but my role has really expanded over that time.
10	**Other staff**	When I came on here, the culture wasn't "Primary care. Oh, and family planning." It was "Primary care and yes, family planning's included, duh." Like that was kind of the expectation and so I think because that's how we think about it here, that that makes it a lot easier for us to restructure the [family planning] team the way we have and be able to say, "These are our goals for the year. And we're gonna move forward with this. Take a look at it. Great, okay. We're off. We're gonna go do this." And I think that is because they are supportive and they do recognize us as the expert in that area.
11	**Other staff**	Our [family planning] team, we've really been trying to do more work around quality assurance and quality improvement. So what that means is trying to pick a part the data that we have and checking to see if it's accurate or close to being accurate. If it's meaningful. Does it say what it needs to show? And how can we use that to improve our services here?
12	**Clinician**	We definitely make that part of, I guess, triage for seeing patients. [Our health center] is very open with family planning because, like I said, we want people to have options, to know that they have options and to be able to make educated decisions about those options.

Findings from In-Depth Interviews: Staffing Patterns

Staffing patterns often reflected the organization's approach to and leadership's attitudes about providing family planning services, while also affecting which providers could prescribe or dispense OCs. Smaller health centers (Health Centers 1 and 2) had a smaller number of providers overall than the larger health centers but other differences emerged as well.

At Health Center 1, clinical staff and leadership staff both mentioned a shortage of providers in general, especially those trained in reproductive health (see Table 4.14, quotation 1). In addition, as described above, not all providers were willing to provide contraception (in any format), and pharmacy staff noted that clinicians often did not have time to provide in-depth counseling on how to use contraceptive methods, including OCs (see quotation 2). These challenges clearly represented barriers to the health center being able to meet best practices for providing OCs, as well as other methods.

At Health Center 2, by contrast, all providers offered family planning services. Furthermore, the health center had recently created a reproductive care coordinator position to help address the lack of clinician time to discuss contraceptive methods during appointments. All staff members – including clinicians, leadership, and other staff – talked about how beneficial this new role had been for all family planning services, including providing OCs (see quotations 3 and 4). Although the reproductive care coordinator was not a clinician and could therefore not provide OCs directly, her work had clearly helped facilitate the overall clinic flow for patients obtaining family planning services, and could serve as a facilitator in the future for the health center to provide a one-year supply of OCs.

Health Center 3, a large health center, employed four women's health nurse practitioners and several OB/GYNS, but clinicians noted that the focus of their women's health services was OB care, rather than family planning (see quotation 5). They also had multiple members of the leadership team focused on quality improvement projects, as well as a robust pharmacy team also focused on their own quality improvement work (see quotation 6). However, in spite of relatively large provider and pharmacist capacity, the health center's overall focus was meeting best practices for overall primary care, rather than focusing on a specific service area like family planning.

The clinical team at Health Center 4, also a large health center, included a range of providers, all of whom provided some level of family planning care (see quotation 9). Family planning services are available at all sites (see quotation 7), and clinicians described both clinical staff and leadership as "true believers" in family planning (see quotation 8). It is likely that these attitudes toward family planning facilitated this health center's ability to meet best practices for providing OCs and other contraceptive methods.

Table 4.14 Selected Quotations on Staffing Patterns		
	Staff Type	**Quotation**
	Health Center 1: small site, rural, state policy category B	
1	**Leadership**	The big issue is we don't have enough doctors here. We don't have enough providers …. The other piece is, are they getting the training they need in reproductive health?
2	**Pharmacist**	Interviewer: Does it seem like most of the family planning counseling happens on the front end? Or should it happen theoretically with the provider? Or there's no, like, health educator? Interviewee: No. I mean, there's [one staff member] - have you talked to [her]? She doesn't do that yet. Or at all. It depends on the provider because there's a few providers that are well organized, and they have the time to spend, and they will do it. But others are just not capable of providing that due to time constraints. Some of them? Yes, I counsel, "Yeah, she told me about that." But a lot of them, "I don't even know what this is." I would say the majority is a no on that end.
	Health Center 2: small site, urban, state policy category A	
3	**Clinician**	I think that having the reproductive care coordinator introduced into our model of care has been really beneficial for our patients. It really takes a load off the nursing team for us to be able to focus more on patient education, on the chronically ill, and focus on other initiatives like population health.
4	**Leadership**	And they've really been a nice resource, I think, for the providers because particularly in those visits where the patient comes in with a sore throat and reproductive health was the last thing on their mind but it comes up. And then you're like, "Well our visit's done," but that's great. The reproductive health coordinator can come in and then I'll circle back in 20 minutes and see what you guys talked about. So, it's been helpful.
	Health Center 3: large site, suburban, state policy category C	
5	**Clinicians**	Interviewer: Can you tell us a little bit more about kind of the general staffing structure for women's health services and like how many nurse practitioners are there within the sites, it looks like it's a little bit different. Interviewee 1: So across [the grantee], we have four nurse practitioners. Interviewee 2: Okay, you mean OB/GYN? Oh yeah …. There's four of us. Interviewee 1: And then we have a big doctor presence because we do so much obstetrics.

6	**Pharmacist**	Also I play a part in clinical aspect of joint commission preparedness medical executive committees, quality committees and quality projects, basically if it has anything with pharmacy, pharmaceutical drug, medicine in the title…. So yeah, I kinda have a large role throughout the organization, not just specifically running pharmacy and finding prescriptions. I have a staff of 12 people under me.
	Health Center 4: large site, urban, state policy category A	
7	**Clinician**	We have family planning available on site at all of our health centers, which we already talked about. There are multiple ways for patients to access services, through scheduled appointments, through walk in, as we talked about. We have a strength is that the majority of our providers at [this health center] are family medicine or they're the family medicine physicians or nurse practitioners so, it's not like, any provider that they see pretty much can provide family planning.
8	**Clinician**	Our leadership, the clinical leadership is family, they're all family medicine physicians. So, in a sense we have a lot of true believers. We haven't had to convert. We haven't had to convert believers, they come in as true believers. And there hasn't been significant, we haven't seen significant issues with providers, provider objections, that sort of thing, with providing services.
9	**Clinician**	My family planning services title is the family planning clinical quality specialist, which was recently updated from the EHR specialist, which did not reflect the work that I was doing related to Title X and family planning services. I am also a certified nurse midwife and a board certified women's health nurse practitioner.

Findings from In-Depth Interviews: Characteristics of Health Center Location and Community

Clinicians and health center leadership based their policies and processes on their perceptions of the community they serve.

Located in a rural area, Health Center 1 experienced capacity challenges, which were exacerbated when another primary care clinic in the region closed. Clinicians, leadership, and other staff spoke about the chaos and "upheaval" in their patients' lives that made it challenging for patients to return to the clinic for appointments or to pick up medications. One pharmacy staff member noted, "And it does seem like there is a lot of upheaval in a lot of these patients' lives that taking their medications on a regular basis, or even remembering to come and get it, is a challenge because there's so much bigger issues going on that that's not a priority. So, yeah, I'd say that it's pretty challenging to get in every month to get what you need." Although the challenges of this particular population would make offering a one-year supply on-site beneficial, it seemed that the other challenges of providing any type of care for patients superseded trying to establish best practices for family planning.

Health Center 2 was located in an urban area where unintended pregnancy was common and generally supported within the community. Community perceptions also influenced which contraceptive methods patients chose. Immigrants from countries where OCs were common often requested them as their method of choice, and some were used to being able to obtain them over-the-counter (see Table 4.12). This health center viewed it as a service to their community to provide access to OCs. One clinical staff member said, "We do see a lot of our Latina patients buying birth control pills from Latino stores

that are not necessarily, they're not prescribed, it's a brand called Perla and you know, they may be fine, but nobody knows the chain of custody on those, or if they were in an overheated truck getting here or what. So, with our Title X we can say 'hey, you don't need to be buying those, we can give you ones that we know are gonna work.'" These specific characteristics of their patient population are likely to facilitate the health center's current and future practices for providing OCs.

At Health Center 3, the largest site was located in a suburban area, with many satellite sites located in surrounding areas. Several staff members noted that patients often did not live close to the clinic where they received care and some did not have access to reliable transportation, so health center policies focused on providing access to medications (including OCs) at pharmacies that may have been closer to where patients live, rather than directly at the clinic. One pharmacy staff member stated, "We have a large population of non-citizens within this area, undocumented persons and so they usually do not have access to health care or very good health care, and that includes medications. … Our job, basically, is to tear those barriers down and make medications more accessible to the patient, whether it's financially or it's closer to where they live." Clinicians also felt that the large population of immigrants affected their practice patterns. In particular, immigrants from certain countries had received misinformation about the safety of contraception, including OCs, either from other immigrants in their community or from their country of origin. This pattern led to clinicians focusing on the safety of OCs rather than on other aspects of providing them. For example, two clinicians relayed the following during their interview:

Interviewee 1: My gut reaction to that is we probably have a bigger challenge having a discussion with some folks about whether or not contraception is okay, period.
Interviewee 2: Safe. Yeah, I think that's probably a better word. …
Interviewer: And you think the biggest concern that patients might have about contraceptives is the safety? Really? That's interesting to me. I don't know that I've heard that.
Interviewee 1: I have an amazing number of young women who have been told that contraception will make them sterile. …
Interviewer: Is that true kind of for all methods, because from what I understand -
Interviewee 1: Yes.
Interviewer: Now, I know there's some kind of concerns about IUDs or implants, but that's about-
Interviewee 2: Even pills.

Given these challenges, it is not surprising that the health center might not be able to prioritize offering a one-year supply on-site.

At Health Center 4, also located in an urban area, staff members described differences in the patient populations depending on where in the city the health center was located. Clinicians noted high rates of unintended pregnancy and teen pregnancy within their population and "an unmet need for contraception." At the same time, several clinicians felt that contraception was an acceptable topic for patients to discuss and, unlike at Health Center 3, they did not have to combat misinformation about contraception: "There's little stigma around requesting those services compared to other sites, other parts of the country where there may be different social norms. … I think the barriers may be just actually getting to the health center because of having other challenges in their lives, which may be child care or just having other social challenges." These other challenges of getting to the health center because of other life circumstances appeared in interviews across all four health centers, but at Health Center 4, staff viewed

it as a reason to provide as many services on-site at once, rather than requiring patients to return to the clinic.

Findings from In-Depth Interviews: State Health Policy

State-level health policy served mainly as a barrier, rather than as a facilitator, to providing a one-year supply across all three states.

At Health Center 1, most staff stated that insurance coverage dictated their ability to provide a one-year supply of OCs on-site (see Table 4.15, quotations 1 and 3). Health center staff stated that most managed care plans limited supply to one month, and that private plans limited supply to three months (see quotation 2); however, as described above in the state-by-state policy analysis, publicly available Medicaid documents showed that both fee-for-service enrollees and managed care plans allowed for a 12-month supply. Others were uncertain about the specific policies by insurance type but believed that the limits on OC supply were different by different insurance type.

Health Center 2 was located in a policy category A state, where a state policy had recently gone into effect requiring insurers to cover a 12-month supply. However, many staff noted that outside pharmacies were disregarding the recent law and limiting the supply that patients could pick up (see quotation 4). Without an internal pharmacy at their health center, staff at this health center had to rely on external pharmacies or on a limited supply of provider dispensed medications, which meant they often provided a three-month supply (see quotation 5).

Staff and leadership at Health Center 3 expressed frustration with state policy around family planning in general, particularly for establishing a consistent stream of funding for low-income patients (see quotation 6). Several clinicians noted that patients

would return to the clinic and not be using a contraceptive method, even though they had previously received one, because their insurance or other funding ran out and they could not afford to get another month's supply (see quotation 7). As with Health Center 1, state policy documents indicated that at least some Medicaid managed care plans allowed up to a six-month supply, but most staff reported that all Medicaid patients were limited to a three-month supply (see quotation 9). Furthermore, the health center could not provide medications to Medicaid patients at their internal pharmacies; instead, patients were required to use an outside pharmacy such as Walgreens, due to the state's Medicaid policy restrictions (see quotation 8).

Health Center 4 was located in the same policy category A state as Health Center 2, and clinicians and staff stated that nearly all patients received some type of insurance coverage (see quotation 12). Because this health center had an on-site pharmacy, as well as referring patients to external pharmacies, insurance coverage did not drive most of the policies around providing OCs (see quotation 11). Staff at this health center also noted reluctance on the part of outside pharmacies to comply with the recent law and provide a one-year supply of OCs, while also stating that even an increase from one month to three months at external pharmacies had been beneficial for their patient population (see quotation 10).

Table 4.15 Selected Quotations on State Health Policy		
	Staff Type	**Quotation**
	Health Center 1: small site, rural, state policy category B	
1	**Clinician**	I don't know if our pharmacy does a one-year supply or if that would have to be a mail order. I know a lot of that ends up being insurance specific.
2	**Pharmacist**	I think if it's straight provider dispensing they try to get a year's worth out to them. And then the managed care plans are a month. Typically they will only just, no matter what medications we're talking, it's a month at a time. And the private plans, generally we do three months' worth.
3	**Leadership**	Interviewer: And are they able to get a one-year supply at once when they pick up the pills here, or is it more like three months at a time, six months at a time? Interviewee: It depends on their insurance. We have no control over that, but we would certainly write the prescription if we knew it was allowed.
	Health Center 2: small site, urban, state policy category A	
4	**Clinician**	Interviewee: Well the biggest one, which we're having a ton of trouble with, is the new law in [this state] that states that you can prescribe 12 months' supply at one time, but no pharmacy will fill it. It's very frustrating. So that would be incredible if it were to happen, particularly for patients who take OCPs. To just have their whole year's worth at home with them. But we find it's not working. Most pharmacies are not dispensing. Interviewer: And do you know - is that because they don't know about the law? They don't - Interviewee: Mostly it's 'cause they don't know, is my guess. Yeah.
5	**Clinician**	When we dispense them here, we usually give them three months, and sometimes six months, just because we're kind of making sure we're utilizing these resources most effectively and if someone is not sure they're gonna stick with it, or something like that then we might have them back in three months.
	Health Center 3: large site, suburban, state policy category C	
6	**Leadership**	[This state] is a particularly difficult state, I think, for achieving comprehensive, coordinated continuous family planning because women fall in and out of programs at the end of the day. So, they do what they can based on the programs that they're in, and that could change from year to year. So, you may be taking care of this same woman year over year, but your ability to actually take care of her family

		planning needs specifically may really be hampered by what it is that she's able to do, and when she's able to do it.
7	**Clinician**	So during the conversation as to whether or not the pregnancy is a good thing for that person, invariably it gets around to the fact of, "Well, I was taking this pill, but my insurance ran out, or my funding ran out and so I wasn't taking it any more." I hear that commonly.
8	**Leadership**	If you are internal to us and you want to pick up your prescription at that site and you are not covered by Medicaid, you can do that, as well. If you are a Medicaid patient, then you need to go outside to a Walgreens, or to a pharmacy of choice in order to pick up your birth control prescription.
9	**Pharmacist**	Medicaid definitely limits you in [this state] to a maximum three months.
	Health Center 4: large site, urban, state policy category A	
10	**Clinician**	As of - in January 2017, it's [state] law now that patients can get up to a year's supply. So, that has its own challenges … [the previous system was] programmed to not let you get more than three at a time and all this stuff so, there continue still to be all of these snafus with that. But, even just increasing it to three months has been a big benefit because previously it was kind of variable.
11	**Leadership**	I think that definitely this increased dispensing, this law that allows increased dispensing of contraceptives, the pill/patch/ring, I think is really great. I'm very happy that we have that. I think it speaks almost more to the climate in [this state] than it does to how that actually changes lives for our patients. I think that [this state] is really unique and great. It's an easy place to practice because almost everybody has insurance.
12	**Clinician**	Most of our patients have public insurance, the vast majority. We do have some patients with private insurance, but that is the exception rather than the rule.

Findings from In-Depth Interviews: Federal Health Policies & Programs

Finally, federal policies and programs played a minor role in a health center's practices for providing OCs. Health Centers 2 and 4 described Title X as a facilitator for providing OCs onsite, especially at Health Center 2, which did not have an on-site pharmacy. By contrast, Health Center 3 had previously received Title X funds but had stopped in recent years because of the burdensome reporting requirements associated with receiving funding. Uninsured patients at Health Center 3 therefore could not rely on Title X funds to cover the costs of their OCs. However, Health Center 3 had negotiated contracts with multiple Walgreens locations in their service area that allowed patients to pay the same prices for all drugs (including OCs) as they would at the health center's on-site 340B pharmacies. Many health center staff described this relationship with Walgreens as highly beneficial for patients seeking prescription medications.

Chapter 5: Discussion

Oral contraceptives are a highly effective and commonly used method of birth control. Yet many women face barriers to obtaining an adequate supply to take them continuously, and failing to take the pills continuously decreases their effectiveness as a contraceptive method. With perfect use, less than 1% of OC users would become pregnant within a year, but with actual use, failure rates range from 3% to 27%, and 20% of unintended pregnancies in the US are estimated to occur after compliance or continuation challenges for OCs (J. Smith & Oakley, 2005).

Women who receive a larger supply of pills at a single time are more likely to maintain an adequate supply for continuous use. Although there is limited research on the effectiveness of providing a one-year supply, existing research suggests that women who receive 13 cycles, as compared to one or three cycles, are more likely to have an increased (i.e., continuous) supply of pills, higher rates of gynecological screening services, lower state expenditures, and lower pregnancy and abortion rates (Foster, Hulett, et al., 2011; Foster et al., 2006). If the women in these studies who had received one or three months had instead received one year, nearly 1,300 publicly funded pregnancies and 300 abortions would have been averted in California alone (Foster, Hulett, et al., 2011). Extrapolating these findings to a national scale suggests that there is the potential to substantially improve health outcomes related to unintended pregnancy and to relieve some financial burdens on states.

Summary of Key Study Findings

This study finds that only one-half of health center sites surveyed provide OCs on-site, and of these, less than one-third offer a one-year supply at a time. In other words, approximately one-sixth of health centers provide a one-year supply on-site. Previous research by the CDC found that, similar to respondents in this study, about half of office-based physicians provide OCs on-site, and that Title X providers are significantly more likely to do so (Centers for Disease Control and Prevention, 2011). Another study, conducted by OPA, found higher proportions of health centers (81%) providing OCs on-site, but it is important to note that the OPA study surveyed at the site level, rather than the grantee level. This sampling strategy may have captured a different subset of the health center population than the survey analyzed here if sites from within the same grantee responded to the OPA survey. By contrast, the present study finds a higher proportion of health centers providing OCs on-site than existing research by the Guttmacher Institute, which found that only 37% of health centers did so (Frost et al., 2012). However, this study was conducted in 2010-11 and, as noted above, health centers have dramatically expanded the scope and volume of family planning services provided on-site.

The present study finds that health centers are more likely to provide OCs on-site if they: receive Title X funding; participate in 340B; are large; are located in urban areas; or have a high proportion of women of reproductive age in their patient population. Health centers are more likely to offer a one-year supply on-site if they: participate in 340B; are large; or are located in states with policies that require coverage for a one-year supply under at least one coverage mechanism.

Several of these effects are unsurprising. The goal of the 340B program is to increase access to prescription drugs among underserved populations, and this study finds that participation in the program is associated with increased access. Large health centers may be able to meet best practices such as providing OCs on-site because their infrastructure and operations allow more flexibility than a smaller site, which may be constrained by smaller physical resources within the health center, fewer qualified staff, or both. Interestingly, urban health centers are less likely to offer a one-year supply, even though they are more likely to offer them on-site, than rural or suburban health centers. One potential explanation for this difference is that urban health centers may be located closer to external pharmacies (e.g., Walgreens, CVS) than rural or suburban health centers are and patients therefore do not have to travel very far from the health center to obtain prescriptions from a pharmacy, where they may prefer to obtain prescriptions because they can also obtain other household supplies in a single trip or because external pharmacies may be open at more favorable hours.

It is worth noting that receipt of Title X funding did not make a statistically significant difference for providing a one-year supply, even though it did make a significant and large difference in whether health centers provide them on-site at all. This lack of difference can be better understood in the context of the in-depth interviews, which indicated that Title X funding served only as a minor factor in influencing the health center's practices. While two health centers considered Title X funding as a facilitator for providing family planning services in general and for providing OCs in general, another health center had opted out of receiving Title X funds because staff felt

that the reporting requirements were too burdensome, and the fourth did not describe it as making a substantial difference in either direction.

Clinician and pharmacist preferences for providing OCs drive many of the policies and practices for dispensing OCs on-site, as illuminated in the interview findings. Often, these preferences reflected the leadership's attitudes about family planning and the overall organizational approach to incorporating family planning into their other primary care services. The health centers that provided a one-year supply on-site included a leadership team and clinicians who prioritized family planning and made it a central part of their practice. In addition to the top-down effect from leadership, clinicians' perceptions of the patient population and patient needs also influenced their preferences for providing a one-year supply on-site. When clinicians perceived that patients were less responsible or less likely to keep track of a full year of contraception at once, they did not express much enthusiasm for providing it, whereas clinicians who believed that a one-year supply would help their patient population to avoid an unintended pregnancy sought out ways to provide a one-year supply. The survey data also found that health centers with at least one OBGYN are less likely to provide a one-year supply on-site than health centers with less than one OBGYN. This finding should be explored through future research.

In addition to these factors at the health center level, state and federal policy played a role in determining health centers' practices, although the relationship between favorability of state policy and provision of a one-year supply was not always clear-cut. Health center staff in the state with a highly favorable coverage policy mostly felt that the policy environment enabled provision of higher quality family planning services but

nonetheless faced challenges in navigating the coverage environment, particularly when dealing with external pharmacies. In the state with a somewhat favorable environment, health center staff indicated that their practices were based entirely on insurance policies, even though some insurance plans allowed for a one-year supply and the health center did not provide a one-year supply. Finally, in the state with the least favorable environment, staff expressed frustration with the state's approach to family planning in general, and coverage for OCs did not appear to rise to the top of their concerns.

Although no previous studies have examined this exact topic, the majority of the findings presented here concur with existing research on related topics, especially related to provider preferences and beliefs. Analyses of the QFP guidelines indicate that practice patterns vary significantly within the family planning safety net, although all health centers that receive Title X funds are supposed to meet these quality guidelines. Furthermore, existing research suggests that providers base practice patterns on their own values and preferences, even when these contradict the guidelines. For example, a qualitative study of providers' attitudes toward implementation of the QFP found that at least one provider continues to provide clinical breast exams due to her personal conviction about the benefit of the procedure, although the QFP guidelines recommend against it, and another provider stated that "not all guidelines and recommendations are 100% built for your client. You have to individualize the care to that client" (Simmons et al., 2016). Similarly, in a qualitative study examining access to family planning services, providers offered OCs on-site only to patients who specifically had problems obtaining them from outside pharmacies but not to other patients (McIntosh et al., 2012). These studies echo other findings in the literature that suggest that providers' personal

preferences and beliefs affect prescribing for other contraceptive methods: residents with more conservative attitudes toward teen sex and abortion are less likely to prescribe emergency contraception to teens, even though practice guidelines encourage routine EC prescription and counseling for this patient population (Upadhya, Trent, & Ellen, 2009).

This study also finds a rapidly shifting state policy environment for coverage of a one-year supply of OCs. While several states have passed legislation or implemented regulations requiring insurers to cover a one-year supply, the majority of states do not have such a requirement. In addition, most state Medicaid plans limit the supply of OCs to either one or three months. Only three states require coverage for a one-year supply under all coverage mechanisms examined here, with another 11 requiring coverage under at least one coverage mechanism. These findings reveal that women in most states do not have access to coverage for a one-year supply of OCs, whether through private insurance or Medicaid.

Policy and Practice Implications

Six million women of reproductive age receive care at health centers every year, and health centers provide 30% of all publicly funded family planning care in the US (Health Resources and Services Administration, 2017; NACHC, 2017). Understanding barriers to accessing high quality family planning services is essential in meeting the needs of this population, especially for low-income women and women of color, who are disproportionately affected by outcomes such as unintended pregnancy and who receive care at health centers.

Although the CDC and OPA have issued guidelines for family planning services that health centers *may* follow, there are very few practices that health centers *must* follow. As a condition of receiving Section 330 funding, health centers must provide "voluntary" family planning services. Yet the exact scope of these services, or even a set of quality guidelines for these services, is open to interpretation at the health center level. As a result, there is substantial variation in the quality of family planning services available at health centers, particularly relating to the accessibility of OCs. The 2017 GWU and KFF study found that only 46% of CHCs provide OCs using the quick start method and 62% provide OCs without requiring a pelvic exam (Wood et al., 2018), both preferred practices (American College of Obstetricians and Gynecologists, 2017). These shortcomings, along with the findings of this study, suggest that guidelines issued by external entities are not sufficient for health centers to meet the highest quality standards for family planning. To remedy these gaps, HRSA could establish performance criteria for health centers, either through an independent process or by requiring adherence to existing guidelines, such as those outlined by the CDC or ACOG. Although this change would likely be effective in improving quality of care, it is not likely to come to fruition in the near future, as HRSA has not opted to impose specific requirements on family planning services since the initiation of the health center program.

By contrast, health centers that receive Title X funds are expected to meet a set of performance guidelines for family planning care. These guidelines, the QFP, were first issued in 2014 and have been updated several times since. The current QFP includes making a "broad range" of FDA-approved contraceptive methods available on-site, and providing or prescribing multiple cycles – "ideally a full year's supply" – of OCs.

Although the receipt of Title X dramatically increases the likelihood of health centers offering OCs on-site, it did not make a significant difference in whether health centers offered a one-year supply on-site, as noted above. This finding lends support to existing research that shows gaps in translating the QFP into practice. In the study by Simmons and colleagues, one of the participants had never heard of the QFP guidelines, and others were unclear on how adaptable the guidelines were (Simmons et al., 2016). One potential remedy for this gap is for OPA to work with the Family Planning National Training Center to increase knowledge of the QFP and provide technical assistance about implementing the recommendations among Title X grantee health centers. During this process, OPA and CDC could issue an update that uses stronger language clarifying that a one-year supply of OCs should be offered on-site. However, this update is highly unlikely under the current administration, especially as the most recent regulatory action for Title X shifts away from evidence-based practices for providing FDA-approved contraceptive methods (Department of Health and Human Services, 2019).

The March 2019 Title X final rule imposes dramatic new restrictions on entities that can receive these funds, including limits on referrals for abortions. Although the ACLU, NFPRHA, and several states initiated lawsuits to stop the rule from taking effect (ACLU, 2018), and a preliminary injunction was granted in late April (State of Washington v. Alex Azar, 2019), Title X grantees must comply with the rule as of July 15, 2019. As the rule is implemented, certain family planning providers such as Planned Parenthood will be excluded from the program, which will likely leave health centers to meet the increased demand among this population (Rosenbaum, Wood, et al., 2018). If health centers are faced with absorbing additional patient capacity, there are several

potential implications. First, health centers have indicated that most cannot absorb significant increases in patient load (Wood et al., 2018). Second, it is important to note that there is a gap between the common health center practices identified here and the common practices of family planning clinics. Although the current study did not capture data for family planning clinics, existing research has found that Planned Parenthood health centers are substantially more likely to provide OCs on-site and to provide a one-year supply than this study has found (Frost et al., 2012). Therefore, restricting the family planning safety net through these requirements for Title X is likely to exacerbate differences in both access to and quality of care for low-income women.

In the absence of specific requirements or guidance at the federal agency level, health centers themselves could play a role in spreading this practice, as could state or regional Primary Care Associations (PCAs). Large health centers that participate in 340B are the most likely to provide a one-year supply and may be uniquely positioned to serve as early adopters of this practice. As the majority of health centers do not currently provide a one-year supply on-site, there is substantial room to increase adoption of the practice at a larger scale. Health centers that provide a one-year supply and consider it a beneficial practice could highlight strategies to implement it at widely attended national conferences, such as those led by the National Association of Community Health Centers (NACHC) or those led by the National Family Planning & Reproductive Health Association (NFPRHA). At the state and regional level, PCAs could focus upcoming training efforts on implementing this practice or could offer technical assistance to health centers for doing so.

In addition to policy and practice guidance at the health center level, addressing individual provider preferences and attitudes could change uptake of this practice. Although professional societies such as ACOG have issued practice recommendations, additional strategies to increase provider awareness could lead to more health centers providing a one-year supply on-site. For example, new continuing medical education modules could focus on this practice or on provision of oral contraception more broadly, both for clinical providers and for pharmacists. However, prior research from both reproductive health and other areas of health services suggests that provider knowledge is only one factor affecting adherence to clinical guidelines or recommendations (Golden et al., 2001; Rushton, Fant, & Clark, 2004; Upadhya et al., 2009; Ward et al., 2002). As this study has shown, clinicians' and pharmacists' personal preferences may also influence their practices for providing OCs. In some cases, these preferences are based on perceptions of the patient population's needs, which in turn may be influenced by individuals' perceptions of certain racial or ethnic groups. Implicit provider bias, both on the basis of race/ethnicity and gender, has been well-documented in reproductive health (Dehlendorf et al., 2010; Gomez & Wapman, 2017; Higgins, Kramer, & Ryder, 2016) and in other areas of healthcare (FitzGerald & Hurst, 2017; Schulman et al., 1999). Addressing provider bias is a complex and persistent challenge. While practice recommendations at the national level may have some effect on provider habits, more directed efforts at the state and local level may be tailored more individually to specific provider groups. ACOG operates in 12 districts that represent different geographical regions, and focusing on district-level efforts may be another effective way to reach physicians. Similarly, each state's pharmacy board could issue guidance for pharmacists

on providing a one-year supply and could update their lawbook for pharmacists, especially in states that have passed laws requiring coverage. Furthermore, individual providers who meet this best practice may be able to serve as models for other providers, for example, through presentations and discussions at widely attended national conferences (e.g., ACOG, NFPRHA, NACHC, American Pharmacist Association, etc.). Future research can inform the best approach to reaching providers individually.

State-level policies play a significant role in the likelihood of health centers providing a one-year supply on-site. As Medicaid is a federal-state partnership, there are potential policy levers at both the federal and state level. For example, CMS could issue a letter to states stating that a one-year supply should be covered under all Medicaid plans. While such a letter would not be binding, it could encourage states to change their policies. However, in the current political climate, such a letter is highly unlikely. More feasible would be individual actions at the state level. In states with managed care, state Medicaid agencies could require coverage for a one-year supply in all managed care contracts. While possible, this process could be slow and cumbersome to implement, and would also require political support at the state level. Nonetheless, some states with more conservative policy climates – Indiana, South Carolina, and South Dakota – already require coverage for a one-year supply in some Medicaid plans and could serve as models for other states where political support for family planning is not immediately apparent. States with fee-for-service Medicaid could implement changes through updates to their provider manuals, including the manuals for health centers, family planning, and pharmacy. State agencies could also issue provider bulletins to Medicaid providers in those states, which could encourage providers to change their practices in this area.

Finally, coverage through private insurance represents an important avenue for improving policy, both on its own and as a driver of Medicaid coverage policy. Although only a small proportion of health center patients have private insurance coverage, reimbursement through these plans plays a role in determining whether health centers provide a one-year supply, as this study shows. Coverage under private insurance plans has mainly taken effect through legislation, or in one case, a state-level regulation. As only 17 states (including DC) have instituted such policies, the remaining 34 would have to follow suit in order achieve coverage across the country. It is worth noting that these policies have developed fairly recently and build upon the preventive services benefit of the ACA, which requires coverage for all FDA-approved contraceptives without cost-sharing. The 17 states with these policies may prove to be early adopters, and legislatures in other states could follow suit in the coming years. Included in some of the existing state legislation (e.g., CA, DC, and HI) is language specifying that the coverage requirements apply to Medicaid managed care plans as well as plans in the private market. While Medicaid policy may be decided through Medicaid state agencies, legislation such as in these three states can also serve to guide Medicaid policy, especially in states that may pass such laws in the future. Thus, as the private insurance policy landscape continues to shift, its reach may extend beyond the private market alone.

Limitations

Although this study has several strengths, particularly with the use of mixed methods, it is also important to note some limitations. First, with survey data where the response rate is less than 100% of a population, there is always a possibility of

differences between those that responded to the survey and those that do not. In this study, health centers that have more robust family planning services, including offering OCs on-site, may be more likely to self-select into responding than health centers with less robust services. There may also be differences between respondents and non-respondents on factors such as size and location. To account for these differences, survey weights were used for all quantitative analyses. In addition, an analysis of the UDS data reveals no significant differences between health centers that responded to the survey by rural vs. urban location, number of patients served, or number of patient visits.

A second limitation of this study is the timing of the full study and analysis. With a rapidly shifting health policy landscape, it is important to recognize that the policy environment and practices of health centers may have shifted from the beginning of the study period through the end. In addition, although the policy analysis was designed as a point-in-time scan and included detailed information for the majority of states, six states had inconclusive and/or details missing from documentation and no conclusions could be drawn about the policy environments in those states based on document reviews alone.

Finally, this study does not include any patient perspectives. Previous research has found that going to a pharmacy presents a barrier for women obtaining contraception and that women may prefer to pick up a full year at a single visit (McIntosh et al., 2012). However, this study does not provide any insight into the patient perspectives about the value of this practice.

Future Research

Future research could address some of these limitations. Examining this issue from the patient perspective would provide valuable insight into the way that health centers could or should change their practices for providing OCs to serve patients better. This type of research question could best be addressed through a qualitative analysis through individual interviews or focus groups among women accessing care at health centers, as well as other providers in the family planning safety net. Although some research has studied reasons for non-adherence to continuous use of OCs (J. Smith & Oakley, 2005), additional studies could examine patient perspectives on the importance of having a one-year supply relative to other barriers.

While this study does not aim to assess health outcomes, additional research in the future could do so. A limited number of studies have examined the potential impact of this practice. In those studies, receiving a one-year supply has been associated with higher rates of continuous use of OCs, higher use of gynecological screening services, lower rates of unintended pregnancy and abortion, and lower expenditures by the state (Foster, Hulett, et al., 2011). Future research could focus on these outcomes specifically among the health center population. In addition, the studies on a one-year supply have only included women in California; studies in other settings have examined supplies larger than one month and less than one year. Although California is a large and diverse state and the existing research examined claims data for over 80,000 women, research on the effectiveness of this practice should be expanded to women in other states as well. If these studies also support the effectiveness of this practice, interventions to increase it

could also be examined. These interventions could include outreach and education to providers and pharmacists, to health center leadership, and/or to patients.

Another avenue for future study would be to update the policy analysis to provide information for the six states without readily available documentation and to understand in more detail the way that these policies are enacted. To address these queries, researchers could conduct targeted outreach to staff within state insurance commissions, Medicaid agencies, and/or Medicaid managed care plans to obtain additional details on the policies within each state through structured interviews or email questionnaires.

Finally, additional research should examine trends in this practice over time. Coverage policy has shifted significantly in the last few years and may continue to do so. Also, the volume and scope of family planning services provided at health centers has increased significantly in recent years and may increase even further if other family planning providers in the safety net must close their doors. The survey used for this study found that a smaller proportion of health centers offer OCs on-site than did so in 2011 (Wood et al., 2018), and additional studies should examine health center trends over time. The policy analysis could also be updated on a yearly or other regular basis, as policies continue to evolve.

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Appendix A

Milken Institute School of Public Health
THE GEORGE WASHINGTON UNIVERSITY

Geiger Gibson Program in Community Health Policy

rchn community health foundation

Jacobs Institute of Women's Health
THE GEORGE WASHINGTON UNIVERSITY

Survey of Family Planning Services in Community Health Centers

Consent Form and Information Sheet about the Research Study (IRB #: 031763)

We invite you to participate in a survey of family planning services provided by community health centers (CHCs). The survey is being conducted by the Geiger Gibson Program in Community Health Policy and the Jacobs Institute of Women's Health at the George Washington University (GWU), with support from the Henry J. Kaiser Family Foundation. This survey is a follow-up to one conducted in 2011 on the same topic. Your responses will help us to understand health centers' important role in family planning and any changes since the previous survey, as well as to identify opportunities to further strengthen family planning services at CHCs.

Who Should Complete This Survey

All federally-funded health centers are eligible to participate in this survey. The health center CEO or her/his designee should complete the survey. An individualized link has been created for each health center; your progress will be saved and you can return to the survey to complete it. You can forward the link to your designee, but please do not forward the link beyond your health center. Please use only the "Next," "Prev," and "Done" buttons provided by SurveyMonkey to navigate the survey; if you use your internet browser's Forward and Back buttons, you may lose your answers. Unless otherwise indicated, this survey should be completed for your largest health center site that provides family planning services.

Your participation in this study is voluntary and you may stop at any time. Please try to answer all questions, but if you are unable to answer some, please skip over them and continue. If you choose to participate in this study, only questions 1, 4, 7, 13, 14, 17, and the final question are required. We estimate that you will need 30 minutes to complete this survey. The possible risks or discomforts that participating health center respondents could experience during this study are minimal. Taking part in this research will not benefit you directly, but may benefit society through a better understanding of the scope of family planning services provided by CHCs.

We will provide your organization with a $25 online gift certificate to a major retailer for the time and effort involved in completing the survey. Please be sure to click "Done" at the end of the survey in order to receive your gift certificate.

Confidentiality

Your responses are completely confidential. All responses and the names of health centers and

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respondents will be held in strictest confidence by the Geiger Gibson Program. Your identity will be known only to the principal investigators and the research staff. All findings will be reported in the aggregate only. No respondents will be identified by name in any printed report. This survey will ask you if you are willing to share your findings with your state Primary Care Association (PCA). Should you provide us with permission to share your responses, only your state's PCA will receive the information; your information otherwise will not be shared and will be kept securely at GWU.

The Office of Human Research of George Washington University, at (202)-994-2715, can provide further information about your rights as a research participant. Further information regarding this survey can be obtained by contacting Principal Investigator Susan Wood (ggprogram@gwu.edu). Your willingness to participate in this research study is implied if you submit the survey.

* 1. Name of your health center

2. UDS or BHCMISID Number

3. City/Town

* 4. State

State/Province -- select state --

5. Name(s) of survey respondent(s)

6. Job title(s) of survey respondent(s)

* 7. Email address (to receive gift certificate)

Email Address

8. Telephone number

Phone Number

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THE HENRY J. KAISER FAMILY FOUNDATION | Milken Institute School of Public Health, THE GEORGE WASHINGTON UNIVERSITY | Geiger Gibson Program in Community Health Policy | rchn community health foundation | Jacobs Institute of Women's Health, THE GEORGE WASHINGTON UNIVERSITY

Survey of Family Planning Services in Community Health Centers

Health Center Site Information

9. How many health center sites operated by this UDS grantee organization provide comprehensive primary medical care? Comprehensive primary medical care includes acute and chronic illness care, health promotion, disease prevention, and patient education and counseling. (Please enter a numeric value).

Number of health center sites that provide comprehensive primary medical care

10. How many health center sites operated by this UDS grantee organization provide any family planning services? Family planning services include counseling and education related to family planning; contraceptive drugs and devices; follow-up care related to family planning (e.g., IUD removal); related screening and diagnostic tests (e.g., pregnancy, Pap, HIV, other STIs); and treatment after diagnosis? (Please enter a numeric value).

Number of health center sites that provide ANY family planning services

11. How many health center sites operated by this UDS grantee organization provide each of the following services or supplies? (Please enter a numeric value for each box. Enter "0" if none of your health center sites provide the service or supply).

Prescriptions for oral contraceptive pills	
On-site oral contraceptive pills	
Depo-Provera injections	
Intrauterine device (IUD) insertions	
IUD removals	
Hormonal implant insertions (e.g., Nexplanon)	
Emergency contraceptive pill supplies	
Male condoms	
Sexually transmitted infection (STI) testing	
STI treatment	
Fertility services, beyond general counseling	

12. Does the comprehensive primary medical care site with the greatest overall number of patients provide family planning services?

- ◯ Yes
- ◯ No

* 13. Name of largest health center site that does provide family planning services. (Your largest site is the site with the highest number of patients.)

Survey of Family Planning Services in Community Health Centers

Information on your largest health center site that provides family planning services

Please respond to the following questions based on your largest health center site that provides family planning services that you wrote in question 13.

* 14. Does {{ Q13 }} receive funding from the Title X Family Planning program?

- ◯ Yes
- ◯ No
- ◯ Don't know

15. Does {{ Q13 }} participate in the 340B program?

- ◯ Yes
- ◯ No
- ◯ Don't know

16. How do patients at {{ Q13 }} receive prescription drugs? (Check all that apply).

	Dispensed by provider	Through an on-site pharmacy (either in-house or contract pharmacy)	Through an off-site contract pharmacy	Don't know
Contraceptive medications	☐	☐	☐	☐
Other medications	☐	☐	☐	☐

* 17. Location of {{ Q13 }}:

- ◯ Urban
- ◯ Rural
- ◯ Suburban

18. Is there a free-standing family planning clinic within 30 miles of {{ Q13 }}?

- ◯ Yes
- ◯ No
- ◯ Don't know

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Survey of Family Planning Services in Community Health Centers

19. Is the closest free-standing family planning clinic accessible from {{ Q13 }} by (check all that apply):

- [ ] Walking
- [ ] Public transportation
- [ ] Car

20. Approximately how many patient visits did you have at {{ Q13 }} in the 2016 calendar year? (Please enter a numeric value).

Number of patient visits in 2016 _____

21. Please estimate the percentage of patient visits in 2016 at {{ Q13 }} that were for contraceptive services.

- ○ <10%
- ○ 10-24%
- ○ 25-49%
- ○ 50-74%
- ○ 75-99%
- ○ 100%

22. Are patients able to schedule a same-day/walk-in appointment for an initial contraceptive visit at {{ Q13 }}?

	Yes	No
Established patient	○	○
New patient	○	○

23. Does {{ Q13 }} currently face any of the following barriers in meeting the family planning and reproductive health needs of patients in your service area?

	Not a barrier	Minor barrier	Major barrier
Lack of insurance coverage among patients	◯	◯	◯
High out of pocket costs for patients	◯	◯	◯
High patient demand for other primary care services	◯	◯	◯
Lack of culturally and/or linguistically appropriate materials or services	◯	◯	◯
Lack of space to stock family planning supplies	◯	◯	◯
High cost to have contraceptives in stock	◯	◯	◯
Lack of staff to meet patient demand	◯	◯	◯
Lack of staff trained in IUD/implant procedures	◯	◯	◯
Religious or moral concerns on the part of health center staff or board members regarding certain types of family planning methods	◯	◯	◯
Inadequate insurance reimbursement/payments	◯	◯	◯
Coding system for family planning services or supplies	◯	◯	◯
Other barrier	◯	◯	◯

Other (please specify)

24. In the last five years, what has changed in the provision of family planning services at {{ Q13 }}?

	No change	Increased	Decreased
Number of staff providing family planning services	◯	◯	◯
Access to training for staff in IUD/implant procedures	◯	◯	◯
Space to stock family planning supplies	◯	◯	◯
Cost of stocking family planning supplies	◯	◯	◯
Reimbursement for family planning services and supplies	◯	◯	◯
Number of uninsured patients	◯	◯	◯
Number of patients seeking family planning services	◯	◯	◯
Other change	◯	◯	◯

Other (please specify)

25. How do any of the following influence the provision of family planning care at {{ Q13 }}: cultural or social attitudes of the patient population, board of directors, providers, community partnerships, and/or area hospitals?

26. In the next year, what is the estimated percentage increase in new patients {{ Q13 }} could accept with current staffing and clinic space?

- ◯ None
- ◯ <10%
- ◯ 10-24%
- ◯ 25-49%
- ◯ 50-74%
- ◯ 75-99%
- ◯ 100% or more

27. Does {{ Q13 }} regularly refer patients to a free-standing or other family planning clinic in the community?

- ◯ No, there are no family planning clinics in the community
- ◯ No, we do not regularly refer patients to a family planning clinic
- ◯ Yes

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28. Is this referral relationship between {{ Q13 }} and the free-standing or other family planning clinic documented in a formal written agreement or is it informal?

- ◯ Formal
- ◯ Informal
- ◯ Don't know

29. For each of the following methods of contraception and health services, please indicate the most commonly used practice for the specific service at {{ Q13 }}.

	Prescribed and dispensed/provided at this site, including on-site pharmacy	Prescription (only) given at this site	Not provided on-site- Patient referred to a provider/clinic WITHIN our health center organization	Not provided on-site- Patient referred to a provider/clinic OUTSIDE our health center organization	Neither dispensed, provided, nor referred
Oral contraceptives (OCs)	◯	◯	◯	◯	◯
IUD: Mirena, Skyla, Liletta, Kyleena	◯	◯	◯	◯	◯
IUD: ParaGard (Copper)	◯	◯	◯	◯	◯
Implant (Nexplanon, Implanon)	◯	◯	◯	◯	◯
Injectable (Depo-Provera/DMPA)	◯	◯	◯	◯	◯
Patch	◯	◯	◯	◯	◯
Vaginal ring (NuvaRing)	◯	◯	◯	◯	◯
Diaphragm, cervical cap (Lea's Shield, FemCap)	◯	◯	◯	◯	◯
Natural family planning instruction	◯	◯	◯	◯	◯
Plan B or other over the counter emergency contraceptive pill	◯	◯	◯	◯	◯
ella (emergency contraceptive pill sold by prescription only)	◯	◯	◯	◯	◯

30. What is the largest number of cycles (i.e., number of months) of oral contraceptives that patients can pick up on-site at {{ Q13 }} at any one time?

- ◯ Not applicable—oral contraceptives are not provided on-site
- ◯ 1 month
- ◯ 3 months
- ◯ 6 months
- ◯ One year

Survey of Family Planning Services in Community Health Centers

31. If {{ Q13 }} does not provide a one-year supply of oral contraceptives on-site, please identify any barriers to doing so.

	Not a barrier	Minor barrier	Major barrier	Not applicable
Insufficient state Medicaid reimbursement	○	○	○	○
Insufficient private insurance reimbursement	○	○	○	○
Lack of grant funding (e.g., Title X)	○	○	○	○
Challenges with stocking medications	○	○	○	○
No on-site pharmacy	○	○	○	○
Other barrier	○	○	○	○

Other (please specify)

32. Please indicate whether these activities take place at {{ Q13 }}.

	Yes	No
Oral contraceptive pills (OCs) are dispensed using the 'Quick Start' protocol (patient takes first pill on day of visit, regardless of her menstrual cycle)	○	○
New patients can receive a prescription for OCs without having a pelvic exam	○	○
Emergency contraceptive pills (ECPs) are dispensed or prescribed ahead of time for a woman to keep at home (advanced provision of ECPs)	○	○

33. If {{ Q13 }} provides prescriptions only for IUDs or implants, do patients obtain the IUD/implant from an outside pharmacy and return to the health center for insertion?

- ○ Not applicable
- ○ Yes, always
- ○ Most of the time
- ○ Sometimes
- ○ Never

34. If {{ Q13 }} provides IUDs or implants on-site, can patients obtain the IUD/implant on the same day as their contraceptive counseling visit?

- ◯ Not applicable
- ◯ Yes, patients can obtain only IUDs on the same day
- ◯ Yes, patients can obtain only implants on the same day
- ◯ Yes, patients can obtain either an IUD or an implant on the same day
- ◯ No, patient cannot obtain either IUDs or implants on the same day

35. For each of the following services, check the box indicating which type of staff usually provides the service at {{ Q13 }} (check all that apply).

	Health Counselor or Educator	Nurse (LPN/RN)	Advanced Practice Clinician (NP/PA/CNM)	Physician (MD/DO)
Family planning counseling	☐	☐	☐	☐
Clinical exams	☐	☐	☐	☐
Pelvic exams	☐	☐	☐	☐

36. How many of the following types of full-time equivalent (FTE) staff (including full-time, part-time, and PRN/float staff) have been trained in IUD insertions and/or implant placements at {{ Q13 }}? (Please enter a numeric value for each box. Enter "0" if none of these staff have received the training).

Nurses (LPN/RN) trained in IUD insertions

Nurses (LPN/RN) trained in implant placements

Advanced Practice Clinicians (NP, PA, CNM) trained in IUD insertions

Advanced Practice Clinicians (NP, PA, CNM) trained in implant placements

Physicians (MD/DO) trained in IUD insertions

Physicians (MD/DO) trained in implant placements

37. Are the following contraceptives provided at {{ Q13 }}?

	Yes	No	Don't know
Male condoms	◯	◯	◯
Female condoms	◯	◯	◯
Spermicides	◯	◯	◯
Sponge (Today)	◯	◯	◯

38. Does {{ Q13 }} have the following policies or procedures in place?

	Yes	No	Don't know
Sexually active, asymptomatic women age 25 or younger are routinely screened for chlamydia	◯	◯	◯
Women of childbearing age are routinely screened for intimate partner violence (IPV)	◯	◯	◯
Women of childbearing age are asked annually about pregnancy intention	◯	◯	◯

39. Please indicate if {{ Q13 }} does the following.

	Yes	No	Don't know	Not applicable
Offers contraceptive services tailored specifically for adolescents	◯	◯	◯	◯
Collaborates with other entities on outreach activities to adolescents to meet their family planning needs	◯	◯	◯	◯
Maintains separate contact information for communications regarding family planning services for adolescents	◯	◯	◯	◯
Provides family planning services at school-based health centers	◯	◯	◯	◯

40. Please select the retailer you would prefer for your gift certificate:

- ◯ Home Depot
- ◯ Target
- ◯ Staples
- ◯ Walmart

41. We would like to conduct follow-up interviews to better understand the role of health centers in providing family planning services. Would your health center be willing to be contacted about participating in an interview to discuss this topic in more detail?

- ◯ No
- ◯ Yes, I am willing to be contacted and am available at the email address provided at the beginning of the survey
- ◯ Yes, I am willing to be contacted but please use another email address or contact another person at the email address below

Other name and/or email address

* 42. Your responses to this survey will be used only in the aggregate with other health centers' responses unless you consent to share your complete response to this survey with your state's Primary Care Association (PCA). Do we have permission to share your complete response to this survey with your state's Primary Care Association?

- ◯ Yes
- ◯ No

Please be sure to click the "Done" button below in order to receive your gift certificate.

Thank you for participating in this study on family planning and reproductive health services in community health centers. We appreciate your time and effort in responding to our survey. Please feel welcome to contact us with any questions at: ggprogram@gwu.edu

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Appendix B

Interview guide

ABOUT THE INTERVIEWEE

[Ask interviewee what their role is in the organization.]

1. Please describe your daily activities.

CHARACTERISTICS OF THE COMMUNITY/POPULATION

First, we are interested in learning more about your community and the population your health center organization serves.

2. Can you describe the major reproductive health concerns in this community?

3. How would you characterize the population of people who need family planning services in your service area / county?
   Probe: proportion low SES
   Probe: proportion racial/ethnic minorities
   Probe: proportion immigrant populations
   Probe: women seeking contraceptive care

4. Are there specific, notable characteristics of the patient population that affect use of FP&RHS?
   a. Are there specific, notable characteristics of the population that affect their use of OCs? That affect their ability/interest in obtaining a one-year supply of OCs?

5. Can you tell us whether you believe the health center can meet the FP&RHS needs of your patient population?
   Probe: What do you think might be helping you meet those needs? (e.g. special funding, dedicated staff, training, etc.)
   Probe: What do you think might be limiting your ability to meet those needs? (lack of funding, staffing, training, community support, etc.)

SCOPE OF FAMILY PLANNING SERVICES

We are interested in learning more about how family planning and reproductive health services are delivered at this health center. We are specifically interested in learning more about how OCs are provided at this health centers.

6. Can you tell us a little bit about how FP&RHS are provided here on-site? For example, a woman comes in requesting a contraceptive counseling visit. What would that encounter look like?
    a. Probe: Which provider(s) does she see?
    b. Probe: Same day, open access appointment? Scheduled out?
    c. Probe: Is this routine primary care or specialized FP visit?
    d. Probe: Are there special considerations because she specifically requested FP services? What if she had come in for another routine primary care visit; would FP be addressed at any point during her care?
    e. Probe: Does she generally receive her contraceptive method of choice on-site? Is this the same for all methods (OCs, LARCs, etc.)?

7. What about an adolescent who comes in requesting contraceptive counseling services? How is her care organized and delivered?
    a. Probe: are there special considerations or protections for adolescent privacy or confidentiality?

8. What about a male who comes in requesting contraceptive counseling services? How is his care organized and delivered?

9. What challenges (if any) have you encountered in providing this range of FP&RHS to your patients?

10. What strategies have you used to address these challenges?

11. Does the health center provide a one-year supply of OCs on-site? If not, why not? If yes, what was the decision-making process around this practice?

[If they provide a one-year supply on-site]

    a. Is this something that staff and/or leadership had to fight for to institute? How do clinic staff feel about this practice? Is this something you plan to continue in the future?

[If they don't provide a one-year supply on-site]

    b. Is this something that might be discussed among staff members or leadership in the future? What would be involved in starting this practice? Would you have support from relevant leadership, staff, board members, etc.?

LINKAGES, CARE COORDINATION, & REFERRAL NETWORK

12. Are there times when you are unable to provide FP&RHS for certain patients within the health center and must refer them to another service provider? Can you describe an example of this?
13. Are there times when other service providers refer certain patients for FP&RHS to your health center because they are unable or unwilling to provide them FP&RHS? Can you describe an example of this?
14. Do you think these referral arrangements or relationships with other providers have changed in the last five years? How has the ACA or other state and federal policy reforms changed your referral practices?

POLICY CONTEXT

15. What is the political landscape in your state when it comes to providing FP&RHS to women? To men? To adolescents? How has this changed since the implementation of the ACA or other state/federal policy reforms?
    Probe: Medicaid expansion/waivers
    Probe: Exchanges
    Probe: Cuts to Title X; cuts of funding to referring partners
    Probe: others?
    Probe: changes to provision of OCs on-site, one year of OCs on-site

16. Has this landscape (or the change in landscape) ever created challenges that have led you to reduce the care you provide? Please explain

17. Are there any current state-level policy or funding changes on the horizon that could potentially affect your ability to provide the services you currently or wish you could provide?

[For pharmacy staff only]
STATE PHARMACY & REGULATORY BOARDS

18. How do state regulatory boards or pharmacy entities affect your ability to provide OCs on-site? To provide one year on-site?

WRAP UP

19. If you could change anything in terms of the provision of FP&RHS at your CHC, what would it be?

Appendix C

Codebook for Thematic Content Analysis					
Node - Level 1	**Node - Level 2**	**Node - Level 3**	**Node - Level 4**	**Description**	**Example of Coded Text**
Characteristics of Health Delivery System					
	Family planning clinics			describes information about family planning clinics (including Planned Parenthood) within the community	I think another challenge is that I'm not aware when my patients do go to Planned Parenthood, because I would like those consultation notes, so I know what pill they're on, or what their method is, because a lot of times they don't know the name of it.
	Hospitals, private physicians, other health centers			describes information about private physicians (including OB/GYNS), hospitals, and other health centers in the community	It breaks my heart when someone goes to an OB/GYN because they think they have to go there for their contraception. It's like, "No, we do that."
	Health centers				
		Structure			

			Location and community characteristics	describes info about the patient population relevant to OCs, including community beliefs about birth control in general includes: types of insurance coverage, contraceptive method preferences, race/ethnicity, age distribution, common health conditions (including unintended pregnancy), transient or homeless populations	I think the patients ... yeah the patient issues, it's a poor population. Lots of chaos in their lives. Sometimes they can't get in. We'd like to provide the service but we're also overwhelmed so, it just sometimes we can't make that connection and make it happen and we have unintended pregnancies that we really don't want to have happen. So the patient population is not the most reliable always either.
			Pharmacy location	describes the pharmacy location and/or way that pills are provided includes: on-site pharmacy, contract, off-site, physician-administered (e.g. Class D pharmacy, samples)	Julia: For the pills, do you have an onsite pharmacy or is it physician ... A clinician administering? [interviewee]: We do have an onsite pharmacy.
			Size	describes number/distribution of sites, service area, number of patients, etc.	We are in five counties soon to be six. About 70, just over 70,000 patients. It looks like we're going to be right around 75,000 patients this year, and right under 300,000 visits a year.

			Staffing patterns	describes information about which clinicians prescribe/provide OCs, whether FP coordinators counsel on OCs, etc.	Now we do have a role here of a person who's called a reproductive care coordinator who, and this is a new role for us, I guess in the past year or two, who does have time to do more intense counseling, which is great. I think it's a little bit of a challenge to figure out how to work them into the flow, because of our relentless 20 minute visits.
		Process			
			Clinician & pharmacist processes and preferences	describes clinician preferences for prescribing and providing OCs (e.g. I like to give them 3 months at a time) includes: clinician preferences in favor of/against other types of birth control that may displace OCs (e.g., LARC methods); clinician opinions about patients' characteristics related to birth control methods (e.g., patients are not responsible enough to have one year of pills) does not include: clinician observations or opinions about the	I have another pharmacist, and we've talked about this before, but having an entire year's worth of your medication at your house to me doesn't seem like a great idea because a lot of these people are younger women, maybe students, maybe they move twice a year. You're going to lose it. I've actually have that happen where they lose it, and then it's a little harder to get it, and maybe you're not going to wait around for the phone call that the pharmacy has to make.

				patient population more broadly (e.g. a lot of patients are Latina)	
			Organizational strategy & overall approach to family planning	describes high-level strategy around family planning care and where family planning falls in organization's priorities includes: integration of FP into primary care (vs as a separate service); leadership (CEO, CFO, CMO) attitudes toward FP; onsite stocking of FP methods; quality improvement initiatives	Our leadership, the clinical leadership is family, they're all family medicine physicians. So, in a sense we have a lot of true believers. We haven't had to convert. We haven't had to convert believers, they come in as true believers. And there hasn't been significant, we haven't seen significant issues with providers, provider objections, that sort of thing.
		Outcome		describes whether OCs are provided on-site (any amount), one year of OCs provided; does not include rationale for why/why not	Julia: And are they able to get a one year supply at once when they pick up the pills here, or is it more like three months at a time, six months at a time. [interviewee]: It depends on their insurance. We have no control over that, but we would certainly write the prescription if we knew it was allowed.
Federal Policy					

	340B	describes either use of 340b pricing or not participating in 340b	In addition to our internal pharmacies, we also have a relationship with Walgreens. So, our FQHC patients pay the same thing at Walgreens as they would at our internal pharmacies, which is a 340B program, which is huge.
	Title X	describes either Title X funding or not participating in Title X	We don't ask patients to pay for the Title X. It's all given to them free of charge, so it really does fall on my budget and looking at managing my budget for the site for the year and what we can afford.
State Policy			
	Medicaid policy	describes info about eligibility, coverage, reimbursement, etc.	Well, Medicaid, some of them it seems they want us to do a month at a time. Some of them want a year at a time. But most of the time it's one month.
	Other state-level policy	describes state-level FP programs, laws around contraception/OCs	We do know there's this [state] law that lets people get up to 12 months, but the pharmacies often don't respect that, we just decided we're gonna print copies of the law to give to the patient to take, because yeah.

	Private insurance policy	describes policies related to reimbursement, coverage, referrals to specialists, etc.	I don't know if our pharmacy does a one year supply or if that would have to be a mail order. I know a lot of that ends up being insurance specific.
	Uninsured	describes actions common among uninsured patients (e.g., picking up one month of pills because they self-pay), clinician actions related to uninsured	If it's an uninsured patient, it's hard for me to be able to give six months to a year's worth of birth control just because depending on the pricing and the 340B pricing that I get and depending on the method.