

EXPANDING ACCESS TO SEXUAL AND REPRODUCTIVE HEALTH CARE
IN ALTERNATIVE PRIMARY CARE SETTINGS

by

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ABSTRACT

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The need to expand access to and availability of quality and comprehensive sexual and reproductive health care (SRH) to help close the gaps in existing health disparities and health inequities in the United States is a pressing public health concern. The emergence of alternative primary care settings (i.e., retail-based clinics [RBCs]) has recently proven to be an effective model for the delivery of acute care in lieu of more traditional medical services. Indeed, RBCs could be an agent for greater SRH care access with the integration of more services; however, barriers exist that inhibit this maximization of care. Providers play a central role in the utilization of SRH in RBCs, whether through their intent to recommend or biases about RBCs. Provider recommendation is a strong indicator for patient compliance. However, little is known about how providers' attitudes and beliefs influence the uptake of SRH in RBCs.

This cross-sectional study collected survey data from a large sample of 341 advanced practice clinicians (APC) to (1) understand the benefits and barriers of SRH integration in RBCs; and (2) identify the relationship between the attitudes of APCs regarding RBCs and their influence on barriers and benefits of SRH integration into RBCs. Items were adapted from existing valid and reliable measures. Survey data were analyzed primarily using descriptive statistics. Comparative analysis between demographic factors and identifier variables that led to several themes: a majority of APCs believe the integration of SRH into RBCs would expand access to and availability

of quality and comprehensive SRH care for prevention and intervention; hesitancy to recommend SRH services is chiefly founded in lack of confidence in quality assurance, professional training and quality of services offered; overall APCs had a generally positive attitude towards the integration of SRH in RBCs but attitudes differed among the types of SRH services offered at RBCs.

These findings provide insight for the identification of barriers and benefits in the integration of SRH in RBCs. This may create opportunities to address barriers for the expansion of prevention and intervention services among women while capitalizing on benefits to advance awareness, education and access to care.

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Chapter I

INTRODUCTION

Background to Study

The delivery and definition of primary care for women in the U.S. has evolved over the years. Primary care, once generalist approach to day-to-day wellness, is encompassing disease prevention, health promotion, and healthy living for the whole person, both in the present and for the future. For women, this includes not only the domains of physical, emotional, and mental health, but sexual health as well. However, the provision of sexual and reproductive health (SRH) in the primary care sector poses many challenges, like inhibiting healthcare environments and biased professionals (Leeman, 2007; Roan, 2009; Trussell, 2007). Despite these ongoing barriers, the integration of SRH in health practice is both necessary for the comprehensive well-being of women nationwide, including benefits of early screening and detection for reproductive cancers, adherence to immunization schedules, the prevention of unintended pregnancy or infant/maternal mortality, and behavioral risk modifications (Callegari, Ma, & Schwarz, 2015; Edelman, de Visser, Mercer, McCabe, & Cassell, 2015).

As recommended by the World Health Organization (WHO, 2011b), core sexual and reproductive health competencies are needed in the primary care setting (PCS) to protect and promote SRH across diverse communities. SRH care creates opportunities for disease prevention, like breast, thyroid, and cervical cancer screenings or vaccination completion for protection against the human papillomavirus. SRH care also fosters risk

reduction strategies, like condom use or smoking cessation when considering family planning options (Guttmacher, 2015). SRH counseling can lead to more informed decision making about contraceptive options or risk reduction strategies for intended pregnancy, like the management of chronic conditions, mental illness, or obesity and diabetes (Centers for Disease Control and Prevention (CDC), 2014; Health Resources & Services Administration (HRSA), 2016). SRH counseling and education may also increase patient well-being and quality of life, particularly among those that suffer from female sexual dysfunction (Leeman, 2007; Roan, 2009; Trussell, 2007).

Alternative primary care sites, like retail-based clinics (RBCs), have proven to be successful for acute and convenient care, particularly among individuals with barriers to health care (Berry & Mirabito, 2010). They also offer opportunities for greater access to available and affordable health care services in primary and secondary prevention and intervention (Berry & Mirabito, 2010). The primary care visit presents an opportunity to educate women about sexual and reproductive health across a variety of topics; yet RBCs are often an underutilized space for this targeted educational intervention. While RBCs are still a relevantly new health care delivery platform, the potential to expand access to and availability of comprehensive health care across diverse communities in the United States remains steadfast.

Advanced practice clinicians include members of the interdisciplinary primary care team who provide health services and education to women of reproductive ages (18 to 45 years). This includes physicians (MDs and DOs), nurse practitioners (NPs), physician assistants (PAs), registered nurses (RNs), and nurse midwives (NMs) who practice in gynecology, obstetrics, family medicine, internal medicine, and general medicine.

Providers of primary care are presented with unique opportunities to deliver quality healthcare that encompasses both sexual and reproductive health in conjunction with well-person visits (Callegari et al., 2015; Curtis, Mohllajee, & Peterson, 2006; Edelman et al., 2015; McElwaine et al., 2014). Operationally, the well-person exam is a

standardized clinical visit that includes both prevention and intervention, including physical anatomy checks (blood pressure, weight, height), medical intake questions for basic daily medications or self-reported health, diagnostic testing (i.e., routine blood work), as well as the assessment of any presenting symptoms or concerns (Office of Disease Prevention and Health Promotion [ODPHP], 2017). It is the role and responsibility of the healthcare team to present all patients with objective, safe, and reliable access to quality care, yet many providers are pressed for time, resources, and training that would support the integration of SRH in primary care environments (Bellanca & Hunter, 2013; Callegari et al., 2015; Edelman et al., 2015; McElwaine et al., 2014; WHO, 2011a). Integrating more SRH into diverse and alternative primary practice settings is a vehicle by which to expand prevention efforts and intervention care, thus leading to better health outcomes across patient populations.

Research demonstrates the importance of SRH care and services in terms of prevention and intervention (Callegari et al., 2015; CDC, 2014; Curtis et al., 2006; Edelman et al., 2015; Guttmacher, 2015; HRSA, 2016; McElwaine et al., 2014). Studies reveal the importance and benefits of the expansion of these services into various healthcare settings to expand access and availability to quality care for all persons, particularly in remote areas or primary care deserts that might inhibit one's access (Bachrach, Frohlich, Garcimonde, & Nevitt, 2015; CDC, 2014; HRSA, 2016; Curtis et al., 2006; Guttmacher Institute, 2015; Healthy People, 2017a; Leeman, 2007; Sonfield, Kost, Gold, & Finer, 2011). Research also shows the role of providers in the delivery of care; how their attitudes, knowledge and beliefs effect their ability to recommend, refer or advocate for particular services; and how these constructs impact patient experiences, perceptions and behaviors (Callegari et al., 2015; Curtis, et al., 2006; Edelman et al., 2015; Finney-Rutten et al., 2017; Guttmacher, 2015; Hurst & Linton, 2015; Leeman, 2007; McElwaine et al., 2014; Roan, 2009; Trussell, 2007). Likewise, literature highlights the various dimensions of healthcare and the growing arm of alternative

primary care sites, like retail-based clinics, in the delivery of healthcare (Tai-Seale, McGuire, & Zhang, 2007; Green & Fielding, 2011; Bachrach, et al., 2015; Berry & Mirabito, 2010).

However, research is limited in what currently practicing advanced practice clinicians think about this model of healthcare, and how their attitudes might impact their perceptions, biases and intention to recommend, refer or advocate for the integration of more SRH in alternative primary care sites. Since the provider beliefs are among the strongest indicators for behavioral intention and provider recommendation is one of the strongest indicators for patient compliance, the role of provider attitude significantly impacts where one might seek care and their degree of adherence to services (Callegari et al., 2015; Curtis et al., 2006; Edelman et al., 2015; Finney-Rutten et al., 2017; Guttmacher, 2015; Hurst & Linton, 2015; Leeman, 2007; McElwaine et al., 2014; Roan, 2009; Trussell, 2007). Furthermore, gaps in the scientific literature do not comprehensively determine how any variance in provider attitudes (i.e., measured by confidence intervals or weighted categorical indicators) influences the assimilation or secession of SRH in alternative primary care settings and access to these services.

SRH can be an ambiguous term, as it encompasses many facets of prevention and intervention. In order for SRH to be considered quality care, providers must follow national standards and recommendations that are rooted in evidence-based science. As new information is released, providers must remain up-to-date in order to implement unbiased, reliable, and safe care. For SRH to be considered comprehensive, it should include the distinct yet coordinated components of SRH that include prevention and intervention on the initial and primary (i.e., education, counseling, vaccination, contraception, medication intake), secondary (i.e., screening, lifestyle assessments, PAP smears, exams), and tertiary (i.e., treatments) levels (Cappiello, Levi, & Nothnagle, 2016; Nothnagle, Cappiello, & Taylor, 2013).

Study Purpose

The purpose of this study was to identify opportunities of access for sexual and reproductive healthcare in alternative and diverse primary care settings, like retail-based clinics. Through a comprehensive review of the literature, this study aims to identify practice gaps of current primary care providers when integrating sexual and reproductive health (SRH) into practice settings in order to understand barriers of SRH implementation. To address notable barriers, this study also sought to determine alternative sites for SRH through both a comprehensive literature review and a quantitative national survey design of closed-ended and open-ended questions. In tandem, this study also seeks to understand provider attitudes about/toward alternative primary care settings, like retail-based clinics (RBCs) as a source of SRH, in an effort to overcome potential barriers to access and capitalize on potential benefits of its advancement and predict behavioral intention to support the integration of services and recommend and/or refer patients to RBCs. The concept of RBCs is still relatively new and continues to evolve, yet the provider's attitudes about both RBCs the scope of services needs more exploration. Gaps in the scientific literature do not comprehensively determine how any variance in attitudes influences barriers to SRH in alternative primary care settings and access to these services.

The investigation of current reproductive and sexual health practices of advanced providers across alternative primary care settings, retail-based clinics (RBCs) (i.e., Walgreens, CVS, and RiteAid), was reviewed based upon a systematic literature—and in response, the data collected evaluated primary care providers' attitudes toward alternative primary care settings and about the delivery of sexual and reproductive health within these RBCs. Biases or support from current providers may often dictate a patient's experience, referral, or paralleling attitudes about the subject (Curtis, Mohllajee, & Peterson, 2006; Leeman, 2007; Roan, 2009; Trussell, 2007) thus, provider attitudes about

SRH in RBCs or alternative practice settings may also influence or affect a patient's ability to seek this care in those domains. The intent of the survey collection was to determine potential gaps, barriers and benefits of SRH in RBCs through a provider's lens while identifying opportunities to expand SRH access and availability in this arena.

Specific Aims

An electronic survey of advanced practice clinicians nation-wide, which includes both quantitative (closed-ended) and qualitative (open-ended) questions, seeks to capture provider attitudes about retail-based clinics. This includes current provider attitudes regarding retail-based clinics as a current and future point of SRH care and access, as well as opinions among those providers regarding the implementation, integration, and expansion of SRH services in more RBC environments. As this series of items has not been previously administered together to clinicians, particularly in regard to RBCs, the survey instrument was best adapted from validated measures with supporting evidence.

This electronic survey determined the attitudes among advanced practice clinicians toward the current landscape of the scope of services offered at RBCs, which includes sexual and reproductive health practices for patients 18 through 45 years, including frequency of: pregnancy testing; preconception counseling; family planning intentions; contraception counseling and administration; sexually transmitted infection/disease (STI/STD) screening, counseling, and intake; reproductive-related cancer screening and prevention; female sexual dysfunction screening and intervention; and intimate partner violence or contraceptive coercion screening and discussion. The study also aimed to identify perceived barriers when implementing SRH into RBCs, based on provider attitudes and behavioral intentions. Understanding provider attitudes and behavioral intentions and those corresponding resulting barriers in complement to those identified in the literature can help inform future planning and policies to expand SRH access and

availability for all individuals. The themes that emerged during the open-ended question responses helped contextualize the quantitative survey findings and are utilized, along with the study's key findings, to inform future research and research questions.

As per research on mixed-methodological approaches in survey research, using both open-ended and closed-ended questions for these specific aims contributes to improved validity and reliability in response data, particularly given the limitations of utilizing self-reporting responses (Weis, Eisenhart, & Duncan, 2014). This mixed-methods approach is helpful for interpreting and disseminating results to a wide range of audiences, which would consider the diversity in subject specialties, profiles, and demographics (Weis et al., 2014). The open-ended responses generate a qualitative component that will complement the quantitative nature of the closed-ended questions, aiming to capture a mixed-methods approach benefit. Surveys with items of multiple modalities are commonly used among health researchers and health scientists (Tariq & Woodman, 2013).

Research Questions

This dissertation will answer the following research questions:

1. *Research Question 1:* What are the beliefs among a national sample of advanced practice clinicians, specifically about the following constructs: (a) the importance of integrating sexual and reproductive healthcare (SRH) in retail-based clinics (RBCs); (b) the responsibility of offering comprehensive sexual and reproductive care in retail-based clinics; and (c) the quality of the sexual and reproductive healthcare services currently offered in retail-based clinics?
2. *Research Question 2:* What is the relationship between the attitudes of advanced practice clinicians regarding retail-based clinics and their likelihood

of recommending or referring patients to retail-based clinics (RBCs) as a means of seeking sexual and reproductive healthcare (SRH)?

3. *Research Question 3:* What do advanced practice clinicians perceive as the potential benefits of and potential barriers to the integration of quality and comprehensive sexual and reproductive healthcare services in retail-based clinics?

Hypotheses

The following hypotheses will correspond to the research aims, as noted below:

1. *Research Question 1:* What are the beliefs among a national sample of advanced practice clinicians, specifically about the following constructs: (a) the importance of integrating sexual and reproductive healthcare (SRH) in retail-based clinics (RBCs); (b) the responsibility of offering comprehensive sexual and reproductive care in retail-based clinics; and (c) the quality of the sexual and reproductive healthcare services currently offered in retail-based clinics?

Null Hypothesis: There is no importance, responsibility, and/or quality of services for/when integrating SRH into RBCs.

Test Hypothesis: The test hypothesis states that more than 50 percent of providers (a) believe it is important to integrate SRH into RBCs; (b) feel it is responsible to offer comprehensive SRH; and (c) may not be confident in the capacity of RBCs and the quality of SRH training in RBC staff to offer SRH to all persons.

2. *Research Question 2:* What is the relationship between the attitudes of advanced practice clinicians regarding retail-based clinics and their likelihood

of recommending or referring patients to retail-based clinics (RBCs) as a means of seeking sexual and reproductive healthcare (SRH)?

Null Hypothesis: There is no relationship between the attitudes of advanced practice clinicians regarding RBCs and their likelihood of recommending or referring patients to RBCs for SRH.

Test Hypothesis: There is a relationship between attitudes of advanced practice clinicians regarding RBCs and their likelihood of recommending or referring patients to RBCs for SRH. Weak attitudes regarding SRH in RBCs directly correlate with how often and how confident providers are in recommending SRH in RBCs. A majority of providers may not be recommending or regarding RBCs as a trusted source of SRH because they are unaware of the complete scope of services offered but do believe that RBCs are a helpful and affordable resource for patients seeking immediate care.

3. *Research Question 3:* What do advanced practice clinicians perceive as the potential benefits of and potential barriers to the integration of quality and comprehensive sexual and reproductive healthcare services in retail-based clinics?

Null Hypothesis: There is no recognition of perceived barriers to or the benefits of the integration of SRH in RBCs among advanced practice clinicians.

Test Hypothesis: Providers will have varied degrees of perceived barriers and perceived benefits about RBCs that might impact their likelihood of recommendation, referral or support for the integration of SRH in RBCs.

Theoretical Framework

This work was informed by the Theory of Planned Behavior (TPB). TPB links personal beliefs that may impact and affect behavior (Resnick & Siegel, 2013). It is often the theory of choice when examining behavioral intentions and associations with attitudes or beliefs (Ajzen, 1991; Resnick & Siegel, 2013). In the particular study, TPB was used to determine if provider attitudes influence behavioral intention for the recommendation of SRH and referral of care among patients to RBCs. The nature of this theory depicts how attitudes, beliefs, subject norms, behavioral intention, and perceived behavioral control shape an individual's intentions to engage in particular behaviors, or in this case, how or if provider biases about alternative primary care settings may influence their opinions about or referrals to them while also gaining insight about potential barriers that may be addressed to maximize RBC utilization, benefits, and potential (Ajzen, 1991; Asare, 2015; Resnick & Siegel, 2013). Among the other adult learning theories, TPB can be extremely useful and indicative when seeking to answer how and attitudes and beliefs make impact behavioral intention and decision-making, which for this study, is exactly what the research is intended to do.

TPB is often the Perceptions of attitudes may vary based on segmentation factors, including personal beliefs and professional specialty. Cultural beliefs and attitudes about SRH (contraception, family planning, administration of vaccination, abortion referrals, female sexual dysfunction, etc.) may also vary and will all impact one's choice to integrate these services or their views about where and how these services are rendered.

Defining personal beliefs or cohort norms of the target audience, which may vary by sociodemographic factors, can create opportunities for identifying barriers to the broad implementation of SRH in alternative primary care settings, like intention to recommend. The Theory of Planned Behavior (TPB) also seeks to understand the source of decision making in order to educate and prepare individuals with the knowledge and

information they need to engage in desired behaviors, which, within this particular focus, will include the recommendation of SRH in diverse and alternative primary care settings (Ajzen, 1991; Asare, 2015).

The Theory of Planned Behavior (TPB) is an extension of the Theory of Reasoned Action (TRA), as both theories assume the best indicator of behavior is *behavioral intention*, which is determined by attitude toward behavior regarding it (Glanz, Rimer, & Viswanath, 2008). However, TPB includes an additional construct of *perceived behavioral control*, determined by control beliefs, to account for factors outside individual control that could facilitate or inhibit behaviors (Glanz et al., 2008). Perceived control considers situational differences, as it is recognized that subjects do not always have complete control over a behavior, due to external variables that could include demographic variables, attitudes (also influenced by environment or other health determinants), personality traits (shaped by external factors), and other individual variables (Glanz et al., 2008). By including perceived control in this theory, it is assumed that behaviors are a product of motivation (intention) and ability (behavioral control) (Glanz et al., 2008). That is, behaviors are not simply isolated decisions (i.e., to recommend SRH in all primary care environments and/or to implement SRH in individualized primary care environments), but rather a culmination of contributing factors that influence one's conscious and subconscious choices to engage (or disengage) in particular behaviors (i.e., medical school training, personal biases towards SRH, practice barriers, lack of information about updated guidelines, lack of resources, etc.).

According to Ajzen (2006), behavior is directed by various domains of individual beliefs, that is, behavioral beliefs, which refers to one's belief about a likely outcome of behavior and the evaluation of these outcomes; normative beliefs, which refers to the normative expectations of others and the "motivation to comply with expectations" (p. 1); and control beliefs, which refers to beliefs about factors that may influence (interfere or support) a behavior (p. 1). Ajzen also states:

Behavioral beliefs produce a favorable or unfavorable attitude toward the behavior; normative beliefs result in perceived social pressure or subjective norm; and control beliefs give rise to perceived behavioral control. In combination, attitude toward the behavior, subjective norm, and perception of behavioral control lead to the formation of a behavioral intention. (p. 1)

Figure 1 demonstrates the constructs of the Theory of Planned Behavior (Ajzen 2006).

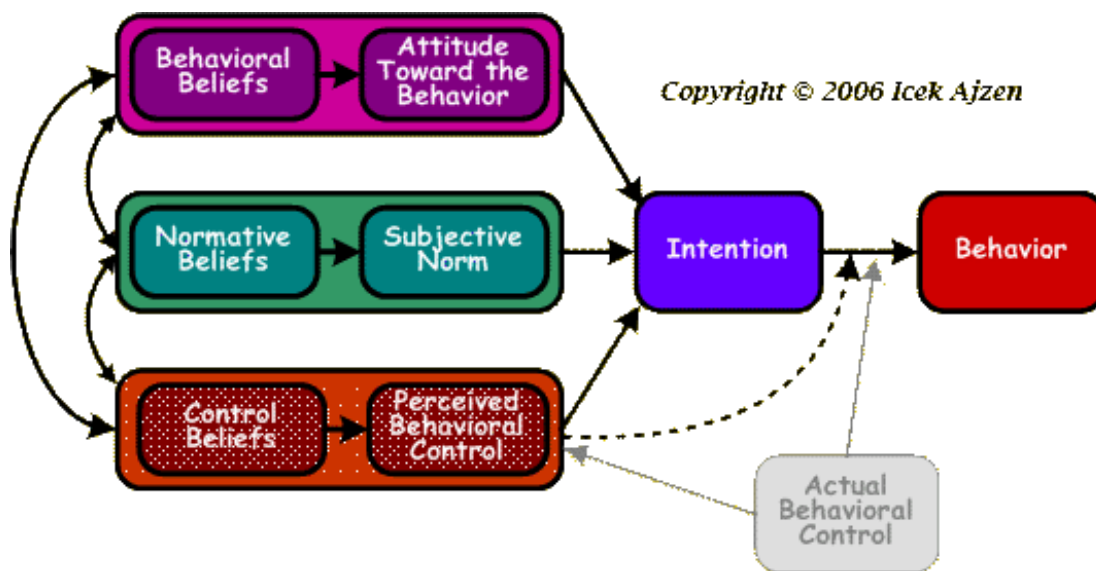


Figure 1. Behavioral Interventions Based on the Theory of Planned Behavior. Retrieved from Ajzen (2006).

The Theory of Planned Behavior lends itself well to a quantitative study design with qualitative components to capture, quantify, and qualify sample constructs that affect attitudes, beliefs, and behaviors. Operational methodology used to determine attitudes and influencing constructs are measured on a Likert scale of spectrums, often self-reported, interpretive, and qualifying (rather than quantifying) (Glanz et al., 2008). Regression and structural equation analytic methods often test the relationship, as constructs are weighted to determine which are more indicative of behavior change and intention (Glanz et al., 2008). Furthermore, since constructs individually affect one's attitudes, beliefs, and ultimately behaviors, population differences and individual or community characteristics determine norms, often best through quantitative survey and

analysis (Glanz et al., 2008). Closed-ended and open-ended questions during quantitative research offer the identification of any environmental or affective barriers that influence behavior (Glanz et al., 2008). Rationale supports this study's quantitative research methodology with qualitative exploration using open-ended questions.

Formulating a questionnaire that aims to capture direct measures of attitudes subjective norms, behavioral controls, intentions and actual behaviors, utilizing various measures of scale that can be regressed and analyzed to determine constructs and behavioral predictions (Ajzen, 1985, 2006; Ajzen & Fishbein, 1977). Within the TBP, behavioral intention is the strongest predictor of behavioral action (Ajzen, 1985). Regression analysis can determine "relative contributions of attitudes, subjective norms and perceptions of behavior" (Ajzen, 2006, p. 2), which will provide valuable insight into behavioral predictions. After all, "beliefs represent the information people have about a behavior" (Ajzen, 2006, p. 3).

Significance of Study

A goal of Healthy People 2020 is to "improve access to comprehensive, quality healthcare services" (Healthy People, 2017c) in order to achieve health equity and quality of life for all (Healthy People, 2017c). Healthy People 2020 measures the access to health services and care by services, coverage, timeliness, and workforce, which collectively impact overall health status, prevention of disease and disability, quality of life, detection of disease, and early intervention (Healthy People, 2017c). Due to the high costs of healthcare, lack of available and accessible timely care, and changes within the political landscape that could affect healthcare coverage and insurance access, individuals need both workforce and field shifts to account for these gaps that impact SRH. Diverse primary care settings that offer comprehensive care could be a useful tool and valuable resource to address gaps in health disparities and health inequities because they offer

convenient, local, and affordable care by trusted and trained healthcare providers, thus addressing key components of coverage, services, timeliness, and workforce issues.

Access to SRH services encompasses several other Healthy People topics and objectives, including the “reduction of new cancer cases ... through cervical cancer screening using Pap test or combined Pap and HPV testing” (Healthy People, 2017d); the improvement of “pregnancy planning and spacing” (Healthy People, 2017a), with the prevention of unintended pregnancy through “contraception services, patient education and counseling, breast and pelvic examinations, pregnancy diagnosis and counseling, and sexually transmitted infection (STI) and human immunodeficiency virus (HIV) prevention education, counseling, testing, and referral” (Healthy People, 2017a); increasing the rates of vaccination and the reduction of preventable infectious diseases through the appropriate use and administration of immunizations (i.e., HPV) (Healthy People, 2017b); “improving the health and well-being of women, infants, children, and families” (Healthy People, 2017e) by providing “opportunities to identify existing health risks in women and to prevent future health problems for women and their children during pregnancy” (Healthy People, 2017e); the promotion of “healthy sexual behaviors, strengthening community capacity, and increasing access to quality services to prevent sexually transmitted diseases (STDs) and their complications” (Healthy People, 2017f).

Primary care providers “play an important role in the general health of the communities they serve” (Healthy People, 2017c) and are often the first point of care for patients presenting across individual clinical environments. As such, providers are in a key position to identify modifiable health behaviors, educate patients about SRH-related issues (i.e., family planning, sexual risk behaviors, preconception risk reduction strategies), and manage patient concerns, questions, and overall health (Weitz, Anderson, & Taylor, 2009). The facilitation and integration of SRH care in primary care environments present clinical opportunities for and are valuable instruments in the

delivery of patient-centered care, narrowing gaps in health inequities and increasing access to trusted SRH care for all.

Operational Definitions

Advanced Practice Providers. Advanced practice clinicians include members of the interdisciplinary primary care team who provide health services and education to women of reproductive ages (18 to 45 years). This includes physicians (MDs and DOs), nurse practitioners (NPs), physician assistants (PAs), registered nurses (RNs), and nurse midwives (NMs) who practice in gynecology, obstetrics, family medicine, internal medicine, and general medicine (Cappiello et al., 2016; Weitz et al., 2009).

Alternative Primary Care Settings/Retail-based Clinics (RBCs). Alternative primary care settings are referred to as environments that have not historically provided comprehensive care, medical interventions, and preventive services to community members, ages 18 to 45 years. Retail-based clinics (RBCs) are an example of an alternative primary care setting, which includes retail spaces that offer comprehensive care, medical interventions, and preventive services to community members, ages 18 to 45 (Carthon, Sammarco, Pancir, Chittams, & Wiltse, 2016). Examples of RBCs include clinics at retailers like Kroger, CVS, Target, RiteAid, Walgreens, or Walmart.

Implementation of Sexual and Reproductive Healthcare. The integration of quality and comprehensive sexual and reproductive healthcare across traditional and alternative primary care settings. Strategies for implementation are rooted in evidence-based science and national standards of care. This also included the adherence to synchronized aspects of primary, secondary, and tertiary prevention and intervention (Guttmacher, 2016).

Quality and Comprehensive Sexual and Reproductive Healthcare Services (SRH Care). *Quality* care is understood as care that adheres to evidence-based national standards and recommendations, while *comprehensive* care refers to the coordination of

primary, secondary, and tertiary prevention and intervention. This includes sexual and reproductive health practices in primary care settings for patients 18 through 45 years, with frequency of: pregnancy testing (through urine or blood testing); preconception intake and counseling (medical history intake for risk factors affecting preconception (i.e., chronic conditions); risk assessment of current health behaviors; intentions/fears/concerns regarding the preconception and conception period; medication intake (i.e., contraindications for pregnancy); assessment of sexual health and functioning; sexual risk behaviors intake; family planning intentions (pregnancy intentions, spacing between intended pregnancies, discussion of options for unintended pregnancy—i.e., abortion, medication abortion, Plan B, also congruent with contraceptive counseling); contraceptive counseling (intake and counseling, as defined by the assessment of current contraceptive methods, including intentions, adherence, and utilization; dialogue about individualized satisfaction, drawbacks, barriers, and lifestyle choices for contraceptive method selection); contraceptive administration (prescription, intrauterine device or implant insertion or removal, condom distribution); sexually transmitted infection/disease (STI/STD) screening (through physical exams, blood work, and lab testing); STI/STD counseling and intake (i.e., STI history intake; sexual risk behavior intake; discussion of STI prevention and intervention opportunities; how to communicate with your partner about your STI status; prevention methods); reproductive-related cancer screening (as categorized by breast and/or thyroid physical exams; cervical cancer screening, i.e., Pap Smear, HPV testing, HPV vaccination, co-testing); and Intimate Partner Violence (IPV) or contraceptive coercion screening and discussion, including the provision of resources and references if/when appropriate (Guttmacher, 2016; Nothnagle et al., 2013).

Sexual and Reproductive Health (SRH). Sexual and reproductive health (SRH) encompasses the complete and comprehensive well-being, including prevention and early intervention, of sexual and reproductive health-related issues. As defined by the World Health Organization (WHO, 2017), sexual health is:

a state of physical, mental and social well-being in relation to sexuality...requiring a positive and respectful approach to sexuality and sexual relationships ... [and] the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.

Likewise, the WHO (2017) addresses reproductive health as “not merely the absence of disease or infirmity” but rather, “the reproductive processes, functions and system at all stages of life,” which implies that people are able to have responsible, satisfying and safe sexual experiences with the capability to reproduce and the freedom to decide if, when and how to do so.

According to the WHO (2017), SRH care includes family planning; the prevention of sexually transmitted infections/disease(s) (STDs); the management of chronic conditions and/or cancers as it relates and impacts sexual and reproductive health; pleasurable and safe sexual behaviors; intimate partner violence and contraceptive coercion; STD and pregnancy risk assessments; and the prevention of reproductive or sexually-related cancers. SRH also includes the guideposts for preventive measures, including guidelines on cervical cancer screenings, breast exams, and the administration of the human papillomavirus (HPV) vaccination. Sexual and reproductive health practices in primary care settings for patients 18 through 45 years, including frequency of: pregnancy testing; preconception counseling; sexual risk behaviors intake; self-reported sexual health and satisfaction; family planning intentions; preconception intake; contraceptive counseling; sexually transmitted infection/disease (STI/STD) screening; STI/STD counseling, intake, screening, and testing; breast and thyroid exams; and recommendations for care or provider referral for wanted and/or unintended pregnancies (Nothnagle et al., 2013).

Traditional Primary Care Settings. Traditional primary care settings will be referred to as the private practices, public clinics, hospitals, Title X clinics, and community health centers that are known to typically provide comprehensive care,

medical interventions, and preventive services to individuals of reproductive ages 18 to 45 years (Carthon et al., 2016).

Summary

This chapter included an introduction and brief rationale for the study, including the purpose, aims, research questions, theoretical framework, and the study's significance. The next chapter includes a comprehensive and detailed review of the literature regarding the gaps in current SRH; an overview of RBCs; and the potential benefits of SRH integration in alternative primary care settings.

Chapter II

REVIEW OF THE LITERATURE

This chapter exhibits an overview of the literature pertaining to sexual and reproductive health practices in the United States, as well as a needs assessment for more sexual and reproductive health integration into practice settings. Literature highlights the history and evolution of RBCs as an alternative delivery of care, including the opportunities to implement more sexual and reproductive health into these practice settings. This chapter is organized into three broad categories and subdivided into relevant corresponding topics: (1) Facets and Gaps within Sexual and Reproductive Health (SRH), (2) Significance of Integrating Sexual and Reproductive Health into Primary Care, and (3) Retail-based Clinics (RBCs) as an Alternative Primary Care Setting.

Facets and Gaps within Sexual and Reproductive Health (SRH)

Sexual and reproductive health (SRH) is essential for overall health and quality of life. As defined by the World Health Organization (WHO, 2017), sexual health is:

a state of physical, mental and social well-being in relation to sexuality ... requiring a positive and respectful approach to sexuality and sexual relationships ... [and] the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence.

Likewise, the WHO addresses reproductive health as “not merely the absence of disease or infirmity” but rather, “the reproductive processes, functions and system at all stages of

life,” which implies that people are able to have responsible, satisfying and safe sexual experiences with the capability to reproduce and the freedom to decide if, when and how to do so.

SRH is a cornerstone of healthcare, and in 2010, the World Health Organization agreed when they declared SRH be integrated into primary care practice (Institute of Medicine [IOM], 2012; WHO, 2017). In response, the U.S. incorporated women’s health and contraceptive care into the 2010 Patient Protection and Affordable Care Act (ACA), requiring full insurance coverage for all contraceptive methods. Moreover, the Centers for Disease Control and Protection (CDC) and Office of Population Affairs at the Department of Health and Human Services (HHS) developed and released new family planning guidelines for private and public clinicians that outlined how to provide more quality family planning services, encompassing patient contraceptive counseling, sexually transmitted disease (STD) testing, and pregnancy spacing to better achieve equitable, efficient, and effective comprehensive primary care (CDC, 2014).

While the cornerstones of sexual and reproductive health may be family planning, comprehensive SRH encompasses the overall sexual and reproductive well-being and practices of individuals. This includes distinct yet related domains, like the prevention of sexually transmitted infections/disease(s); the management of chronic conditions and/or cancers as it relates and impacts sexual and reproductive health; pleasurable and safe sexual behaviors; sexual functioning; intimate partner violence and contraceptive coercion; STD and pregnancy risk assessments; and the prevention of reproductive or sexually-related cancers. Rubrics for preventive measures, like newly released guidelines on cervical cancer screenings, breast exams, or the administration of the human papillomavirus (HPV) vaccination, are suggestive health management checkpoints that call to action the range of healthcare providers, like pharmacists and gynecologists, that were once in seemingly unrelated fields. This underscores the importance, encouragement, provision, and integration of SRH across alternative and diverse practice

settings. While policy strides toward this integration, significant barriers to its implementation and accessibility continue to persist in the United States.

Unintended Pregnancy Prevention in Sexual and Reproductive Health

Women account for the more than 50% of the total population, and women between the ages of 18 through 45 account for almost 36% of the total female population in the United States (HHS, 2012). Among the 62 million women of reproductive age in the U.S., an estimated 70% are fertile, sexually active, and trying to avoid pregnancy (Guttmacher Institute, 2016; Hubacher, Finer, & Espey, 2011; Mosher, Martinez, Chandra, Abma, & Wilson, 2004); yet, nearly half of all U.S. pregnancies each year are unintended, and this number is likely to keep rising (Finer & Zolna, 2016; Hubacher et al., 2011). The Guttmacher Institute (2016) notes that 41% of all unintended pregnancies are among the 18% of women at risk who use contraceptives inconsistently or incorrectly. Fourteen percent of women at risk who do not utilize any or consistent contraception account for 54% of all unintended pregnancies (Sonfield, Hasstedt, & Gold, 2014). Among the 45% of U.S. unintended pregnancies, 42% of them (excluding miscarriages) end in abortion (Guttmacher Institute, 2016).

Family planning for the prevention of unintended pregnancy is a goal of *Healthy People 2020*, defined as the “improvement of pregnancy planning, spacing, and prevention of unintended pregnancy” (Healthy People, 2017a; see also Leeman, 2007, p. 26). Objectives include a 10% improvement in intended pregnancies; a 10% decrease in unintended pregnancies among females, ages 18-19 years; and a 10% increase in the number of sexually active females who use a condom or hormonal intrauterine contraception (IUC) at last intercourse (Healthy People, 2017a).

The cost of unintended pregnancy can be measured both financially and non-monetarily. According to the Department of Health and Human Services (HHS), the cost of unintended pregnancy in 2006 was \$11 billion—and the implications to mothers

widened the gaps of social inequities and health disparities and impacted likelihood of advanced and/or professional education (Curtis et al., 2006; Guttmacher Institute, 2015; Healthy People, 2017a; Leeman, 2007; Sonfield et al., 2011). As such, there remains a steadfast need to help prevent unintended pregnancies through diverse measures. *Healthy People 2020* recommends advancing patient education and counseling while increasing more family planning opportunities to generate more informed decision making, contraceptive commitment, and patient adherence to prevention methods (Healthy People, 2017a; Roan, 2009; Trussell, 2007). However, Bellanca and Hunter (2013) note that only 41% of patients receive contraceptive services from their providers, and only 19% received contraceptive counseling (p. 4).

While most U.S. women use some form of reversible contraception, compounding factors make it difficult to increase contraceptive uptake among females of reproductive age, despite the evolution of healthcare policies, coverage, and recommendations for preventive care. Inhibitors for patient contraception uptake include fear and confusion about contraceptive options; misunderstanding about relative and actual risks; lack of awareness and differentiation among methods; inaccessibility of preferred options; and inadequacies in effective contraceptive counseling (Guttmacher Institute, 2015; Hubacher et al., 2011; Trussell, 2007). Patients are susceptible to both material and influence when information is delivered effectively, efficiently, and strategically. Guidance, education, and clinical opportunities are necessary for informed and shared decision making about individualized SRH for patients to make the choices that best meet their needs and lifestyle.

Despite the frequency and cost burden of unintended pregnancy, there are limited prevention guidelines and coordinated prevention efforts for the provision of care to women of reproductive age (Taylor & James, 2011). According to Taylor and James, this is a “system-wide failure” (p. 782) due to “general fragmentation of healthcare services” (p. 783) that requires an “evidence-based blueprint for a coordinated system of primary,

secondary and tertiary prevention” (p. 782). Reducing the number of unintended pregnancies is a national health goal of *Healthy People 2020*, but with inadequate knowledge about the scope of the issue, limited time for healthcare and clinical visits, and the “lack of a coordinated system” (p. 784), it makes meeting this national health goal much more challenging (pp. 782-784). It will require mobilization of the healthcare team and systems.

A key strategy for increasing contraceptive access and utilization is to strategically grow the number of clinicians who are appropriately trained and have become advocates for family planning alternatives (Leeman, 2007). The clinical visit creates an opportunity to educate and guide patients toward the method of family planning that best meets individual patient needs. In fact, research shows that both women and providers are positively inclined toward using a particular contraceptive method when educated and counseled about it—and women are more likely to choose and adhere to this method after discussing the various options with a healthcare provider (Curtis et al., 2006; Leeman, 2007; Roan, 2009; Trussell, 2007). Research by Schwarz et al., (2010) and Lee et al. (2011), both cited in Bellanca and Hunter (2013), demonstrates that routine collection of information about women’s pregnancy intentions and contraceptive use in primary practice is “feasible, acceptable and has the potential to reduce unsafe prescribing to women and primary care physician liability” (Bellanca & Hunter, 2013, p. 4) and furthermore, contraception counseling by a primary care clinician “increases the likelihood that women utilize contraception” (p. 4).

However, misconceptions and misunderstandings about safety, effectiveness, and differentiations of methods continue to permeate the healthcare community, making it challenging to deliver effective messaging about the advantages of contraceptive options. Other barriers to contraceptive uptake are provider and practice limitations that marginalize the contraceptive marketplace for patients. This includes misinterpretation of eligibility requirements for particular long-acting reversible contraception (LARC); lack

of time to counsel and explore options per individual patient need; unfamiliarity for billing, coding for contraceptive counseling, and/or insertion and removal of some contraceptive devices; costs to stock contraceptive methods; provider discomfort with counseling or guiding patients about SRH decision-making; and deficiencies and inconsistencies in mainstream SRH training and education among primary care practitioners (Mosher et al., 2004; Trussell, 2007). These inconsistencies and deficits among healthcare professionals thwart advanced protection efforts to decrease the rising rates of unintended pregnancy.

The integration of sexual and reproductive healthcare, including primary, secondary, and tertiary prevention, into primary care practice directly corresponds to “currently established national health goals and advances [in] health promotion” (Taylor & James, 2011, p. 784). Researchers agree that successful assimilation of this model into the broader health system will require “coordination and continuity” among healthcare providers, professionals, systems, and settings (p. 784).

Intended Pregnancy for Family Planning in Sexual and Reproductive Health

According to the Guttmacher Institute (2015), two-thirds (68%) of U.S. women at risk for unintended pregnancy annually use contraceptives consistently and correctly, and these women account for only 5% of all unintended pregnancies. In contrast, the U.S. women that do desire children on average will spend almost 3 years prenatal, pregnant, or postpartum with roughly 30 years trying to avoid pregnancy [est. for two children] (Guttmacher, 2016). This projection includes decades in clinical visits that generate multiple opportunities to foster SRH through education, preparation, counseling, and screening while delivering SRH choices in a positive, healthy, and empowering way.

For those women that are seeking pregnancy or who do become pregnant, the United States has one of the “highest rates of maternal mortality in the developed world” (Callegari et al., 2015, p. 664), with a “growing proportion of maternal deaths” each year

(pp. 663-664). These statistics attribute to chronic medical conditions, most often diagnosed and/or managed in primary care during preconception periods (Callegari et al., 2015). Preconceptional care can be an intersectional definition, but most concisely defined by Callegari et al. as a set of interventions to “identify and modify biomedical, behavioral, environmental, and social risks” impacting the health of females or their children prior to conception, particularly because of the vulnerability to maternal and fetal mortality during this time (p. 664).

Far too often, prenatal care is initiated too late to be “meaningful and impactful on pregnancy outcomes” (Callegari et al., 2015, p. 664). Callegari et al. and Edelman et al. (2015) agree that, comparably, substance use, sexual risk behaviors, intimate partner violence (IPV), and smoking influences “formative experiences” (Edelman et al., 2015, p. 11), adverse sexual and reproductive health outcomes during planned and unplanned pregnancy, as well as conscious or spontaneous abortion (Callegari et al., 2015; Edelman et al., 2015). These risk factors could be proactively avoided or flagged by healthcare providers before imposing additional threats to the well-being of a mother or her fetus through more screening, counseling, and educational opportunities. Callegari et al. (2015) also note:

Primary care physicians (PCPs) care for large numbers of reproductive-aged women before, between, and after their pregnancies and thus are ideally positioned to help women identify and modify preconception health risks; yet, many PCPs lack training and knowledge of preconception care. Few PCPs routinely ask women about their pregnancy intentions or discuss how their health status or medications can impact pregnancy.... Because women’s pregnancy intentions often change over time, a key feature of reproductive planning is the integration of contraceptive and preconception counseling. Reproductive planning conversations are perceived as valuable and important to women from a variety of backgrounds. (pp. 663-665)

These persistent barriers curb quality sexual and reproductive healthcare and minimize opportunities for valuable intervention and prevention.

The Prevention of Sexually Transmitted Infections in Sexual and Reproductive Health

The United States ranks the lowest overall on nearly every measure of health status, with some of the widest gaps in health outcomes, health disparities, and health inequities, despite our record high spending costs on healthcare each year (Commonwealth Fund, 2017). In 2008 alone, America spent \$2.3 trillion on healthcare (Berry & Mirabito, 2010); yet, our rates of sexually transmitted infections/disease (STIs/STDs) are skyrocketing. According to the American Sexual Health Association (ASHA, 2017), more than half of all people will have an STD/STI at some point in their lifetime, and one in two sexually active people will contract an STI/STD by age 25. There are almost 20 million new STIs each year in the United States, and in 2008, there were an estimated 110 million incidences of STIs, with 22.1 million of infected individuals between the ages of 15 and 24 years (ASHA, 2017). The direct financial burden of STIs costs the U.S. nearly \$16 billion annually in intervention efforts (ASHA, 2017; CDC, 2016c).

ASHA (2017), the Centers for Disease Control and Prevention (2016a, 2016c) and the World Health Organization (2016) provide the following facts about STIs:

- More than a million people worldwide acquire a sexually transmitted infection daily.
- One out of 20 people in the United States will get infected with hepatitis B (HBV) at some point during their life, in which half of HBV infections are sexually transmitted and can lead to chronic liver disease, cirrhosis, and liver cancer.
- Fifty million adults in the U.S. are living with genital herpes, with 776,000 new infections every year; yet, nearly 90% of those living with herpes are unaware of their status. It is estimated that by 2025 up to 40% of all men and half of all women could be infected.

- From 2014 to 2015, there were a reported 1.5 million new cases of chlamydia (roughly 3 million annually), demonstrating a 6% increase of prevalence rates with one year. Two-thirds of females believe that doctors routinely screen for chlamydia; yet, only 30% of women 25 and under with commercial healthcare plans and 45% in Medicaid plans were actually screened for chlamydia in 2003.
- Fifteen percent of U.S. infertility rates among women are attributed to tubal damage caused by an untreated STD that has led to pelvic inflammatory disease (PID).

Among the rampantly inflating rates of STIs, the human papillomavirus is the most common sexually transmitted infection in the United States, with nearly 80 million people currently infected (CDC, 2016a, 2017). In fact, almost all sexually active men and women will become infected with one type of HPV in their lifetime (CDC, 2017). Furthermore, approximately 27,000 people are diagnosed with HPV-related cancer (i.e., mouth/throat, anus/rectum, penile, cervical, vaginal, and vulvar) annually (CDC, 2016a, 2017). HPV vaccination (in its various versions) protects against an array of HPV-strands and has been steadily recommended by the CDC (2016a, 2017). *Healthy People 2020* aims for 80% HPV protection, yet this vaccination remains extremely underutilized (Healthy People, 2017). In 2015, a national survey found that only 42% of girls within vaccine recommended ages (aged 13-17) received the complete vaccination series, and only 28% of boys within recommended vaccination ages (ages 13-17) completed the vaccination series (CDC, 2016a).

According to the *Sexually Transmitted Disease Surveillance Report* released by the CDC (2016c), reported cases of chlamydia, gonorrhea, and syphilis in 2015 reached unprecedented record highs in the United States. In 2015, there were nearly 400,000 cases of gonorrhea (12.8% increase from 2014), and almost 24,000 cases (19%) of primary and secondary (P&S) syphilis reported in the U.S. Most STD cases continue to

be misdiagnosed, overlooked, and untreated, putting individuals at risk for the myriad of “severe and often irreversible health consequences, including infertility, chronic pain and increased risk for HIV” (CDC, 2016c).

While condom use or barrier methods, routine STD screening and counseling, and immunization could significantly protect women from the effects of common STIs/STDs, a national survey of U.S. physicians revealed that less than one-third routinely screened patients for STDs/STIs (ASHA, 2017; St. Lawrence et al., 2002; WHO, 2016) and few primary care providers initiate conversations about sexual risk behaviors unless prompted by their patients; yet, patients are often hesitant to share this information because they feel providers should begin the conversation (Politi, Clark, Armstrong, McGarry, & Sciamanna, 2009). In turn, providers miss valuable opportunities to screen and counsel patients, leading to delayed diagnoses and treatments.

Widespread access to screening and treatment would significantly reduce the prevalence rates and lifetime effects of STIs, but requires action and engagement across micro and macro levels (CDC, 2016c). The CDC recommends the following procedures and charges the healthcare community to: (a) implement STD screening as a standard part of medical care, particularly among women of reproductive ages (18-45); (b) proactively integrate STI/STD prevention into prenatal and routine care visits; (c) gain heightened awareness about STD prevention through public discussion; (d) offer safe, effective, and convenient ways to access information and services; and (e) engage state and local health departments to direct resources to diverse and vulnerable communities (CDC, 2016c). While research by WHO (2011) promotes the integration and necessity of SRH in primary care environments worldwide, little is known about the actual integration of these services nationwide. Despite the policy recommendations, best practice guidelines, and government initiatives, the delivery and quality of SRH in PCS remain unclear.

Significance of Integrating Sexual and Reproductive Health into Primary Care

Members of the healthcare team that provide care to female patients of reproductive age (ages 18 to 45) are determined to be primary care providers; as such, they play an integral role in the delivery of SRH care to both men and women, with the potential to have a positive impact on healthcare outcomes (Hurst & Linton, 2015). Private and public primary care providers (PCPs) manage the health of women during their reproductive years, including pre-, post-, and peri-natal periods, often in tandem with or in supplement to reproductive specialists (Callegari et al., 2015). However, primary care providers are not typically specialized in reproductive and sexual health care issues, like a typical obstetrician or gynecologist might be; however, they are often seeing patients of reproductive ages and managing issues that often impact sexual and reproductive health (Hurst & Linton, 2015). This presents precious and valuable opportunities to identify and modify preconceived health risks (i.e., medication management, smoking cessation, or medication contraindications), foster the engagement in safer sexual health decision-making (i.e., condom use for STI protection, contraceptive use for unintended pregnancy prevention), provide primary and secondary prevention care (i.e., breast, thyroid, cervical cancer screening), and educate women about their various family planning options (i.e., contraceptive counseling, abortion referral, recommendations prenatal care, vitamins and nutrition) (Callegari et al., 2015).

Primary care settings are an access point for critical management of comprehensive care and have the potential to create profound changes in health outcomes; yet, few PCPs consistently coach or engage women in discussions about their SRH in various clinical checkpoints. Due to lack of knowledge, training, and confidence, PCPs do not routinely (a) assess patient sexual practices family planning/pregnancy intentions; (b) discuss the impact or contraindications of currently utilized medications, chronic conditions, and lifestyle choices on preconception health, pregnancy, or postnatal care; or (c) explore the

implications and influences of SRH on mental health or mental health state on the implications and influences of SRH (Callegari et al., 2015).

During the many annual visits leading up to conception, PCPs could employ opportunities to educate their patients about contraceptive options, prenatal vitamins, or lifestyle choices that could foster a healthy pregnancy or healthy avoidance of pregnancy, but many health care providers report lacking contraceptive knowledge and training, thereby hesitating to provide this care, education, and information to patients that would otherwise benefit from it (Callegari et al., 2015; Edelman et al., 2015). One national study found that contraceptive counseling was provided at less than 20% of healthcare visits to women of childbearing age that “documented use of a potential teratogen” (Callegari et al., 2015, p. 664). Furthermore, many women remain unaware of the importance of their pre-pregnancy health to both maternal and fetal pregnancy health outcomes, and few seek preconception counseling from providers, thus relying on the healthcare provider to initiate conversation, dialogue, and intake (Callegari et al., 2015).

Sexuality can significantly influence an individual’s well-being and quality of life. “Sexuality is an important component of emotional and physical intimacy that most men and women desire to experience throughout their lives” (Ambler, Bieber, & Diamond, 2012, p. 16). However, almost 63% of women experience sexual dysfunction, yet most providers are not discussing healthy female sexual functioning with their patients, which perpetuates stigma, myths about female sexual dysfunction (FSD), and patient suffering, which prevent optimal well-being and quality of life (p. 16). Studies show that sexual dysfunction is more prevalent in women than in men and varies among racial groups, socioeconomic status, smokers and alcohol users, body mass index (BMI), and those that have experienced traumatic sexual experiences (pp. 16-18).

The most common issues faced among those women experiencing FSD include inhibited sexual desire (i.e., hypoactive sexual desire disorder—HSDD), inability to become and stay aroused, problems achieving orgasm, painful intercourse (dyspareunia),

emotional distress, and decreased sexual desirability and attractiveness (Ambler et al., 2012). HSDD is the most common FSD, and as such, it is frequently encountered at primary care practices; yet, is often left unaddressed, untreated, and undiagnosed because both women and clinicians are not discussing it (Hayes et al., 2007; Miner, Sadovsky, & Buster, 2012).

Healthcare providers can screen patients for FSD, as well as overlapping conditions or risk factors that may be affecting female sexuality (i.e., cardiovascular disease, diabetes, lower urinary tract symptoms, and depression), and primary care visits would be an opportunity to do (Ambler et al., 2012). However, providers are not initiating this dialogue with patients, and patients are often reluctant to address these concerns with their primary care teams.

Many providers are not educated or adequately trained to understand female sexuality or discuss sexual health concerns with patients because they feel unequipped to do so, embarrassed to initiate conversation, or lack the knowledge about symptoms and available treatments (Bachmann, 2006; Ferenidou et al., 2008; Miner et al., 2012; Warnock, 2002). Many healthcare professionals report little or no education about issues related to female sexuality, yet most agree that this is a clinically significant issue in primary practice (Woodard et al., 2007). Sexual health counseling, including more routine sexual history intakes, exploration and discussion about sexuality-related concerns, and the promotion of safe and evidence-based safe opportunities for therapeutic interventions could significantly improve HSDD with other FSDs and patients' quality of life and ensure that patients are receiving reliable, quality, and comprehensive care (Tsimtsiou et al., 2006). Diverse and alternative primary care settings could be an optimal entry point for dialogue initiation and discussion regarding female sexuality, including the strategic counseling transition to other areas of complete and comprehensive sexual and reproductive health.

According to the Bureau of Primary Healthcare of the Health Resources and Services Administration (HRSA, 2017), there are currently 1,375 health centers, serving over 24 million people, assuring access to comprehensive, quality, primary healthcare (Bureau of Primary Healthcare, 2016). Yet, most publicly-funded primary care facilities and community health centers are sluggish or reluctant to adopt SRH care into their clinic systems, despite requirements from the ACA. The dissemination of CDC and OPA new family planning guidelines and HRSA's recommendations under the ACA for women's preventive services in 2016 "help ensure women receive a comprehensive set of preventive services without having to pay a co-payment, co-insurance or a deductible," expanding preventive SRH care across several primary care settings (CDC, 2014; HRSA, 2016). This includes screening for gestational diabetes; annual well-woman visits; HPV testing; counseling for STIs and HIV; contraceptive methods and counseling; screening and counseling for IPV; and breastfeeding support, supplies, and counseling (HRSA, 2016).

Despite these government directives that support affordable SRH care, public and private primary care health clinics nationwide have not been steadily or effectively incorporating SRH into practice or into the routine clinical visit (Fenway Institute, 2014; HRSA, 2016). Clinician workforce shortages, limited knowledge and competencies in SRH, challenging procurement and reimbursement systems, and clinical and cultural biases against SRH care account for this poor uptake of SRH and compromises SRH access for women across the U.S. (Callegari et al., 2015).

Sexual and Reproductive Healthcare Training and Education

It is often assumed that advanced practice clinical degrees and/or the completion of a post-graduate residency program satisfies the training requirements to manage all aspects of patient-centered women's sexual and reproductive healthcare. While some obstetrics/gynecology, family medicine, and nursing schools/programs across the United

States do provide comprehensive education and training within these arenas, many do not routinely or sufficiently educate providers about SRH paradigms of contraception options, counseling, abortion procedures, and preconception management (MSFC, 2017).

Primary care specialists like pediatricians and internists receive less SRH training, despite the fact that they care for patients through many of their reproductive years (Auerbach et al., 2011; MSFC, 2017). For example, the HPV vaccination is recommended beginning at age 9 or 11 for both males and females, a target population of patients seen by family practitioners and pediatricians (CDC, 2017); yet, these providers are not dependably educating caregivers and vaccinating their patients. Perhaps they do not feel equipped to counsel patients and caregivers about the HPV vaccination, risk of exposure and correlated cancers, or affirmative recommendation for the immunization, thus creating a discord in standardized care. In fact, research by Finney-Rutten et al. (2017) notes that lack of physician recommendation is the primary barrier to HPV vaccination uptake, most often due to inconsistencies in knowledge regarding HPV vaccination efficacy and administration guidelines (pp. 164, 168). The lack of calibration in training programs further widens this gap and perpetuates the low priority of SRH in primary care settings.

Likewise, many providers cite the need for continuing education to improve their skills and enhance their ability to counsel patients about various contraceptive methods or provide preconception care in order to maximize the clinical opportunities for SRH integration (ACOG Committee on Gynecologic Practice, 2009; Guttmacher, 2015; Sonfield et al., 2011). Health care providers seek appropriate training to overcome barriers that impact their competency to provide SRH in their primary care setting. Comprehensive education and competency-building generate the skills needed in order to (a) convey pertinent information; (b) identify candidates for various contraceptive methods; (c) collect comprehensive medical history intakes; (d) engage in-depth patient communication; and (e) tailor pre-, post-, and peri-natal care per individual patient

complexities—all of which have proven beneficial and necessary for women of reproductive age. Research also shows that health care providers feel more confident using operational strategies to habitually deliver SRH, like address myths and misconceptions of contraception or direct patients toward a contraceptive method that may best serve their individual needs, when they are trained to do so (Hall et al., 2015; HRSA, 2016; Hurst & Linton, 2015).

Retail-Based Clinics (RBCs) as an Alternative Primary Care Setting

Clinical guidelines support risk reduction in the “routine, opportunistic delivery of preventive care by all primary healthcare clinicians to all clients” (McElwaine et al., 2014, p. 424). Integrated practice-based care models in which “reproductive health service delivery can occur in primary care contexts” (Hall et al., 2015, p. 13) are beneficial for closing gaps in health disparities, expanding SRH care access for all, and improving SRH health outcomes across the lifespan (Hall et al., 2015). For example, Callegari et al. (2015) note that the CDC and the American Congress of Obstetricians and Gynecologists (ACOG) recommend that “providers routinely ask women about their reproductive goals” (p. 664), as these conversations are essential to SRH across diverse population cohorts (ACOG, 2009; Callegari et al., 2015). As a woman’s family planning needs and pregnancy intentions frequently shift over time, “a key feature of reproductive planning is the integration of contraceptive and preconception counseling” (pp. 664-665) across various stages of her reproductive life.

All members of the primary care team are in a strategic position to “intervene and have a significant impact” (Hurst & Linton, 2015, p. 340) on SRH health outcomes, including maternal and perinatal outcomes, and female patients’ clinical experiences through the implementation of SRH in alternative and diverse primary care settings; and in turn, every patient encounter should be considered an opportunity to for “evaluation,

intervention, and counseling” (p. 340). Edelman et al. (2015) suggest that strategies to advance the integration of SRH in primary care include increasing the number of skilled health care professionals that provide STI screening and contraceptive counseling or encouraging more contraceptive supply or HPV vaccination stocking in the primary care settings (p. 11).

To expand the accessibility and availability of timely intervention and prevention, Edelman et al. (2015) and Callegari et al. (2015) propose proactively conducting a preconception risk assessment in tandem with routine primary care visits among women of childbearing age as the standardization of preventive care, particularly since the goals of comprehensive primary care and high-quality preconception care overlap (Callegari et al., 2015).

However, clinicians are confused about the changing guidelines and HRSA (2016) recommendations for the inclusion of SRH in primary care. HRSA recommends that the following services be included in primary care: breast cancer screenings at age 40; comprehensive lactation support services pre- and post-natal (i.e., counseling, education, breastfeeding equipment and supplies); cervical cytology every three years for cervical cancer screening; HPV screening with cytology every five years for women ages 30-65; screening for gestational diabetes mellitus between 24 and 28 weeks of gestation; contraceptive care for adolescent and adult women (i.e., counseling, access, removal/insertion); annual prevention education and risk assessment for HIV infection in adolescents and adult women; screening for interpersonal and domestic violence among adolescents and adult women; directed behavioral counseling for sexually active adolescent and adult women with a high risk for STIs; and annual preventive care visits. Since clinical visits are already limited, physicians are challenged to squeeze more comprehensive care into a shorter period of time. Engaging the entire healthcare team, including more NPs, PAs, RNs, and NMs, and utilizing alternative opportunities for care

could enhance SRH integration and broaden its availability to patients of reproductive age.

Providers that are not already integrating these services within their practice settings may need more targeted education to utilize best practice strategies and to do so more effectively and efficiently. However, medical knowledge alone does not guarantee high-quality, patient-centered SRH care. Acceptability of practitioners and patients to engage in SRH must overlap to inform the need and implementation of SRH in primary care settings (Edelman et al., 2015). A collective need for policy changes, affordable healthcare, educational SRH training for advanced practitioners, and expanded access and availability of healthcare resources is essential to successfully incorporate more SRH into primary care (Hurst & Linton, 2015).

The Opportunity of Retail-Based Clinics

The primary care visit is an opportunity, albeit often missed, to educate women about sexual and reproductive health across a variety of topics; however, the average length of a standard clinical visit in a primary care office is often 15 minutes or less (Tai-Seale et al., 2007), an extremely limited allocation of time to cover the variety of specific topics necessary during this visit, which often happens annually. Time constraints and the financial burden to see as many patients as possible often create barriers to necessary and thorough care (Callegari et al., 2015). Other barriers include: (a) access to care across diverse community settings; (b) lack of timely intervention and treatment for high-risk behaviors; (c) “inadequate reimbursement to providers for health promotion/prevention” (Hurst & Linton, 2015, p. 339); (d) moderate impact of public health promotion messaging; and (e) “inadequate training about health promotion and risk assessment skills for providers” (pp. 339-340).

Since many patients rely on this time to discuss their overall state of health, providers and patients may not be characteristically engaging in SRH discussions that

prove pivotal to their care. According to Hurst and Linton (2015), SRH and reproductive planning “should be a consideration at every office visit” (p. 339). More resources, time, and opportunities are needed to address these growing needs and capitalize on the rare and monumental moments when patients have the ear and eye of their provider to make the best decisions regarding their SRH.

A multi-systems approach to and multi-behavioral interventions for the delivery of preventive care is most effective, including a need for better follow-up/referral care (McElwaine et al., 2014). Providers are often the first point of service care and source of trusted health information to patients. The clinical opportunities to inform, educate, and intervene are fundamental, yet limited. When providers are equipped with the knowledge, skills, competence, and resources needed to educate and provide preventive care, the intervention becomes most successful. According to Green and Fielding (2011), integrative healthcare, prevention, and national strategies that are effective and achievable and have an increased emphasis on “health in all policies” (p. 467) require collective contributions to population health status (p. 467). Through “health promotion, health protection, and preventative services” (p. 457) and with opportunities of “involvement for government, voluntary and private sector action” (p. 457), the “deliverable goals in education, service, and research” (p. 460) can become more achievable. More localized and focused action plans (IOM, 2012, p. 75), highlighting the collection and culmination of factors that influence health outcomes across time, also need to be acknowledged and considered during its integration (p. 78).

Despite these commendations, the U.S. suffers from a lack of qualified health care providers, and these “provider shortages are not evenly distributed across the United States” (Bachrach, Frohlich, Garcimonde, & Nevitt, 2015). In at least 12 states with up to 50% of the primary care capacity, as many as 65 million people are living in “primary care deserts” nationwide, with no access to primary care providers in retail,

community, or private sectors (Bachrach et al, 2015). In response, the birth of RBCs gave rise to this notion and solution to this calling.

The rise of RBCs presents valuable and purposeful opportunities to expand the access and availability of primary care across diverse communities. RBCs are a product of and solution to the perpetuating issues in American healthcare, including exorbitant out-of-pocket costs, limited and inconvenient access, saturation of emergency departments, lack of streamlined medical records, and the “declining numbers of primary care doctors” (Berry & Mirabito, 2010, p. 157). According to Berry and Mirabito, RBCs represent “one of the fastest-growing segments in healthcare” (p. 160). It has been said that the emergence of RBCs is a “structure for integrating innovations that can transform the delivery of healthcare” (p. 157).

RBCs found in stores like CVS, Walgreens, RiteAid, Walmart, Kroger, Dillions, and Target are expanding into primary care practices and, thus, mainstreaming access to frequent healthcare. The attraction of RBCs includes their convenience, with weekend and late hours, in settings that consumers already frequent; diversity in services offered; and low-cost of primary services, particularly for those uninsured (Bachrach et al., 2015). According to national studies, the average privately insured or Medicaid patient waits five to eight days to see a provider, whereas some providers will deny Medicaid patients care due to lower reimbursement rates (Bachrach et al., 2015). The majority of RBCs accept all forms of insurance (Bachrach et al., 2015), thus expanding access and availability of healthcare.

History and Evolution of Retail-Based Clinics

The first RBC was created in 2000, and now about 7% of families visit a convenience clinic at least once per year (Berry & Mirabito, 2010). According to Ryan (2010), the industry consolidated early private start-up companies, like Walgreens acquiring Take Care Health Systems in 2007 and CVS Caremark buying MinuteClinic in

2006 (p. 28); consequently, by 2010, there were approximately 24 companies operating clinics in 30 states, and RBCs treating more than 3.5 million patients (p. 28). Growth continued, as this model of care proved relevant, necessary, and in demand. According to Carthon et al. (2016), there were 1,790 RBCs operating in the United States as of October 2014, which represented a 20% increase over 2013, attributed to convenient hours, lower out-of-pocket costs, shorter wait times, and reliance on NPs as a cost-efficient means to provide necessary care services (p. 1). It is estimated that RBC visits will “account for 10% of primary care visits in 2015” (p. 6).

There are currently over 1,800 RBCs across the country, delivering quality primary care services to millions of people (Bachrach et al., 2015). Analysts predict that more than 2,800 RBCs will open in 2017 (a 47% increase since 2014), with the capacity to serve 25 million patients, but researchers argue that those predictions are underestimated by 3,000 (Accenture, 2015; Mehrotra, 2008; Spetz, Parente, Town, & Bazarko, 2013). Despite the difference in prediction and calculation, both healthcare analysts and researchers agree that RBCs are expected to multiply exponentially nationwide in the coming years.

According to Spetz et al. (2013), the expansion of RBCs is likely due to convenient locations and transparency of pricing, with roughly 45% of clinic visits occurring on the weekend or after physician hours during the week (p. 1977). Ryan (2010) states, “Access to healthcare in a neighborhood—where patients work or live—is critical” (p. 29). The diversity in RBC locations and placements has the “ability to expand in key areas of need across the country, in multiple cities and states” (p. 29), particularly to eliminate the primary care and contraceptive deserts (Berry & Mirabito, 2010, p. 159). In fact, “more than a third of the urban U.S. population (35.8 percent) lives within a ten-minute drive of a clinic” (Pollack, Gidengil, & Mehrotra, 2010, p. 999).

Scope and Practice of Retail-Based Clinics

RBCs are convenient, accessible, cost-effective, and “bridge the access gap between physician offices and emergency departments” (Berry & Mirabito, 2010, p. 158). High degrees of satisfaction have been reported across diverse patients that have utilized RBC clinic care, which continues to drive approval and success rates (Spetz et al., 2013). The cost per visit at RBCs is also significantly lower than one in a traditional primary care setting (Spetz et al., 2013). Prices can range from \$30 to \$110 and are often “half as much” as traditional medical practices charge (Herrick, 2010).

For those that have insurance, the out-of-pocket expense parallels that at a physician’s office, as RBCs characteristically accept insurance and copayments; but for patients without insurance, the cost is “substantially less than in traditional medical settings” (Berry & Mirabito, 2010, p. 160). Miller (2011) notes that the cost of care in a RBC was significantly lower not only compared to physician offices, but to urgent care clinics and emergency departments as well (p. 52). Patients who utilize RBCs without insurance save 30% to 40% more than if they were to visit a physician’s office and save nearly 80% from an emergency department visit (Ryan, 2010).

Field research demonstrates that approximately 30% of the patients that visit RBCs are uninsured, and “that number could grow in the face of economic turmoil and rising healthcare costs” (Ryan, 2010, p. 29). Since almost all RBCs accept some form of private insurance and most accept public insurance(s), this eliminates the cost barriers to healthcare, intervention, and preventive services (Pollack et al., 2010). This is critical for the provision of healthcare and the prevention of chronic disease(s) in the United States. In fact, many health plans will reduce or waive copayments to RBCs as primary care visits to encourage more patients to frequent RBCs and receive primary prevention healthcare (Pollack et al., 2010).

According to Ryan (2010), RBCs are monitored for quality assurance and the compliance of quality care delivery, ensuring the safety and well-being of visiting patients:

The Convenient Care Association (CCA), a national non-profit organization whose members operate more than 95% of the convenient care clinics (CCCs) in the United States, developed a set of standards with input from leading medical, nursing, and patient care quality organizations. These standards, along with a third-party certification process from the Jefferson School of Population Health, ensure CCA members are committed to continuously monitoring quality and safety and have policies and procedures to which they adhere. This includes ongoing quality monitoring through peer and collaborating physician review and analyzing data on quality and safety outcomes. (pp. 29-30)

In studies highlighted by Berry and Mirabito (2010), the audited records at RBCs showed a 99% adherence to clinical guidelines (p. 160).

RBCs are the “most common method for delivering primary healthcare” (Berry & Mirabito, 2010, p. 159), with continued benefits like first contact access, comprehensive care and a whole-body approach, and coordinated care (p. 159). Evidence demonstrates that the quality of routine care provided in RBCs has repeatedly been shown to be equivalent to or better than treatment in comparable settings (Herrick, 2010; Miller, 2011).

Typically the scope of services offered in RBCs includes immunizations; acute care for common medical conditions, such as sinus infections, ear infections, urinary tract infections, and strep throat; routine physicals; preventive screening for diabetes, cholesterol, and blood pressure; health coaching and diagnosis; and sports and school physicals (Berry & Mirabito, 2010; Carthon et al., 2016; Pollack et al., 2010) (see Appendix A for a more comprehensive overview of services offered). Services also differ by entity (see Appendix A for the differentiations and inclusions of care across three different RBCs). For example, Minute Clinics (by CVS/Target) offer birth control injections and contraceptive counseling, whereas RediClinic by Rite Aid offers

chlamydia and gonorrhea testing. “More recently, large chains such as CVS (MinuteClinic) and Walgreens have begun to provide disease management services for chronic illnesses such as diabetes and hypertension” (Carthon et al., 2016, p. 1); thus encouraging frequenters of grocery stores and shoppers at drugstores/pharmacies to obtain routine care without an appointment (Herrick, 2010).

Despite the differences along the continuum of care, almost all RBCs offer immunizations, but not all offer the HPV vaccination. Ryan (2010) specifically comments on the role of RBCs as a “distribution point for vaccines,” which could target HPV vaccination and prevention among diverse patient populations (p. 31). In fact, Mehrotra (2008) notes that the majority of patients that visit RBCs are between the ages of 18 and 44, which are prime reproductive years (p. 1276). This would be an ideal entry point for expanded SRH care.

RBCs are typically staffed and managed by nurse practitioners (NPs), physician assistants (PAs), and physicians, who provide routine care for a “narrowly defined list of conditions” (Berry & Mirabito, 2010, p. 160; Carthon et al., 2016, p. 1; Ryan, 2010, p. 28). The RBC model was initially designed for NPs, but given the unique skill sets and education of NPs, their role expanded to healthcare business in addition to care, education, health promotion, disease prevention, and preventive services, including health risk evaluations and vaccinations (Ryan, 2010). Spetz et al. (2013) state, “NPs are ideal providers of care” in RBCs because their “education and training are focused on the provision of primary care services ... as, up to 75 percent of primary care services could be provided by NPs” (p. 1978). Family nurse practitioner (FNP) hires must have a minimum of one year experience, and according to Miller (2011), there are roughly 5,000 NPs working in RBCs (p. 52).

While RBCs offer quicker, easier, and broader access to healthcare, restrictions on NP scope of practice (SOP) inhibit the expansion of service potential and vary by state. For example, numerous states introduced legislation restricting the scope of practice

(SOP) of NPs and RBCs (Carthon et al., 2016). According to Carthon et al., in March 2007, Illinois introduced a bill requiring RBCs to have more “physician supervision and that allowed MDs to supervise no more than two NPs” (p. 2); similarly, that same year, Florida passed a bill that “limited the number of clinic sites that a physician could supervise to four” (p. 2), indisputably inhibiting both the SOP of NPs and the number of NPs that can provide services, see patients, and manage care. Furthermore, these variations of SOPs could make it difficult for NPs and RBCs to offer more SRH services. According to Spetz et al. (2013):

In twenty-two states, NPs are permitted to provide care independently. Other states do not permit NPs to practice without collaborating with, or being supervised by, a physician. Many of these states require written practice protocols, and they sometimes restrict the number of NPs with whom a physician may collaborate. Still other states allow NPs to practice independently but permit them to prescribe medicines only if they are collaborating with or supervised by a physician. The extent to which variations in scope-of-practice regulations across states affect the costs or quality of retail clinics has not been previously studied. (p. 1978)

A greater scope of practice (SOP) authority is linked to expanded care delivery, especially among rural and vulnerable populations, and could lead to an estimated savings of \$810 million annually (Carthon et al., 2016).

Moreover, as the horizon over healthcare continues to shift, there is an increasing demand for primary care providers in both retail-based and traditional practice-based settings (Berry & Mirabito, 2010; Pollack et al., 2010). Studies have shown that one fifth of health care providers are frustrated with increasing workloads and their inability to assure high-quality care due to patients’ insurance restrictions, lack of time, patient overload (Berry & Mirabito, 2010, p. 160). Spetz et al. (2013) confirm:

The potential for NPs to increase access to healthcare while reducing costs is particularly pertinent in regions where there is a shortage of (p. 1983) ... since primary care providers and patients have difficulty gaining access to services. NPs, when practicing to the full extent of their training, can deliver care that is both of high quality and highly efficient. Primary care practices should capitalize on the opportunity to leverage NPs’

knowledge and skills, and the increased availability of convenient settings for care delivery, to meaningfully expand access to services and focus on improvements in care coordination and integration. (pp. 1982-1983)

This would be particularly relevant for the delivery and provision of SRH. SRH requires timely intervention, specifically for issues of unintended pregnancy or possible fear of STI transmission. Traditionally, we assume that sexually activity often spikes on the weekends, as does the risks of STI transmission or unintended pregnancy. Should there be an urgent need relating to SRH over the weekend, patients may be lost or confused about where and how to receive immediate care, counseling, and guidance. If more RBCs offered SRH care services, it could eliminate this barrier to accessible SRH for patients. Patients are struggling to find timely, convenient, and accessible care, and researchers continuously cite the need and importance for expanding RBC services to all services that are provided in primary care settings (Ryan, 2010).

Oppositions to Retail-Based Clinics

Despite the supporting evidence that demonstrates the value of RBCs and the research proving the benefits of SRH integration into RBCs, skeptics debate ongoing concerns about their scope of services and threat to primary care. According to Mehrotra (2008), the American Medical Association, the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics (AAP) have concerns about the degree of efficacy, efficiency, and accuracy of diagnoses and decision-making at RBCs and whether or not RBCs could disrupt the existing physician-patient relationships (p. 1273). However, the research by Mehrotra also demonstrates that three-fifths of patients visiting RBCs do not report having a consistent primary care provider (p. 1276) and 62% of RBC visits do not have a primary care provider at all (Carthon et al., 2016); so, for these patients, “there is no relationship to disrupt” (Mehrotra, 2008, p. 1276), and they are receiving care they would have otherwise been neglecting.

AAFP (2017) also opposes the expansion of the scope of services, like the management of chronic conditions, and suggests that RBCs stay within the management of minor acute illnesses. This rationale suggests that protocol-based decisions and diagnostic models that are utilized by RBCs could result in several missed opportunities to manage more complex patient cases (AAFP, 2017). The fear of fragmentation also underscores the AAFP hesitation. Pollack et al. (2010) state, “Physicians and policy makers have worried that the clinics will lead to further fragmentation and will interfere with the medical home” (p. 999) as “increased fragmentation may result in missed opportunities for patients to receive appropriate preventive care and care for chronic conditions” (p. 999). Yet, currently most independent RBC providers can provide patients with a printed visit summary from their electronic medical records or the clinic can fax the record to a physician upon patient request (Mehrotra, 2008).

Electronic medical records help facilitate coordinated care, communication between providers and among patients, and shared decision-making. In fact, as health IT and EMR sharing become more mainstreamed and integrated, coordinated care becomes more likely and relative. According to Pollack et al. (2010), “the use of personally portable and accessible medical records ... or communitywide EMRs ... increases communication between RBCs and primary care offices and allay most concerns about care coordination” (pp. 1001-1002). In turn, EMR sharing and exchange address gaps in fragmented care that, in contrast, actually broadens care and expands access to “satellite services tailored to individual needs” (p. 157), thus “transforming healthcare delivery into a system that benefits everyone” (Berry & Mirabito, 2010, p. 157).

Despite common criticism, Pollack et al. (2010) highlights that the medical home model and RBCs actually share many of the same key principles, including (a) a focus on improved access to care; (b) the incorporation of EMR and evidence-based guidelines; (c) the provision of directed patient-centered care; and (d) the use of non-physicians for services that do not require physician-level training (p. 1000). Moreover, RBCs also (a)

relieve the disproportionate burden of emergency department visits for non-emergency conditions; (b) fill the gaps and meet the shortage for more primary care providers; (c) see more patients with and without insurance, expanding affordable and accessible healthcare for all people; and (d) play a central and critical role in triaging patients to the appropriate provider” (Miller, 2011; Selway, 2010). Selway (2010) remarked:

RBCs have established themselves as an integral part of the healthcare community.... Increased utilization, recognition from the healthcare community, and increased attention from government and reform leaders all illustrate a need for additional high-quality, convenient, and low-cost healthcare access points.... More and more patients are seeking nurse practitioners’ and physician assistants’ comprehensive health and wellness expertise. Overall, clinics need to continue to function as a bridge to primary care and entry point into the healthcare system as the medical home concept and healthcare industry as a whole evolve. (p. 35)

As RBCs evolve over the next several years, the best practices and gold standards for practice management and clinical operations will also take shape. While each RBC may or may not be owned by individual entities with differing SOPs, there are three models of care by which the RBCs currently operate: Integrated Model of Care, Hybrid Model of Care, and Independent Model of Care.

The Integrated Care Model of Retail-Based Clinics

According to Pollack et al. (2010), “retail clinics are owned and operated by existing healthcare providers” (p. 1000). For example, in 2008, over 20 physician groups and hospital chains operated RBCs, like the Mayo Clinic and Geisinger Health System, and the NPs or medical staff that work in RBCs are employees of the overarching physician or hospital group rather than the RBC (p. 1000). Within this model, each RBC is connected to a larger health system through shared EMR (p. 1000). This is beneficial because it addresses fragmented care and ensures consistency and continuity of care across collaborative health professionals. Under this model, medical professionals can work interchangeably at the RBCs or hospital setting/physician office, and any visits to

the RBC “accrue to the larger physician group,” thus “mitigating any negative impact of retail clinics on aggregate primary care physician revenue” (p. 1000). In other words, the RBC is merely an “extension of the medical home” (p. 1000), and within this integrated model, the RBCs may serve as a bridge between prevention and intervention that “encourages patients to receive preventive services” (p. 1000).

The Hybrid Care Model of Retail-Based Clinics

The Hybrid model of care is characterized by a “formal collaboration between retail clinics and medical practices” (Pollack et al., 2010, p. 1000) in which the clinics are “co-branded” but remain separate entities financially. As such, the RBC providers could access patients’ medical histories, and providers could access RBC clinic medical records for shared access (pp. 1000-1001). The sharing of patient EMRs could contribute to the benefits of coordinated care while avoiding over care coordination (pp. 1000-1001). RBC staff would need coordinated training and education to ensure the fluidity of care and that preventive services are offered, despite the lack of financial incentive possibly attached to these services (p. 1001).

The Independent Care Model of Retail-Based Clinics

Unlike the Integrated and Hybrid models of care, the Independent model is one in which the RBCs are owned and operated by private companies (i.e., MinuteClinic) without shared finances, shared EMRs, or consistent communication between primary care providers (i.e., only via fax or medical visit summaries, in which the patient is responsible for delivering or providing this to their health care provider) (Pollack et al., 2010, p. 1001). Communication is “solely in one direction (from retail clinic to physician)” (p. 1001). The drawbacks of this model include lack of coordinated care, risks of over care, or safety concerns (i.e., documented allergies that a patient may forget, adverse reactions to medications) (p. 1001).

The RBC model represents what business strategists call a “disruptive innovation” (Berry & Mirabito, 2010, p. 160); that is, an “innovation that creates a new market, value network and eventually disrupts an existing market and value network, displacing established market leaders and alliances” (p. 160). While there is research that supports the pressing need, versatile benefits, expanding enterprises, and public popularity of RBCs, there is little research that depicts provider attitudes toward RBCs. In fact, given the growing research about constraints and limitations in primary care settings and SRH-care environments, RBCs appear to be the balanced hybrid in complement, and/or in some situations, supplement. Is this a resource that providers would recommend to patients outside of traditional hours and for those that do not have acceptable insurance? Or would this be coined a sub-par competitor? Are already pressed providers willing to implement necessary SRH into care if they aren’t already? And in tandem, do primary care providers suggest, recommend, or agree that more SRH should be incorporated into primary care settings and in RBCs?

Summary

This chapter included a comprehensive literature review of the gaps within sexual and reproductive health access and availability, including the significance of integrating sexual and reproductive healthcare into alternative primary care settings, like RBCs. The background, evolution, opposition, and diversity among RBCs was also explored. However, there is limited research regarding what current advanced practice clinicians know about the scope of SRH services offered at RBCs; their attitudes about RBCs offering SRH; and their beliefs about integrating more SRH into RBCs based on the current barriers to SRH access and availability today. Furthermore, there is also limited research regarding how these attitudes would impact an advanced practice clinician’s recommendation or referral to an RBC for patients they may or may not be unable to care

for. This study aims to fill this gap. The following chapter presents the research methods that were utilized to answer the study's research questions.

Chapter III

RESEARCH METHODOLOGY

This chapter presents the methodology that will be used in this study. This chapter is divided into the following categories: (1) Research Design, (2) Recruitment Process, (3) Data Collection, (4) Instruments, (5) Procedures, (6) Data Management, and (7) Data Analysis.

Research Design

This quantitative research design includes elements of qualitative research to mirror a mixed methodology approach with closed-ended and open-ended questions within the survey design. “Surveys are a key method in health services research” (O’Cathain & Thomas, 2004, p. 1), with a majority of the survey designed with closed-ended questions whereby participants can choose from a concrete number of options because this presents efficiency of data (p. 1). Efficiency of data is critical in research design and survey methodology when researchers seek to “obtain attitudes or experiences of a representative sample for generalization to a wider population” (p. 1).

Likewise, using qualitative and quantitative measures in a study design is a “dynamic and integrated uses of methods that complement one another” (Weis et al., 2014 p. 3), while interpreting and disseminating results to a wide range of audiences (p. 3). According to Tariq and Woodman (2013), mixed methodology research “focuses on collecting, analyzing, and mixing both quantitative and qualitative data in a single

study” (p. 1), from which this study will incorporate some of those same principles with a rationale for the inclusion of open-ended questions in the survey design structure.

According to Weis et al. (2014), mixed methods is best described as the integration of qualitative (text-based) and quantitative (number-based) and has been chosen with “regard for the research questions” (p. 3) in an attempt to naturalistically illustrate and “capture the whole context or situation” (p. 3) in order to “understand impacts on specific outcomes” (p. 3). While this study is not entirely a mixed methods approach by pure definition, this evidence supports the integration of qualitative research in quantitative measurements, perhaps to inform future research in a mixed methods design study.

In particular, the use of quantitative and qualitative data collection is popular among health researchers and is becoming increasingly utilized, “especially within health services research” (Tariq & Woodman, 2013, p. 1). It is likely because these methods are useful in understanding and analyzing variables in tandem (Weis et al., 2014), and in this particular case, the variables in attitudes that differ among providers—and how these variations could impact practice recommendations and referrals for care. Through combination and in complement, the use of closed-ended, quantitative-driven questions with open-ended, qualitative-seeking questions can “deepen understanding or challenge one another” (Weis et al., 2014, p. 3) by ensuring validity, highlighting study limitations, and securing reliability of subject responses (p. 4).

Questionnaires offer an “objective means of collecting information about people's attitudes and behavior” (Boynton & Greenhalgh, 2004, p. 1313), including closed-ended questions that are useful for ensuring anonymity; when coupled with open-ended response questions, they enable respondents to express thoughts and attitudes more freely. Boynton and Greenhalgh suggest their usefulness through their research but note the importance of analyzing both closed-ended and open-ended survey response data (pp. 1312-1314). Moreover, by offering direct questions and formalizing the scope of questions, it provides both the research designer and the participant with clarity of

direction, survey goals, and research use while also flagging any potential practical challenges that may arise through questionnaire design and roll-out (pp. 1312-1314).

One strength of a quantitative survey is the “representativeness” (O’Cathain & Thomas, 2004, p. 5), and as such, non-response bias is a concern (p. 5); but, when coupled with qualitative components or features of survey design, it can lower risks of non-response bias since open-ended questions can improve response rates among respondents (McColl et al., 2001; O’Cathain & Thomas, 2004). According to O’Cathain and Thomas (2004):

Open questions at the end of structured questionnaires has the potential to increase response rates, elaborate responses to closed questions [i.e. benefits or barriers], and allows respondents to identify new issues not captured in the closed questions. (p. 1)

Similarly, Weis et al. (2014) note that a combination of qualitative and quantitative research findings can “corroborate some findings, interrogate and/or elaborate upon others, and help to initiate new ideas” (p. 4). This is also an ideal research design for large-scale research studies and multidisciplinary teams because the quantitative questionnaire component can capture large-scale data in a cost-effective and timely way in order to analyze study variables; whereas the qualitative question complement can further explore participant responses in ways that the structured questionnaire may be limited in order to fully grasp why and how particular perspectives differ (p. 5).

Open-ended questions can serve as a complement to closed-ended questions and are considered “good practice” (Boulton, Fitzpatrick, & Swinburn, 1996; O’Cathain & Thomas, 2004), but they should be strategically utilized, since they can be problematic in the ambiguity between qualitative and quantitative data—but when used thoughtfully, they can “optimize the quality of the data and analysis” (O’Cathain & Thomas, 2004, p. 2) and potentially increase response rates (McColl et al., 2001; O’Cathain & Thomas, 2004; Seale & Silverman, 1997). Closed-ended questions “represent the researchers’ agenda” (O’Cathain & Thomas, 2004, p. 2), while open-ended questions are primarily

used to “address the ‘why or how’ associated with strengths of qualitative research” (p. 3). This engages the respondent and can be useful for questions that require more detail, explanation, or thought than a closed-ended question with a fixed number of options may allow (O’Cathain & Thomas, 2004). This study will seek to utilize the emerging themes from open-ended questions for future research recommendations, which, according to O’Cathain and Thomas, is another benefit of open-ended questions—they create a space for identifying and uncovering potential new issues (p. 3).

Open-ended questions are often considered quantitative research with quantitative features, like an open response structure, ability for respondents to use their own words, and the use of analysis methods that correspond to qualitative data (O’Cathain & Thomas, 2004; Steckler, 1992). While some researchers argue that general open-ended questions often lack key elements and methodological strengths of typical qualitative design research in which closed-ended questions better correspond to the survey agenda, this particular research design will implement a specific open-ended question (i.e., asking about barriers and benefits) and will be strategically analyzed as qualitative data to avoid the research pitfalls to maintain survey “context and conceptual richness” (O’Cathain & Thomas, 2004, p. 4). This strategy will be helpful in survey analysis, use of data, and for publication (O’Cathain & Thomas, 2004).

To ensure research method reliability for both open- and closed-ended questions, characteristics of the respondents [sample] will be obtained and explicitly presented to inform the respondents of open-ended questions’ “transferability of the beliefs and experiences expressed” (O’Cathain & Thomas, 2004, p. 4) and “characterize the nature of the group providing comments” (p. 4). The research aims for this study are seeking to capture self-reported attitudes and behavioral intentions. Employing a research design approach that capitalizes on the strengths of quantitative research with the added benefits of qualitative insight fosters a depth of data that is multi-dimensional.

Given the diversity among participants and their interdisciplinary specialties, clinical environments, and perspectives (i.e., attitudes), the use of closed- and open-ended questions can best address complex and multiple levels of analysis, particularly through survey research, literature analysis, and participant responses that may help inform the “development of cultivation theory–based research” (Matsaganis, 2016, p. 1333) needed for a more seamless and directed integration of SRH into primary care settings (PCS). It may also speak to individualized experiences, revealed through Theory of Planned Behavior constructs imbedded in the survey design, perceived barriers, and potential benefits, that can help inform best practices for the integration of SRH into PCS as well as a rationale for integrating more SRH into RBCs.

With regard to health sciences and health research, the use of this open- and closed-ended questions can “harness the strengths and counterbalance the weaknesses” (Tariq & Woodman, 2013, p. 2) of qualitative and quantitative methods alone, and is particularly influential when “addressing complex, multifaceted issues, such as health services interventions” (p. 3), and guiding practitioners and policymakers (pp. 2-3). When used individually, findings from small-scale qualitative data may be necessary for thorough exploratory research but lack generalizability (Tariq & Woodman, 2013).

Tariq and Woodman (2013) highlight the benefits of a quantitative research design with complements of qualitative data, in particular regard for health-related research for its complementarity, development, initiation, expansion, and triangulation (pp. 2-3). For example, its complementarity and development of design tethers respondent attitudes and behavioral intentions with perceived barriers and benefits that could be used to inform best practices for the integration of SRH in alternative clinical settings. Examining results from the open-ended questions that specifically ask for perceived barriers and benefits allows the researcher to “look for areas of incongruence in order to generate new insights” (p. 3) that could uncover areas of practice management, knowledge gaps, social norms, and provider bias in order to tailor interventions, education, and recommendations

that best meet participant needs for greatest patient impact (p. 3). This research design also fosters the expansion of research findings with an analysis of themes that emerge within respondent answers to open-ended questions, while triangulation uses “the data obtained by both methods to corroborate findings” (p. 3), as consistencies and correlations may exist between perceived barriers, benefits, and patterns in attitudes (Tariq & Woodman, 2013).

Recruitment Process

A national representation of advanced practice clinicians were sampled from the Association of Reproductive Health Professionals (ARHP), a Washington, DC-based nonprofit organization specializing in continuing education for interdisciplinary members of the healthcare team.

The Association of Reproductive Health Professionals (ARHP)

Since 1963, ARHP has established itself as the leading source for trusted medical education and information on reproductive and sexual health. ARHP educates healthcare providers, informs consumers, and impacts public policy with the notion that health is a right for all, rather than a privilege for some. By convening teams of organizational colleagues and respected experts, ARHP is able to advocate for reproductive health advances and educates professionals across specialties. The organization’s multidisciplinary and multispecialty membership, strong strategic partnerships, broad educational focus, and five-plus decades of experience are among its many strengths. ARHP is committed to expanding provider training, evidence-based education, disease prevention, and quality care through educational opportunities across the entire healthcare team (ARHP, 2016).

The principle investigator was the Associate Director of Development at ARHP, with a master's degree in Health Promotion (MS), as well as a Certified Health Education Specialist (CHES). As a qualified professional in the public health space with over thirteen years of experience, the principle investigator was able to conduct a thorough needs assessment to locate areas in the field of sexual and reproductive health that required further education and training. As such, she created, designed, tailored and evaluated educational and training initiatives while securing funding for these efforts in order to broaden the ARHP program portfolio and advance the awareness and understanding of providers on various health care topics to impact patient care.

Participants

As of June 2016, there were 14,624 ARHP members, including both paid and associate members (ARHP's Raiser's Edge Database, 2017). Over 116 disciplines and specialties are represented, categorized as physicians (34.4%), advanced practice clinicians (NPs, PAs, RNs, nurse midwives) (25.6%), researchers and educators (i.e., health educators, pharmacists) (18.03%), and students, residents, and retirees (21.97%) (ARHP's Raiser's Edge Database, 2017). Members include disciplines and specialties in obstetrics (normal and high risk), gynecology, internal medicine, family practice, general medicine, pediatrics, oncology, cardiology, and pharmacy, with specialties in family planning, labor and delivery, prenatal health, autoimmune disorders, chronic conditions and chronic pain conditions, gynecological and infectious dermatology, mental health, geriatrics, and genetics.

According to ARHP's membership database, members are located in each region of the United States, spanning 30 states: 26% in the Northeast, 28% in the West, 25% in the Mid-Atlantic and South, and 17% in the Midwest (ARHP's Raiser's Edge Database, 2017). ARHP membership does include international members, with 3% in Canada, 1% in the United Kingdom, 25% that practice both internationally and domestically, as

defined by those practitioners that have practices in either the US and other countries and/or those that see patients around the globe during mission trips or NGO contracting (ARHP's Raiser's Edge Database, 2017). Sixty-seven percent of practitioners are only US-based providers (ARHP's Raiser's Edge Database, 2017).

Eligibility

Participants for this survey were only US practitioners that educate and/or manage the care of patients of reproductive ages, 18 to 45 years. Practitioners included MDs and DOs, nurse practitioners, physician assistants, registered nurses, and clinical nurse midwives, practicing in gynecology, obstetrics, family medicine, internal medicine, and general practice. Members that opted for email communication from ARHP were also a criterion for study inclusion.

Exclusion criteria included those practitioners that only practice internationally; retiree status; providers that do not interact with patients ages 18 to 45 years; and those who have chosen to opt out of email communication from ARHP.

Sampling Frame Response Rate

ARHP has been administering membership surveys for the last several decades to gather information, opinions, and insight from its network. Typically, surveys are used to collect membership assessment of knowledge gaps, field needs, and programmatic deficits. For example, ARHP will survey members to determine what types of programs they may be interested in, what knowledge gaps persist for a specific clinical topic area, what modalities or deliverables members might be seeking, or what tools or resources may be lacking in their practice settings. These results often drive and inform programmatic grants, efforts, changes, and development. This intentional data collection happens several times in a year, and results are often discussed internally, externally, and/or included in grant submissions as needs assessment data.

When calculating their response rate among 15,000 members over surveys from the last two years, ARHP typically has a 5% response rate on electronic surveys and a 4% completion rate for surveys—most of which were without incentives (ARHP, 2017). This study anticipated at least a 5% response and completion rate given the newness of the topic, the included incentive, and the time of year in which this survey was released. Research shows that incentives could increase participation rates for both face-to-face surveys and for health surveys, which, in turn, improves the quality of research because it can provide more validity and generalizability to findings with the use of more data (Chen et al., 2015; David & Ware, 2014).

Anticipated Barriers to Recruitment

Healthcare providers are often without spare available time to engage in survey and extracurricular activities that are not producing continuing education credits or payment for participation. It may be challenging to ensure participants complete the electronic survey, not simply respond or begin. Likewise, the open-ended questions component in the electronic survey were generalizable questions, rather than leading questions, to ensure respondents freely expressed their attitudes and beliefs without guiding or probing. The themes that emerged were explored; however, participants may have chosen to skip these questions, as this qualitative component may require more time and engagement with open-ended questions than the closed-ended questions. Moreover, some providers may have preferred paper and mailed surveys over electronic surveys. This could naturally have deterred some participants who would rather engage in a written survey than an electronic or verbal one. However, electronic surveys were chosen for this study to ensure cost-effectiveness, timely distribution, ease and convenience of submission, and accuracy of mass data collection (Boyer et al., 2002; Determann et al., 2017). Electronic surveys have also been shown to produce higher response rates than paper surveys (Bojicic et al., 2014). Lastly, participant contact information was stored and

secured in ARHP's database, Raiser's Edge, but has been managed by several administrators. The outreach and dissemination plans assume the information in the database is up-to-date and correct. Barriers may present if email addresses are faulty or outdated.

Data Collection

Using the membership database from the Association of Reproductive Health Professionals, an interdisciplinary organization based in Washington, DC, an electronic survey was distributed nationally to ARHP's members, consisting of nearly 15,000 healthcare professionals across the United States. Surveys were electronically distributed to those ARHP members that had opted in to receive electronic communication from ARHP. The survey was both electronically distributed and electronically submitted to create easier access and convenience for survey participants. Participants were asked to self-report on criteria measures.

This study utilized and examined demographic variables and variables in participant attitudes regarding RBCs. Questionnaire tools examined provider perceptions of barriers in RBCs and when integrating SRH into RBCs. The full set of survey tools can be found in Appendix B. Examples of survey items include the following:

Demographics

Demographic variables that were evaluated included: (1) gender; (2) age; (3) residence; and, (4) location of practice setting. Professional identifiers that were evaluated include: (1) clinical degree; (2) practice specialty; (3) clinical practice setting; (4) professional status; (5) frequency of interaction with female patients in their reproductive years; (6) frequency of the provision of SRH care to female patients in their

reproductive years; (7) years in practice; (8) frequency of continuing education; and (9) self-assessed knowledge of retail-based clinics.

Attitudes Toward Retail-Based Clinics

In addition to an assessment of the demographic variables, the electronic survey aimed to capture attitudes related to RBCs through a participant self-reporting questionnaire. These dimensions were captured on the *Attitudes toward Retail-based Clinics Scale* (see Appendix B for a full list of survey questions). The operational usage of sexual and reproductive health (SRH) and the operational definition of retail-based clinics (RBCs) were included in the survey for reference.

Instruments

Pilot Testing

Before the formal and finalized electronic survey was massively distributed, it was pilot-tested and re-tested among a small group of five healthcare providers, representative of the target audience, to assess clarity, relevance, usefulness, and effectiveness. According to Jenn (2006), pilot testing is best practice and helps to detect flaws in questionnaires (p. 34). Engaging the (representative) target audience in the instrument design and survey development can provide thoughtful and valuable insight for direct method implication.

ARHP has a network of faculty advisors that has served as advisory committee members across ARHP's diverse educational program interventions. They are also practicing advanced practice clinicians, with degrees in family practice, internal medicine, obstetrics and gynecology, public health, registered nursing, and certified nurse midwifery. This sample was representative of the target audience. An email was sent to this network to solicit four to five volunteers to assess the pilot survey. Five participants

responded and agreed to be part of the pilot testing sample. Among these participants were one medical doctor specializing in family practice, one medical doctor specializing in obstetrics and gynecology, one nurse practitioner with a certification in midwifery, one physician assistant in internal medicine, and one registered nurse. The pilot group was a representative sample of the target population, all with various privileges and experience in private practice, hospital-based or community settings, or Title X clinics.

Participants were informed that this was for a pilot test and were given the opportunity to submit written or verbal edits. This sample was later removed from the distribution list, as they did not receive the final disseminated survey to ensure research design continuity, survey validity, and integrity of results. This also safeguarded against any participant biases or predisposition to survey content (Grant & Davis, 1997).

According to Jenn (2006), this pilot group served as “content experts” in the pilot testing phase because they were the target audience the questions were intended to serve (p. 34), but they were best removed from the actual research study because they knew the content, context, and subject matter.

Survey Revisions

Based on communal and consistent feedback among the pilot group, participants collectively felt the survey was both too long and too repetitive, which inhibited their ability and motivation to complete it. It took each participant, on average, over one hour to complete the full study. To preserve participant retention for accurate data, the decision was made to revise the questionnaire (Abramson et al., 2018; Lovelace & Brickman, 2013; McColl et al., 2001). Utilizing evidence-based science, authorized research design frameworks, and research from adapted validated survey instruments, the survey tool was updated to reflect feedback and reduce the burden of time for participants through data reduction (Jenn, 2006; Laurum & Faxvaag, 2004; McColl et al., 2001; Naghavi, Shabestari, Roudsari, & Harrison, 2012; Shirazi, Moradi, Mehrizi, Keshmiri, &

Montazeri, 2018). Since the pilot sample size was small, proper factor analysis for data reduction was not possible. Pilot testing enabled feedback for survey administration, including length, item identification, and constructs.

The questionnaires included in this paper (see Appendix B) are comprised of the revised items based on pilot testing feedback, survey trends, and evidence-based research that supported their change (Abramson et al, 2011; Boyon & Greenhalgh, 2004; Lam et al., 2010; Laurum & Faxvaag, 2004; McColl et al. 2001; Naghavi et al., 2012). The integrity of the survey items has remained intact, mirroring the validated survey instrument(s) from which they were originally adapted (Lam et al, 2010). While this survey itself is not validated, it is safe to say that face validity is achieved from its adaptable validated components. Cronbach's alpha was also performed to demonstrate internal consistency among and within all questions and sub-questions. The items maintained the conceptual framework, ordering of questions (i.e., beginning with sociodemographic questions and leading into Likert scales), and "test-retest" to ensure reliability with analysis of data in mind, while avoiding double-barreled and ambiguous questions that might skew results (Jenn, 2006, p. 33). Evidence demonstrating the correct and appropriate use of Likert scales to measure and assess attitude was utilized to ensure face validity and proper use of measurement (Jamieson, 2004; Likert, 1932; Lovelace & Brickman, 2013; Norman, 2010; Sullivan & Artino, 2013).

Specific items that were removed and condensed include the Participant Knowledge of Retail Based Clinics Scale Assessment Tool and Participant Beliefs of Retail Based Clinics Scale Assessment Tool, including specific questions aimed to capture beliefs-only. The omission of these questions was corroborated through evidence-based research for instrument development (Abramson et al., 2018; Jamieson, 2004; Naghavi et al., 2012; Norman, 2010; Shirazi et al., 2018). Double-barreled questions that linked different themes were avoided, for example, questions like "*Do you think RBCs should offer contraceptive counseling and HPV vaccination to female patients 18 to 45*

years?” or “*How confident are you that RBC can administer LARC and screen for reproductive-related cancers among female patients ages 18 to 45 years?*” These sample double-barreled questions suggest two different SRH categories, which might make it more difficult to capture a valid or reliable response from participants.

To avoid double-barreled questions, the survey extended a bit in length, but to avoid survey fatigue, common themes were grouped. For example, original questions like “*How important is it for RBCs to take a STI intake at all clinical visits and medical appointments for female patients, ages 18 to 45?*” and “*How important is it for all RBC medical intakes to include a questionnaire about STI prevention methods for women, ages, 18 to 45?*” were combined into “*How important is it for RBCs to [Take a sexual risk behavior intake at all clinical visits] for female patients, ages 18 to 45 years?*” Combining these two questions into one succinct question did not alter the meaning of the question. Rather, it offered a more direct and abridged approach while maintaining specifications (Lam et al., 2010; Naghavi et al., 2012; Shirazi et al., 2018). Not all categories were abbreviated to ensure reliability. For example, the question “*How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?*” includes categorical responses of: *Conduct a preconception intake and counseling for female patients considering family planning; Collect family planning intentions; Discuss pregnancy options with women (i.e., abortion, emergency contraception); and Provide contraceptive counseling.* While all questions are a seemingly different (i.e., contraceptive counseling and pregnancy options), they are all essentially asking a similar question of the importance of family planning counseling (Lovelace & Brickman, 2013; Shirazi et al., 2018).

Final Survey Version

According to Boyton and Greenhalgh (2004), questionnaires are an “objective means of collecting information for knowledge, beliefs, attitudes, and behaviors”

(p. 1312). Since previously validated and published questionnaires were not available for replication in this survey and for this particular topic, the survey, both in its original and its edited form, remains heavily adapted from previously validated survey items (Amin & Chewing, 2016). Moreover, research supports utilizing these questionnaires in areas that include increasing health services (Boyton & Greenhalgh, 2004).

The revised survey remained consistent with validated survey properties, and adjustments did not alter the intention, research aims, or structure of the survey. Rather, questions that were omitted were based upon detailed participant feedback (i.e., those questions that did not seem relevant to the survey intention or were not needed for content validity). This omission was also compared to the validated survey instrument (Amin & Chewing, 2016) and with support of guiding literature, as responses still reflected the “full range of perceptions and feelings [among] people in all different potential sampling frames” (Boyton & Greenhalgh, 2004, p. 1313).

In survey development, some repetition is needed for content reliability. The degree in which repetition was considered useful for reliability and redundant or cumbersome for participants was determined by the supporting literature and evidence-based science (Jamieson, 2004; Lam et al., 2010; Naghavi et al., 2012; Shirazi et al., 2018). The categories were also narrowed based on alignment with the research questions and study aims, as some of the questions were not relevant based on addenda to the original aims. For example, the original questionnaire captured knowledge, beliefs, and attitudes of the advanced practice clinicians toward alternative primary care sites. The amended version omitted the assessment of knowledge, as that appeared to be vague, robust, and uneasily captured, since literature proves that various RBCs offer a variety of services (Hurst & Linton, 2015). Likewise, questions regarding beliefs were imbedded into questions seeking to capture attitudes, which aligned more consistently with the research aims. The questions and scales were rooted in research to mirror validated instruments and questions that captured attitudes, and most specifically, attitudes of

healthcare professionals (Abramson et al., 2018; Jamieson, 2004; Likert, 1932; Lovelace & Brickman, 2013; Norman, 2010; Sullivan & Artino, 2013). In total, five categories of questions were removed. The removal process and the determination were compared to and adapted with validated survey items and supporting literature.

Questions were also condensed and combined without changing the meaning or compromising the text or intention. This helped decrease the time for participants and became more visually appealing, helping to avoid survey fatigue and boost completion rates. This process was also validated and compared with validated survey items, as noted through the literature review and survey adaptation from validated instruments (Abramson et al., 2018; Jamieson, 2004; Likert, 1932; Lovelace & Brickman, 2013; Norman, 2010; Sullivan & Artino, 2013). The instrument was still standardized, ensuring that all participants were asked “precisely the same questions in an identical format and responses recorded in a uniform manner” (Boyton & Greenhalgh, 2004, p. 1313), thus increasing reliability of instruments. Corresponding research aims were also considered by pilot testing feedback and certified corresponding literature support. The survey tool maintained its validated state, and constructs still reflected the correspondence with the Theory of Planned Behavior. Moreover, the pilot group was given the updated survey for test-retest reliability. Data analysis demonstrated reliability and consistency in findings. The finalized electronic survey included two parts. The first part included multiple choice and dropdown menus to depict variations in demographics. The second part (*Scale*), designed to mimic a validated survey instrument, utilized the Theory of Planned Behavior (see Table 1) and was adapted to fit the research needs of this proposal (Ajzen, 1971, 1991; Amin & Chewning, 2016). These closed-ended items were scaled according to the validated survey instrument (Amin & Chewning, 2016), including a traditional Likert Scale and multiple-choice options. This portion of the finalized survey captured and evaluated variations in attitudes toward RBCs, including SRH in RBCs. The last two questions of this section were open-ended questions for participants to freely include their

written responses regarding perceived barriers and perceived benefits of expanding SRH care in alternative primary care settings (see Table 2). The data collection for evaluation instruments were: (1) participant demographic survey, (2) participant attitudes toward RBC scale, and (3) open-ended questions. A screenshot of the final disseminated survey can be found in Appendix J.

The Attitudes toward Retail-Based Clinics Scale for providers consisted of five categories, each of which corresponded to a construct in the Theory of Planned Behavior, and included several closed-ended questions within each category. Each category was ensured to be important, specific, measurable, achievable, and relevant to research aims and study goals (Abramson et al., 2018). Categories included: (1) Perceived Importance of Delivering Quality and Comprehensive SRH Care in RBCs; (2) Perceived Responsibility to Broaden Access to and Availability of SRH in Alternative Primary Care Settings; (3) Perceived Benefits of the Integration of SRH in RBCs; (4) Perceived Confidence in the Quality of SRH Services in RBCs; and (5) Provider Recommendation of RBCs for the Provision of SRH Care. The fifth category capturing provider recommendations aimed to determine a correlation between attitude and behavioral intention or motivation, as deconstructed in the TPB.

The *Scale* for providers consisted of two categories, each of which corresponded to a construct in the Theory of Planned Behavior, included two open-ended questions. Categories included: (1) Perceived Benefits of the Integration of more SRH in Alternative Care Settings; (2) Perceived Barriers in the Integration of more SRH in Alternative Care Settings. These categories corresponded to specific research aims (see Figure 2).

Table 1. Category of Measurement with Corresponding Theory of Planned Behavior Construct

Category of Measurement	TPB Construct	Reference
Perceived Importance of Delivering Quality and Comprehensive SRH Care in RBCs	Attitudes	Ajzen, 1991, pp. 180-188; Amin & Chewning, 2016, p. 674; Asare, 2015, pp. 45-49; Francis et al., 2004, pp. 7-28; Nguyen et al., 2015, pp. 598-602; Fishbein & Ajzen, 2010.
Perceived Responsibility to Broaden Access to and Availability of SRH in Alternative Primary Care Settings	Attitudes/Normative Beliefs	Ajzen, 1991, pp. 180-188; Amin & Chewning, 2016, p. 674; Asare, 2015, pp. 45-49; Francis et al., 2004, pp. 7-28; Nguyen et al., 2015, pp. 598-602; Fishbein & Ajzen, 2010.
Perceived Benefits of the Integration of SRH in RBCs	Behavioral Beliefs (Favorable/Unfavorable Attitude)	Ajzen, 1991, pp. 180-88; Asare, 2015, pp. 45-49; Amin & Chewning, 2016, p. 674; Francis et al., 2004, pp. 7-28; Nguyen et al., 2015, pp. 598-602; Fishbein & Ajzen, 2010.
Perceived Confidence in the Quality of SRH Services in RBCs	Control Belief (Attitude)/ Behavioral Intention	Ajzen, 1991, pp. 180-188; Amin & Chewning, 2016, p. 674; Asare, 2015, pp. 45-49; Boyko et al., 2011, p. 29; Francis et al., 2004, pp. 7-28; Kortteisto et al., 2010, p. 51; Lapkin, et al., 2015, pp. 936-939; Fishbein & Ajzen, 2010.
Provider Recommendation of RBCs for the Provision of SRH Care	Control Belief (Attitude)/ Behavioral Intention	Amin & Chewning, 2016, p. 674; Asare, 2015, pp. 45-49; Boyko et al., 2011, p. 29; Francis et al., 2004, pp. 7-28; Kortteisto et al., 2010, p. 51; Lapkin et al., 2015, pp. 936-939; Fishbein & Ajzen, 2010.
Perceived Benefits of the Integration of More SRH in Alternative Care Settings	Behavioral Beliefs/Outcome and Evaluation	Ajzen, 1991, pp. 180-188; Amin & Chewning, 2016, p. 674; Asare, 2015, pp. 45-49; Boyko et al., 2011, p. 29; Francis et al., 2004, pp. 7-28; Kortteisto et al., 2010, p. 51; Lapkin et al., 2015, pp. 936-939; Fishbein & Ajzen, 2010.
Perceived Barriers in the Integration of More SRH in Alternative Care Settings	Behavioral Beliefs/Outcome and Evaluation	Ajzen, 1991, pp. 180-188; Amin & Chewning, 2016, p. 674; Asare, 2015, pp. 45-49; Boyko et al., 2011, p. 29; Francis et al., 2004, pp. 7-28; Kortteisto et al., 2010, p. 51; Lapkin et al., 2015, pp. 936-939; Fishbein & Ajzen, 2010.

Table 2. Validated Theory of Planned Behavior Survey Structure

Closed-ended Questions

Variable Name/Theme	TBP Construct Driving Intention and Use	Item(s) Used to Measure Variable	Response Categories
Perceived Importance of Delivering Quality and Comprehensive SRH Care in RBCs	Attitudes	<p>How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?</p> <ul style="list-style-type: none"> -Deliver comprehensive SRH care to all female patients of reproductive age -Offer pregnancy testing by way of urine or blood tests - Conduct a preconception intake and counseling for female patients considering family planning -Collect family planning intentions - Discuss family planning options with women (i.e., abortion, emergency contraception) -Provide contraceptive counseling -Administer contraceptive options -Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants -Offer STI/STD screening through medical intake, physical exams, and lab testing -Take a sexual risk behavior intake at all clinical visits -Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening -Provide HPV vaccine administration with counseling 	<p>(1) Not important at all (2) Slightly important (3) Somewhat important (4) Important (5) Extremely important</p>

Table 2 (continued)

Variable Name/Theme	TBP Construct Driving Intention and Use	Item(s) Used to Measure Variable	Response Categories
		<ul style="list-style-type: none"> -Provide education and care for female sexual dysfunction -Include a questionnaire about intimate partner violence (IPV) and contraceptive coercion -Provide resources for IPV and contraceptive coercion -Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services - Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities - Include women-only clinics that provide comprehensive SRH as the next phase of RBCs - Supplement SRH in RBCs with the traditional primary care visit 	
Perceived Responsibility to Broaden Access to and Availability of SRH in Alternative Primary Care Settings	Attitudes/ Normative Beliefs	<p>How responsible are:</p> <ul style="list-style-type: none"> -RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years? - Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years? -RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45? 	<ul style="list-style-type: none"> (1) Not responsible at all (2) Slightly responsible (3) Somewhat responsible (4) Responsible (5) Extremely responsible

Table 2 (continued)

Variable Name/Theme	TBP Construct Driving Intention and Use	Item(s) Used to Measure Variable	Response Categories
		<ul style="list-style-type: none"> - RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45? - RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities? 	
Perceived Benefits of the Integration of SRH in RBCs	Behavioral Beliefs (Favorable/ Unfavorable Attitude)	<p>RBCs that are providing the following services to female patients, ages 18 to 45, are doing something positive for the patient and providing a worthwhile service:</p> <ul style="list-style-type: none"> -Offer contraceptive counseling - Administer contraception, including the insertion of intrauterine devices and implants -Dispense emergency contraception -Offer pregnancy testing -Administer preconception intakes and family planning counseling - Conduct STI/STD screening through physical exams, medical intakes, and lab testing - Provide STI/STD counseling - Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer - Administer the HPV vaccine in tandem with HPV counseling for prevention - Provide IPV and contraceptive coercion screening and resources - Provide FSD screening and resources 	<ul style="list-style-type: none"> (1) Strongly disagree (2) Disagree (3) Neutral (4) Agree (5) Strongly Agree

Table 2 (continued)

Variable Name/Theme	TBP Construct Driving Intention and Use	Item(s) Used to Measure Variable	Response Categories
Perceived Confidence in Quality of SRH Services in RBCs	Control Belief (Attitude)/ Behavioral Intention	<p>How confident are you that RBCs:</p> <ul style="list-style-type: none"> - Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years? - Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance? - Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention? - Provide pregnancy testing to female patients, ages 18 to 45 years? - Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years? - Offer contraceptive counseling to female patients, ages 18 to 45 years? - Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years? - Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion? 	<p>(1) Not confident at all (2) Slightly confident (3) Somewhat confident (4) Confident (5) Extremely confident</p>

Table 2 (continued)

Variable Name/Theme	TBP Construct Driving Intention and Use	Item(s) Used to Measure Variable	Response Categories
		<ul style="list-style-type: none"> - Screen and counsel female patients, ages 18 to 45 years for STIs/STDs - Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening? - Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination? - Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years? -Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction? 	
Provider Recommendation of RBCs for the Provision of SRH Care	Control Belief (Attitude)/ Behavioral Intention	<p>I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:</p> <ul style="list-style-type: none"> - A patient does not have insurance - I cannot accept new patients in my practice -I am unable to treat a patient - A patient requires timely intervention or after-hours care and I am unable to treat that patient 	<ul style="list-style-type: none"> (1) Extremely unlikely (2) Moderately unlikely (3) Neither unlikely or likely (4) Moderately likely (5) Extremely likely

Table 2 (continued)

Variable Name/Theme	TBP Construct Driving Intention and Use	Item(s) Used to Measure Variable	Response Categories
Provider Recommendation of RBCs for the Provision of SRH Care	Control Belief (Attitude)/ Behavioral Intention	<ul style="list-style-type: none"> -A patient requires immediate pregnancy testing -A patient requires preconception counseling after hours - A patient requires timely contraceptive counseling -A patient requires medication abortion or emergency contraception immediately - A patient requires immediate contraceptive counseling - A patient requires timely STI/STD screening - A patient requires immediate IPV and/or contraceptive coercion screening - A patient requires immediate reproductive-related cancer screening and prevention - A patient requires timely resources and intervention for FSD - I am aware of all services provided by RBCs -I am aware of provider quality of training at RBCs -I am confident in the care and services provided by RBCs 	<ul style="list-style-type: none"> (1) Extremely unlikely (2) Moderately unlikely (3) Neither unlikely or likely (4) Moderately likely (5) Extremely likely

Table 2 (continued)

Variable Name/Theme	TBP Construct Driving Intention and Use	Item(s) Used to Measure Variable	Response Categories
Provider Recommendation of SRH in RBCs	Control Belief (Attitude)/ Behavioral Intention	<p>I would recommend RBCs for the following services, targeted towards female patients, ages 18 to 45 years:</p> <ul style="list-style-type: none"> -Pregnancy testing -Preconception counseling -Counseling for unintended pregnancy, including discussions about emergency contraception and abortion -Contraception counseling -STI/STD screening and prevention -IPV and/or contraceptive coercion screening and counseling -Screening for reproductive-related cancers, including breast, thyroid and cervical cancers -Screening and counseling for FSD 	<p>(1) Extremely unlikely</p> <p>(2) Moderately unlikely</p> <p>(3) Neither unlikely or likely</p> <p>(4) Moderately likely</p> <p>(5) Extremely likely</p>

Open-ended Questions

Perceived Benefits for the Integration of More SRH in Alternative Care Settings	Behavioral Beliefs/Outcome and Evaluation	-In your opinion, what are the potential benefits of integrating more quality and comprehensive sexual and reproductive healthcare into alternative primary care settings, like retail-based clinics that would encourage you to recommend these services to patients?
Perceived Barriers in the Integration of More SRH in Alternative Care Settings	Behavioral Beliefs/Outcome and Evaluation	-In your opinion, what are the perceived barriers of integrating more quality and comprehensive sexual and reproductive healthcare into alternative primary care settings, like retail-based clinics that would prevent you from recommending these services to patients?

*Adapted from: Amin, M. & Chewning, B. (2016). Pharmacists' counseling on oral contraceptives: A theory informed analysis. *Research in Social Administrative Pharmacy*, 12, 669-681.

**Informed by: Ajzen, I. (1971). Attitudinal vs. normative messages: An investigation of the differential effects of persuasive communications on behavior. *Sociometry*, 34, 263-280; Ajzen, I. (1991). The Theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50, 179-211.

(See Appendix J for screenshots of disseminated survey.)

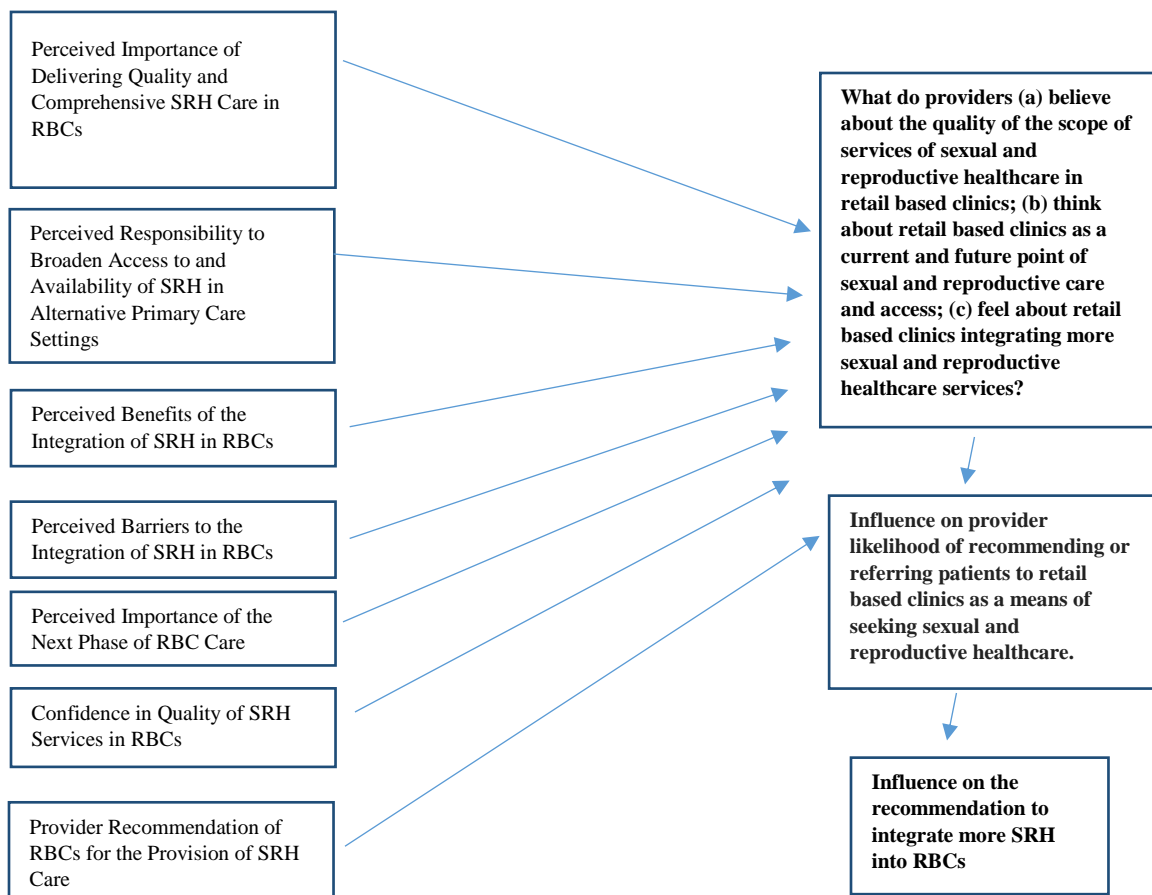


Figure 2. Correspondence of Measurement Categories to Research Aims

*Adapted from: Amin, M. & Chewning, B. (2016). Pharmacists' counseling on oral contraceptives: A theory informed analysis. *Research in Social Administrative Pharmacy*, 12, 669-681.

Each scale of the close-ended questions included five measures, from: not important at all to extremely important; not responsible at all to extremely responsible; strongly disagree to strongly agree; not confident at all to extremely confident; and extremely unlikely to extremely likely. This scale also evaluated the ten identified dimensions of SRH care, including: (1) pregnancy testing; (2) preconception intake and counseling; (3) family planning intentions; (4) contraceptive counseling; (5) contraceptive administration; (6) STI/STD screening; (7) STI/STD counseling and intake; (8) reproductive-related cancer screening and prevention; (9) sexual health and

functionality; and (10) IPV or contraceptive coercion screening and discussion. Each response, (1) through (5), was assigned a numerical value, with a total possible range of score. Depending on each selected response, the scores were mathematically figured to determine a weak, moderate, or positive attitude and belief.

The survey was electronically distributed and submitted. Responses were filtered through Qualtrics to capture data, dumped into Microsoft Excel for organizing, and transferred for analysis through IBM SPSS Version 24.0 to determine variable significance and correlation. The final two questions of the electronic survey were open-ended questions that aimed to assess provide perceived barriers and potential (perceived) benefits to the implementation of sexual and reproductive health emersion in alternative primary care settings. This qualitative component sought to explore more provider opinions about the integration of sexual and reproductive health in primary care settings, the integration of SRH in RBCs with emphasis on the expansion of participant attitudes and perceived barriers for the integration of SRH in alternative primary care settings; however, the questions were general in nature to promote reliable and unguided participant response. Both the operational definition of alternative primary care settings (as RBCs) and the scope of services defined within SRH were reiterated for clarity and understanding.

While the full assessment tools can be found in Appendix B, the last two open-ended questions that aimed to capture participants' attitudes and beliefs regarding the integration of quality and comprehensive SRH care into RBCs also imbeds one's behavioral intention to recommend this care. By determining perceived barriers and perceived benefits, the response data might uncover roots of behavioral intention of providers to recommend or discard this care, thus helping to inform future research areas, follow-up questions, or intervention design (Ajzen, 1991; Asare, 2015; Boyko et al., 2011; Francis et al., 2004; Kortteisto et al., 2010; Lapkin et al., 2015; Nguyen et al., 2015).

Procedures

Upon receiving Institutional Review Board approval at Teachers College, Columbia University, the Association of Reproductive Health Professionals (ARHP) granted access to their database of members that were surveyed. ARHP agreed to allow access to their membership database for purposes of this study. All members that had opted in to receive email communication were asked to participate. Those that had not opted in to receive email communication from ARHP were not contacted.

Using this complete sample, the survey was first administered on October 16, 2017 at 12:00 p.m., EST, using an approved @ARHP address (communications@arhp.org) to ensure that participants knew where email communication was coming from. The survey was sent, via Constant Contact, to 12,028 eligible members with valid email addresses; 11,506 of them were successful deliveries. There was an 18.8% open rate and 20.5% click through rate. Surveys were emailed twice—once for those that opened the initial email (10/16/2017) and once again for those that did not open the initial survey email within 14 days of receipt (10/30/2017). This was tracked by the principal investigator.

As stated, the first survey was administered on October 16, 2017 at 12 p.m. The survey was then administered again on October 30, 2017 at 9 a.m. for those that did not open the initial email. Electronic surveys were monitored weekly and within one week of a second distribution to see how many surveys were opened, deleted, and completed. Response rates were monitored up to one month (November 30, 2017) after the initial distribution, at which time data were collected. The survey remained active for four weeks after final distribution and expired on December 1, 2017.

In the initial email, recipients were briefed about why they had been contacted; what this survey was and why it was being conducted; an overview of research aims; inclusion/exclusion criteria for survey participation; participation incentives; assurance of anonymity; approximate time of completion; and, how results would be used. If

participants were still interested in participating, they were asked to follow a link to the Informed Consent page (see Appendix D), which was obtained by all participants before the survey link appeared and before the actual survey could begin. The template used for Informed Consent was adopted from Teachers College, Columbia University. Once recipients read through the consent and hit “agree,” they were prompted to the opening survey questionnaire. If they chose to decline, they were thanked and the survey did not proceed.

During the survey, participants were alerted to their progress (a progress bar at the top of the screen) so that they knew much more of the survey was left to complete. The final two questions of the survey were open-ended, asking participants about perceived barriers and potential benefits, as per their opinions, when integrating sexual and reproductive care into RBCs and other alternative primary care settings. Data were collected across all instruments. The electronic survey captured and coded data from closed-ended and open-ended responses.

Subjects were not remunerated for their participation; however, at the end of the completed survey, participants had the opportunity to participate in a raffle to win a \$100 gift card. The final page of the survey that informed participants they had completed the survey included an option to participate in a raffle by checking “agree” and hitting “next.” Participants were led to a page that asked for their email addresses only in order to send the gift card, should they be selected as winners. Email addresses were not associated with survey answers, and the separation of answers with email addresses entered for the raffle was stated on this page. Winners were selected at random after the survey had closed. The principal investigator purchased the gift cards electronically and forwarded them to the raffle winners. There were five raffle winners of a \$100 VISA gift card. Participants were required to complete the survey before they were eligible to participate in the raffle.

Data Management

Responses were collected via Qualtrics and subsequently downloaded first into Microsoft Excel 2016 for organization, cleaning, and sorting, and then filtered into IBM SPSS (version 24.0) for data analysis.

Data Analysis

Statistical analysis of the data was performed using IBM SPSS (version 24.0). First, a descriptive analysis of the demographic variables was performed. Next, a comparative analysis was conducted between different demographic factors to assess any differences across identifier variables. Identifier variables are defined as categorical variables. This includes categories within demographics (i.e. geographic location, clinical degree, etc.) as well as categories within SRH domains (i.e. pregnancy testing, STI testing, etc.). Then, an assessment of the RBC questionnaires was performed to capture the attitudes on each scale and determine any discrepancies and/or commonalities across each scale. Odds ratios and corresponding 95% confidence intervals were also computed to establish the likelihood among those with positive attitudes (responses 4 and 5 to sub-questions) to recommend specific SRH services in RBCs to female patients, ages 18 to 45 years.

The quantitative data were first organized, categorized, and sorted through Microsoft Excel 2016 and then filtered into SPSS Version 24.0 for analysis. Descriptive statistics, correlations, and odds ratios were utilized. It should be noted that each response, (1) through (5), had numerical values, with a total possible range of scores. Participant response was scored accordingly and subsequently categorized into the following: weak, moderate, or positive attitude and belief.

The open-ended survey responses succeeding the closed-ended questions in the electronic national survey were analyzed, thematically coded, and summarized to

determine study findings, coupled with the identification of emerging themes that could be used for future research discussion and exploration.

Presentation of Results

Results for each research question are presented. The study results address barriers of SRH integration into alternative primary care settings (i.e., RBCs). The results of this work have specific implications for recommendations of the advancement of sexual and reproductive care in RBCs to meet Healthy People 2020 goals.

While there is currently research demonstrating the need for SRH in primary care settings (Bachrach, Frohlich, Garcimonde, & Nevitt, 2015; CDC, 2014; HRSA, 2016; Curtis et al., 2006; Guttmacher Institute, 2015; Healthy People, 2017a; Leeman, 2007; Sonfield, Kost, Gold, & Finer, 2011), little is known about the actual implementation of SRH in alternative primary care or the opinions of practicing clinicians toward the integration of SRH in these alternative clinical environments. Barriers of SRH care into more primary practice settings, both traditional and alternative, were hypothesized to include lack of time, lack of resources, lack of training and lack of supplies for successful integration of care. It was also hypothesized that most primary care providers may not be recommending or regarding RBCs as a trusted source of SRH because they are unaware of the complete scope of services offered but do believe that RBCs are a helpful and affordable resource for patients seeking immediate care. Furthermore, it was hypothesized that advanced practice clinicians cite the need for optimizing opportunities for pre-conception counseling, sexual risk behaviors intake, family planning intentions, contraceptive counseling, and sexually transmitted disease testing during clinical encounters.

Literature demonstrates some existing benefits and concerns about RBCs (Berry & Mirabito, 2010; Carthon et al., 2016; Pollack et al., 2010) but little is also known about advanced practice clinicians' attitudes about RBCs or their perceptions about the

integration of SRH in RBCs. Hypothesized results included limited knowledge about RBCs and their SRH services, with varied attitudes about RBCs and the recommendations for the integration of SRH in RBCs among participants.

Recommendations for future research include patient opinions, experiences, and reliance on RBCs and their attitudes and behavioral intentions about SRH services in RBCs. Additional research may explore the benefits of offering SRH in RBCs for victims of human trafficking, contraceptive coercion, and intimate partner violence. RBCs are less conspicuous and perhaps more easily accessible than the traditional primary care settings or gynecologist's office that could flag suspicions for these vulnerable populations seeking more discretion. Furthermore, the data collected in this survey are rich and robust. Future researchers could explore the psychometric properties of this instrument to determine any additional insights or correlations from the data points. However, due to capacity, time constraints, and financial restrictions, the establishment of psychometric properties could not be done in this particular study.

Confidentiality and Informed Consent

The contact information for participants was only used for this study's purpose. It was not shared, distributed, or used for future research. Only those ARHP members that had opted in to receive email communication were contacted for this survey. Only email addresses were accessed. Other personal identifiers were filtered and were not released for this study.

Survey data were collected anonymously; however, some professional demographic data were collected (specifically, gender, age, residence, location of practice setting, clinical degree, practice specialty, clinical practice setting, professional status, frequency of interaction with female patients in their reproductive years, frequency of the provision of SRH care to female patients in their reproductive years, years in practice,

and frequency of continuing education). Some participants chose to participate in the raffle at the end of the survey, thereby including their email address in the raffle drawing. For those individuals, their participation in the raffle was separate and disassociated from their survey answers. The email list containing individual email addresses entered into the raffle was deleted after the gift cards were emailed to the winners.

The principal investigator distributed an ARHP-approved email with ARHP-approved language that explained to recipients why they had been contacted; what this survey was, and why it was being conducted. It also included an overview of research aims; inclusion/exclusion criteria for survey participation; participation incentives; assurance of anonymity; approximate time of completion; and how results would be used. Those participants that chose to continue followed a link to the Informed Consent page (see Appendix D). Informed consent was obtained by all participants before they began the survey. The template used for Informed Consent was adopted from Teachers College, Columbia University. Once recipients read through the consent and selected “agree,” they were prompted to the opening survey questionnaire. If they chose to decline, they were thanked and the survey did not proceed. The principal investigator filtered responses to ensure those that had opted out were not contacted again and their email addresses were no longer utilized.

The electronic survey responses that were closed-ended were captured and coded data, whereas the open-ended survey responses were transcribed and uniformly coded. This survey was anonymous. The principal investigator took careful and routine precautions to keep participant demographic identifiers anonymous by categorizing, coding, and analyzing any potentially identifying or sharing demographic data. This also included keeping all data, electronic and/or digital information, in a password-protected, username-protected professional ARHP-issued computer that was not used by the principal investigator for personal use. Regulations required that research data be kept for at least three years.

Summary

This chapter detailed the research methodology for this study, including the research design, recruitment process, confidentiality and informed consent, and data analysis. The next chapter will present the study results.

Chapter IV

RESULTS

This chapter is divided into the following categories: (1) Sample Characteristics, (2) Quantitative Results, and (3) Qualitative Results. In this chapter, the quantitative and qualitative results from the survey will be presented, including a description of the sample demographics and how differences in identifier variables intersect with select survey questions to inform the following research questions:

1. What are the beliefs among a national sample of advanced practice clinicians, specifically about the following constructs: (a) the importance of integrating sexual and reproductive healthcare (SRH) in retail-based clinics (RBCs); (b) the responsibility of offering comprehensive sexual and reproductive care in retail-based clinics; and (c) the quality of the sexual and reproductive healthcare services currently offered in retail-based clinics?
2. What is the relationship between the attitudes of advanced practice clinicians regarding retail-based clinics and their likelihood of recommending or referring patients to retail-based clinics (RBCs) as a means of seeking sexual and reproductive healthcare (SRH)?
3. What do advanced practice clinicians perceive as the potential benefits of and potential barriers to the integration of quality and comprehensive sexual and reproductive healthcare services in retail-based clinics?

Sample Characteristics

Historically, ARHP has a 5% response rate on electronic surveys and a 4% completion rate (ARHP, 2017). Among the 12,028 ARHP members surveyed, there was a total of 598 participants (5%) who initially took the survey ($N=598$). However, the final sample size for the study is $N=341$ due to the following reasons: 8 participants had an invalid IP address; 2 participants did not agree to consent and therefore were disqualified; 187 participants did not fully complete the survey; 59 participants were disqualified due to exclusion criteria (“not currently practicing,” “retired,” “NA,” “never see patients of reproductive age,” and/or did not fall within the specified clinical degree).

Results showed that among the survey participants ($N= 341$), 91.8% were female. The majority (30.2%) were between the ages of 55 and 64 and practice in the Northeast (24.0%). An inclusion criterion of this survey noted participants must “educate and/or manage the care of patients of reproductive ages, 18 to 45 years.” Those that did not select this response were disqualified from the survey. To note, among 341 respondents, 95.9% reported currently seeing patients. The additional 4.1% are residents/fellows; however, they were included in the participant count because of qualifying professional status and reported actively seeing patients. Other notable demographics include a majority (59.8%) of respondents “always” interact with female patients of reproductive age (18-45 years); 44.0% “always” (>30 hours per week) provide SRH care to female patients of reproductive age (18-45 years); 35.8% have been in practice for more than 20 years; 45.2% frequently (“more than one credit per month”) engage in continuing education; and 41.6% are “somewhat knowledgeable” of RBCs.

Specific demographic items were not mutually exclusive and contained multiple selections from participants. The questions and responses regarding clinical degree, practice specialty, and clinical practice setting were not mutually exclusive, as respondents were able to select more than one response which is reflected in the

frequency of responses below. It is also important to note that clinical degree, while not mutually exclusive, was an inclusion criterion for the study. While “other” was a category of choice, the participants within $N=341$ that might have selected “other” also selected the included clinical degrees of MD, DO, NP, PA, RN, CNM, Health Educator, or Resident/Fellow. Any participant that selected ‘other’ also met the clinical degree for the inclusion criteria and was able to participate in the study. Patient demographics for $N=341$ are showcased in Table 3.

Table 3. Demographics

Demographics	Frequency Reported (n=341)	Percentage
For provider gender, please select one:		
Male	25	7.3%
Female	313	91.8%
Other	3	0.9%
How old are you, please select one:		
18 to 24 years	1	0.3%
25 to 34 years	56	16.4%
35 to 44 years	87	25.5%
45 to 54 years	66	19.4%
55 to 64 years	103	30.2%
65 and older	27	7.9%
NA	1	0.3%
Location of Practice Setting: Select one		
Midwest	72	21.1%
Northeast	82	24.0%
Northwest	54	15.8%
Southeast	69	20.2%
Southwest	58	17.0%
NA	6	1.8%
Clinical Degree: Select all that apply:		
Medical Doctor (MD)	82	24.0%
Nurse Practitioner (NP)	158	46.3%
Physician Assistant (PA)	14	4.1%
Registered Nurse (RN)	68	19.9%
Clinical Nurse Midwife (CNM)	50	14.7%
Health Educator	13	3.8%
Fellow/Resident	9	2.6%
Other	6	1.8%

Table 3 (continued)

Demographics	Frequency Reported (n=341)	Percentage
Practice Specialty: Select all that apply:		
General Practice	15	4.4%
Internal Medicine	4	1.2%
Family Practice	71	20.8%
Obstetrics/Gynecology	196	57.5%
Other	76	22.3%
Clinical Practice Setting: Select all that apply:		
Private Practice – individual practice	21	6.2%
Private Practice – group practice	55	16.1%
Federally Qualified Health Center	49	14.0%
Hospital – non-teaching	15	4.4%
Hospital - teaching	61	17.9%
Academia	44	12.9%
Community Health Center	81	23.8%
Other	89	26.1%
Professional Status: Select one:		
Currently seeing patients/practicing	327	95.9%
Resident/Fellow	14	4.1%
For the frequency of interaction with female patients of reproductive age (ages 18-45), please select one of the following:		
Almost never (10 patients or less per month)	24	7.0%
Sometimes (11-20 patients per week)	51	15.0%
Often (20-30 patients per week)	62	18.2%
Always (30 or more patients per week)	204	59.8%
How many hours a week do you spend providing SRH care to females of reproductive age (ages 18-45), please select one of the following:		
Never (0 hours per week)	8	2.3%
Almost never (5-9 hours per week)	46	13.5%
Sometimes (10-20 hours per week)	69	20.2%
Often (21-29 hours per week)	64	18.8%
Always (30 or more hours per week)	150	44.0%
NA	4	1.2%
Years in Practice: Select one:		
0-1 years	8	2.3%
1-5 years	48	14.1%
5-10 years	63	18.5%
10-15 years	53	15.5%
15-20 years	47	13.8%
20+ years	122	35.8%

Table 3 (continued)

Demographics	Frequency Reported (n=341)	Percentage
Frequency of continuing education: Select one:		
1 credit per year	1	0.3%
More than one credit per year	100	29.3%
1 credit per month	56	16.4%
More than one credit per month	154	45.2%
Does not apply	30	8.8%
What is your level of knowledge and awareness about retail-based clinics and the scope of services they offer? Select one:		
Not at all knowledgeable	25	7.3%
Not very knowledgeable	88	25.8%
Neutral	52	15.2%
Somewhat knowledgeable	142	41.6%
Very knowledgeable	34	10.0%

Quantitative Results

Tables 4-9 display responses from the Participant Attitude Toward Retail-Based Clinics Scale. This Scale consisted of seven categories aimed to measure attitudes and behavioral intentions about/toward RBCs using constructs of the Theory of Planned Behavior. Tables 4-14 will correspond to Research Questions 1 and 2, specifically with Tables 4-7 and Table 11 corresponding to Research Question 1 and Tables 6-14 addressing Research Question 2. The operational use of SRH as it relates to services includes, but is not limited to, the frequency of the following services for patients 18 to 45 years: pregnancy testing; preconception intake and counseling; family planning intentions, contraceptive counseling, and contraceptive administration; STI/STD screening, counseling, and intake; reproductive-related cancer(s) screening and prevention; female sexual dysfunction (FSD) screening and intervention; intimate partner violence (IPV) or contraceptive coercion screening and discussion.

The operational definition of a retail-based clinic (RBC) is: an alternative primary care setting environment that has not historically provided comprehensive care, medical interventions, and preventive services to community members, ages 18 to 45 years

(Carthon et al., 2016). Retail-based clinics (RBCs) are an example of an alternative primary care setting, which includes retail spaces that offer comprehensive care, medical interventions, and preventive services to community members, ages 18 to 45.

Table 4 displays responses from the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) for Question 1 of the survey. Participants ranked each question (and sub-question) based upon its degree of “importance” for each SRH service to be offered at RBCs. This aimed to directly address Research Question 1 when understanding what a national sample of advanced practice clinicians thinks specifically about the importance of integrating SRH care into RBCs.

Table 4. Summary of Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) for Question 1

PATRBCS	Frequency Reported (n=341)	Percentage
Q1: How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?		
Deliver comprehensive SRH care to all female patients of reproductive age		
1 - Not at all important	19	5.6%
2 - Slightly important	29	8.5%
3 - Somewhat important	67	19.6%
4 - Important	99	29.0%
5 - Extremely important	126	37.0%
NA - Missing	1	0.3%
Offer pregnancy testing by way of urine or blood tests to female patients		
1 - Not at all important	5	1.5%
2 - Slightly important	6	1.8%
3 - Somewhat important	33	9.7%
4 - Important	99	29.0%
5 - Extremely important	197	57.8%
NA - Missing	1	0.3%

Table 4 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Conduct a preconception intake and counseling for female patients considering family planning		
1 - Not at all important	5	1.5%
2 - Slightly important	6	1.8%
3 - Somewhat important	33	9.7%
4 - Important	100	29.3%
5 - Extremely important	117	34.3%
NA - Missing	1	0.3%
Collect family planning intentions		
1 - Not at all important	12	3.5%
2 - Slightly important	23	6.7%
3 - Somewhat important	59	17.3%
4 - Important	123	36.1%
5 - Extremely important	122	35.8%
NA - Missing	2	0.6%
Discuss family planning options with women (i.e. abortion, emergency contraception)		
1 - Not at all important	11	3.2%
2 - Slightly important	15	4.4%
3 - Somewhat important	34	10.0%
4 - Important	109	32.0%
5 - Extremely important	172	50.4%
NA - Missing	0	0.0%
Provide contraceptive counseling		
1 - Not at all important	10	2.9%
2 - Slightly important	13	3.8%
3 - Somewhat important	29	8.5%
4 - Important	100	29.3%
5 - Extremely important	187	54.8%
NA - Missing	2	0.6%
Administer contraceptive options		
1 - Not at all important	11	3.2%
2 - Slightly important	17	5.0%
3 - Somewhat important	32	9.4%
4 - Important	105	30.8%
5 - Extremely important	176	51.6%
NA - Missing	0	0.0%

Table 4 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Offer long acting reversible contraception (LARC), including the insertion and removal of intrauterine devices (IUDs) and implants		
1 - Not at all important	35	10.3%
2 - Slightly important	31	9.1%
3 - Somewhat important	63	18.5%
4 – Important	82	24.0%
5 - Extremely important	130	38.1%
NA – Missing	0	0.0%
Offer STI/STD screening through physical exams, blood work and lab testing		
1 - Not at all important	5	1.5%
2 - Slightly important	8	2.3%
3 - Somewhat important	30	8.8%
4 – Important	88	25.8%
5 - Extremely important	210	61.6%
NA – Missing	0	0.0%
Take a sexual risk behavior intake at all clinical visits		
1 - Not at all important	16	4.7%
2 - Slightly important	23	6.7%
3 - Somewhat important	41	12.0%
4 – Important	99	29.0%
5 - Extremely important	160	46.9%
NA - Missing	2	0.6%
Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening		
1 - Not at all important	24	7.0%
2 - Slightly important	45	13.2%
3 - Somewhat important	57	16.7%
4 - Important	90	26.4%
5 - Extremely important	125	36.7%
NA - Missing	0	0.0%
Provide HPV vaccination administration with counseling		
1 - Not at all important	8	2.3%
2 - Slightly important	6	1.8%
3 - Somewhat important	27	7.9%
4 - Important	106	31.1%
5 - Extremely important	193	56.6%
NA - Missing	1	0.3%

Table 4 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Provide education and care for female sexual dysfunction		
1 - Not at all important	37	10.9%
2 - Slightly important	56	16.4%
3 - Somewhat important	83	24.3%
4 - Important	81	23.8%
5 - Extremely important	81	23.8%
NA - Missing	3	0.9%
Include a questionnaire about intimate partner violence (IPV) and contraceptive coercion		
1 - Not at all important	9	2.6%
2 - Slightly important	11	3.2%
3 - Somewhat important	33	9.7%
4 - Important	84	24.6%
5 - Extremely important	204	59.8%
NA - Missing	0	0.0%
Provide resources for IPV and contraceptive coercion		
1 - Not at all important	10	2.9%
2 - Slightly important	10	2.9%
3 - Somewhat important	34	10.0%
4 - Important	83	24.3%
5 - Extremely important	204	59.8%
NA - Missing	0	0.0%
Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services		
1 - Not at all important	16	4.7%
2 - Slightly important	11	3.2%
3 - Somewhat important	56	16.4%
4 - Important	110	32.3%
5 - Extremely important	144	42.2%
NA - Missing	4	1.2%
Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services		
1 - Not at all important	16	4.7%
2 - Slightly important	13	3.8%
3 - Somewhat important	55	16.1%
4 - Important	116	34.0%
5 - Extremely important	140	41.1%
NA - Missing	1	0.3%

Table 4 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities		
1 - Not at all important	11	3.2%
2 - Slightly important	13	3.8%
3 - Somewhat important	49	14.4%
4 – Important	106	31.1%
5 - Extremely important	160	46.9%
NA – Missing	2	0.6%
Include women-only clinics that provide comprehensive SRH as the next phase of RBCs		
1 - Not at all important	34	10.0%
2 - Slightly important	39	11.4%
3 - Somewhat important	77	22.6%
4 – Important	93	27.3%
5 - Extremely important	95	27.9%
NA – Missing	3	0.9%
Supplement SRH in RBCs with the traditional primary care visit		
1 - Not at all important	14	4.1%
2 - Slightly important	28	8.2%
3 - Somewhat important	64	18.8%
4 – Important	127	37.2%
5 - Extremely important	105	30.8%
NA – Missing	3	0.9%

The analysis of Question 1 revealed that respondents thought it was important (4) and extremely important (5) for RBCs to offer several SRH services. For example, the highest ranked categories across the majority of respondents included pregnancy testing; family planning and contraception care; STI screening and prevention; and IPV screening. Specifically, the following categories ranked among the most important SRH services to be offered in RBCs according to participants: provide HPV vaccination administration with counseling (N=299, 87.7%); offer STI/STD screening through physical exams, blood work, and lab testing (N=298, 87.4%); offer pregnancy testing by way of urine or blood tests to female patients (N=296, 86.8%); include a questionnaire

about IPV and contraceptive coercion (N=288, 84.5%); provide contraceptive counseling (N=287, 84.2%); provide resources for IPV and contraceptive coercion (N=287, 84.2%); discuss family planning options with women, like abortion, emergency contraception, (N=281, 82.4%), and administer contraceptive options (N=281, 82.4%).

Question 1 analysis also revealed that respondents thought it was not at all important (1) or slightly important (2) for RBCs to offer some SRH services. For example, the lowest ranked categories included: provide education and care for female sexual dysfunction (N=93, 27.3%); include women-only clinics that provide comprehensive SRH as the next phase of RBCs (N=73, 21.4%); provide reproductive-related cancer screening as prevention, including breast, thyroid, and cervical cancer screening (N=69, 20.2%); and offer long acting reversible contraception (LARC), including the insertion and removal of intrauterine devices (IUDs) and implants (N=66, 19.4%). However, respondents were almost as neutral to this question by selecting “somewhat important” for the same categories that ranked the lowest: provide education and care for female sexual dysfunction (N=83, 24.3%); include women-only clinics that provide comprehensive SRH as the next phase of RBCs (N=77, 22.6%); offer long acting reversible contraception (LARC), including the insertion and removal of intrauterine devices (IUDs) and implants (N=63, 18.5%); and provide reproductive-related cancer screening as prevention, including breast, thyroid, and cervical cancer screening (N=57, 16.7%).

Table 5 displays responses from the Participant Attitude Toward Retail Based Clinics Scale (PATRBCS) for Question 2 of the survey. Participants ranked each question (and sub-question) based upon their belief of how “responsible” RBCs are in the delivery of SRH care and services for the following subcategories. This aimed to directly address Research Question 1 when understanding what a national sample of advanced practice clinicians thinks specifically about the responsibility of offering comprehensive SRH care in RBCs.

Table 5. Summary of Participant Attitude Toward Retail Based Clinics Scale (PATRBCS) for Question 2

PATRBCS	Frequency Reported (n=341)	Percentage
How responsible are:		
RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?		
1 - Not at all responsible	31	9.1%
2 - Slightly responsible	67	19.6%
3 - Somewhat responsible	96	28.2%
4 - Responsible	80	23.5%
5 - Extremely responsible	60	17.6%
NA - Missing	7	2.1%
Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?		
1 - Not at all responsible	11	3.2%
2 - Slightly responsible	29	8.5%
3 - Somewhat responsible	61	17.9%
4 - Responsible	105	30.8%
5 - Extremely responsible	130	38.1%
NA - Missing	5	1.5%
Alternative primary care settings that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?		
1 - Not at all responsible	18	5.3%
2 - Slightly responsible	41	12.0%
3 - Somewhat responsible	86	25.2%
4 - Responsible	108	31.7%
5 - Extremely responsible	79	23.2%
NA - Missing	9	2.6%
Alternative primary care settings that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?		
1 - Not at all responsible	19	5.6%
2 - Slightly responsible	38	11.1%
3 - Somewhat responsible	85	24.9%
4 - Responsible	106	31.1%
5 - Extremely responsible	82	24.0%
NA - Missing	11	3.2%

Table 5 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Alternative primary care settings that offer SRH in helping to close the gaps in health inequities and health disparities across communities?		
1 - Not at all responsible	19	5.6%
2 - Slightly responsible	35	10.3%
3 - Somewhat responsible	80	23.5%
4 - Responsible	92	27.0%
5 - Extremely responsible	105	30.8%
NA - Missing	10	2.9%

Among the categories listed in Table 5 (Question 2), participants felt that traditional primary care settings were the most responsible (ranked responsible (4) and extremely responsible (5) in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years (N=235, 68.9%). However, a majority of respondents also believe that alternative primary care settings that offer SRH are responsible (4) and extremely responsible (5) in helping to close the gaps in health inequities and health disparities across communities (N=197, 57.8%). It is also important to note, participants (N=98, 28.7%) felt that RBCs were not responsible at all (1) or slightly responsible (2) in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years. However, more respondents were almost as neutral with a “somewhat responsible” response to this question than they were in opposition to it (N=96, 28.2%).

Table 6 displays responses from the Participant Attitude Toward Retail Based Clinics Scale (PATRBCS) for Question 3 of the survey. Participants ranked each question (and sub-question) based upon how much they “agree” or “disagree” with the statement. This question aimed to capture attitudes that address both Research Question 1 and Research Question 2 by examining participant responses. Responses reveal what the national sample thinks about the integration of SRH services in RBCs by their ranking of

the proposed question. These responses were later correlated to determine positive or negative attitudes and how the relationship between attitudes affects likelihood of recommendation of SRH in RBCs in Tables 11 and 12.

Table 6. Summary of Participant Attitude Toward Retail Based Clinics Scale (PATRBCS) for Question 3

PATRBCS	Frequency Reported (n=336)	Percentage
RBCs that are providing the following services to female patients, ages 18 to 45 years, are doing something positive for the patient and providing a worthwhile service:		
Offer contraceptive counseling		
1 - Strongly disagree	7	2.1%
2 - Disagree	2	0.6%
3 - Neutral	22	6.5%
4 - Agree	105	30.8%
5 - Strongly Agree	204	59.8%
NA - Missing	1	0.3%
Administer contraception, including the insertion of intrauterine devices and implants		
1 - Strongly disagree	13	3.8%
2 - Disagree	16	4.7%
3 - Neutral	43	12.6%
4 - Agree	92	27.0%
5 - Strongly Agree	174	51.0%
NA - Missing	3	0.9%
Dispense emergency contraception		
1 - Strongly disagree	6	1.8%
2 - Disagree	3	0.9%
3 - Neutral	16	4.7%
4 - Agree	65	19.1%
5 - Strongly Agree	249	73.0%
NA - Missing	1	0.3%
Offer pregnancy testing		
1 - Strongly disagree	5	1.5%
2 - Disagree	1	0.3%
3 - Neutral	12	3.5%
4 - Agree	83	24.3%
5 - Strongly Agree	238	69.8%
NA - Missing	2	0.6%

Table 6 (continued)

PATRBCS	Frequency Reported (n=336)	Percentage
Administer preconception intakes and family planning counseling		
1 - Strongly disagree	9	2.6%
2 - Disagree	11	3.2%
3 - Neutral	44	12.9%
4 - Agree	100	29.3%
5 - Strongly Agree	175	51.3%
NA - Missing	2	0.6%
Conduct STI/STD screening through physical exams, medical intakes, and lab testing		
1 - Strongly disagree	5	1.5%
2 - Disagree	4	1.2%
3 - Neutral	19	5.6%
4 - Agree	86	25.2%
5 - Strongly Agree	225	66.0%
NA - Missing	2	0.6%
Provide STI/STD counseling		
1 - Strongly disagree	5	1.5%
2 - Disagree	3	0.9%
3 - Neutral	17	5.0%
4 - Agree	87	25.5%
5 - Strongly Agree	226	66.3%
NA - Missing	3	0.9%
Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer		
1 - Strongly disagree	12	3.5%
2 - Disagree	25	7.3%
3 - Neutral	49	14.4%
4 - Agree	100	29.3%
5 - Strongly Agree	154	45.2%
NA - Missing	1	0.3%
Administer the HPV vaccine in tandem with HPV counseling for prevention		
1 - Strongly disagree	7	2.1%
2 - Disagree	3	0.9%
3 - Neutral	21	6.2%
4 - Agree	89	26.1%
5 - Strongly Agree	219	64.2%
NA - Missing	2	0.6%

Table 6 (continued)

PATRBCS	Frequency Reported (n=336)	Percentage
Provide IPV and contraceptive coercion screening and resources		
1 - Strongly disagree	9	2.6%
2 – Disagree	5	1.5%
3 – Neutral	27	7.9%
4 – Agree	78	22.9%
5 - Strongly Agree	219	64.2%
NA - Missing	3	0.9%
Provide FSD screening and resources		
1 - Strongly disagree	13	3.8%
2 – Disagree	8	2.3%
3 – Neutral	48	14.1%
4 – Agree	111	32.6%
5 - Strongly Agree	156	45.7%
NA - Missing	5	1.5%

Among the categories listed in Table 6 (Question 3), the majority of participants strongly agreed (5) or agreed (4) that RBCs were doing something positive for the patient and providing a worthwhile service within the following SRH services: offer pregnancy testing (N=321, 94.1%); dispense emergency contraception (N=314, 92.1%); provide STI/STD counseling (N=313, 91.8%); conduct STI/STD screening through physical exams, medical intakes, and lab testing (N=311, 91.2%); and offer contraceptive counseling (N=309, 90.6%). These were also several of the same categories ranked the highest in Table 4, Question 1 of the survey. The lowest ranking categories in which respondents disagreed (4) or strongly disagreed (5) that RBCs were doing something positive for the patient and providing a worthwhile service to female patients, ages 18 to 45 years, included: conduct reproductive cancer screenings, like breast exams, thyroid testing, and cervical cancer (N=37, 10.9%) and administer contraception, including the insertion of intrauterine devices and implants (N=29, 8.5%). However, more respondents were “neutral” than in disagreement with both of these categories: conduct reproductive

cancer screenings, like breast exams, thyroid testing, and cervical cancer (N=49, 14.4%) and the insertion of intrauterine devices and implants (N=43, 12.6%).

Table 7 displays responses from the Participant Attitude Toward Retail Based Clinics Scale (PATRBCS) for Question 4 of the survey. Participants ranked each question (and sub-question) based upon their belief of how “confident” they are in the delivery of SRH in RBCs. This aimed to directly address Research Question 1 when understanding what a national sample of advanced practice clinicians thinks specifically about quality of the SRH care services currently offered in RBCs by their degree of confidence.

Table 7. Summary of Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) for Question 4

PATRBCS	Frequency Reported (n=341)	Percentage
How confident are you that RBCs: Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?		
1 - Not at all confident	103	30.2%
2 - Slightly confident	92	27.0%
3 - Somewhat confident	80	23.5%
4 - Confident	41	12.0%
5 - Extremely confident	23	6.7%
NA - Missing	2	0.6%
Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?		
1 - Not at all confident	37	10.9%
2 - Slightly confident	79	23.2%
3 - Somewhat confident	9	2.6%
4 – Confident	84	24.6%
5 - Extremely confident	47	13.8%
NA – Missing	1	0.3%

Table 7 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?		
1 - Not at all confident	34	10.0%
2 - Slightly confident	73	21.4%
3 - Somewhat confident	86	25.2%
4 – Confident	88	25.8%
5 - Extremely confident	59	17.3%
NA – Missing	1	0.3%
Provide pregnancy testing to female patients, ages 18 to 45 years?		
1 - Not at all confident	11	3.2%
2 - Slightly confident	20	5.9%
3 - Somewhat confident	52	15.2%
4 – Confident	100	29.3%
5 - Extremely confident	156	45.7%
NA – Missing	2	0.6%
Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?		
1 - Not at all confident	45	13.2%
2 - Slightly confident	75	22.0%
3 - Somewhat confident	88	25.8%
4 – Confident	61	17.9%
5 - Extremely confident	70	20.5%
NA – Missing	2	0.6%
Offer contraceptive counseling to female patients, ages 18 to 45 years?		
1 - Not at all confident	31	9.1%
2 - Slightly confident	70	20.5%
3 - Somewhat confident	87	25.5%
4 – Confident	7	2.1%
5 - Extremely confident	79	23.2%
NA – Missing	1	0.3%
Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?		
1 - Not at all confident	83	24.3%
2 - Slightly confident	77	22.6%
3 - Somewhat confident	68	19.9%
4 – Confident	60	17.6%
5 - Extremely confident	52	15.2%
NA – Missing	1	0.3%

Table 7 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?		
1 - Not at all confident	43	12.6%
2 - Slightly confident	62	18.2%
3 - Somewhat confident	83	24.3%
4 - Confident	72	21.1%
5 - Extremely confident	79	23.2%
NA - Missing	2	0.6%
Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?		
1 - Not at all confident	27	7.9%
2 - Slightly confident	35	10.3%
3 - Somewhat confident	80	23.5%
4 - Confident	90	26.4%
5 - Extremely confident	108	31.7%
NA - Missing	1	0.3%
Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?		
1 - Not at all confident	61	17.9%
2 - Slightly confident	61	17.9%
3 - Somewhat confident	89	26.1%
4 - Confident	72	21.1%
5 - Extremely confident	56	16.4%
NA - Missing	2	0.6%
Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?		
1 - Not at all confident	24	7.0%
2 - Slightly confident	39	11.4%
3 - Somewhat confident	59	17.3%
4 - Confident	100	29.3%
5 - Extremely confident	116	34.0%
NA - Missing	3	0.9%
Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?		
1 - Not at all confident	38	11.1%
2 - Slightly confident	53	15.5%
3 - Somewhat confident	79	23.2%
4 - Confident	80	23.5%
5 - Extremely confident	87	25.5%
NA - Missing	4	1.2%

Table 7 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?		
1 - Not at all confident	97	28.4%
2 - Slightly confident	73	21.4%
3 - Somewhat confident	69	20.2%
4 - Confident	58	17.0%
5 - Extremely confident	41	12.0%
NA - Missing	3	0.9%

The data from Table 7 show how confident respondents are in RBCs to offer a range of SRH services. The highest ranked SRH categories in which respondents felt confident (4) and extremely confident (5) in RBCs to offer included the following: provide pregnancy testing to female patients, ages 18 to 45 years (N=256, 75.1%); administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination (N=216, 63.3%); and screen and counsel female patients, ages 18 to 45 years for STIs/STDs (N=198, 58.1%). SRH services by which respondents felt the least confident (not confident at all (1) or slightly confident (2)) included the following categories: RBCs are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years (N=195, 57.2%); screen and educate female patients, ages 18 to 45 years for female sexual dysfunction (N=170, 49.9%); and administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years, (N=160, 46.9%).

Table 8 displays responses from the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) for Question 5 of the survey. Participants ranked each question (and sub-question) based upon their intention to and the degree in which they would recommend various SRH services in RBCs. This response data from these questions helped to answer Research Question 2 by determining the likelihood of

advanced practice clinicians to recommend or refer patients to retail-based clinics (RBCs) as a means of seeking sexual and reproductive healthcare (SRH).

Table 8. Summary of Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) for Question 5

PATRBCS	Frequency Reported (n=341)	Percentage
I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:		
A patient does not have insurance		
1 - Extremely unlikely	67	19.6%
2 - Moderately unlikely	9	2.6%
3 - Neither unlikely nor likely	65	19.1%
4 - Moderately likely	84	24.6%
5 - Extremely likely	83	24.3%
NA - Missing	3	0.9%
I cannot accept new patients in my practice		
1 - Extremely unlikely	75	22.0%
2 - Moderately unlikely	50	14.7%
3 - Neither unlikely nor likely	75	22.0%
4 - Moderately likely	72	21.1%
5 - Extremely likely	66	19.4%
NA - Missing	3	0.9%
I am unable to treat a patient		
1 - Extremely unlikely	77	22.6%
2 - Moderately unlikely	53	15.5%
3 - Neither unlikely nor likely	60	17.6%
4 - Moderately likely	79	23.2%
5 - Extremely likely	70	20.5%
NA - Missing	2	0.6%
A patient requires timely intervention or after-hours care and I am unable to treat that patient		
1 - Extremely unlikely	35	10.3%
2 - Moderately unlikely	30	8.8%
3 - Neither unlikely nor likely	44	12.9%
4 - Moderately likely	109	32.0%
5 - Extremely likely	122	35.8%
NA - Missing	1	0.3%

Table 8 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
A patient requires immediate pregnancy testing		
1 - Extremely unlikely	34	10.0%
2 - Moderately unlikely	39	11.4%
3 - Neither unlikely nor likely	38	11.1%
4 - Moderately likely	91	26.7%
5 - Extremely likely	138	40.5%
NA - Missing	1	0.3%
A patient requires preconception counseling after hours		
1 - Extremely unlikely	67	19.6%
2 - Moderately unlikely	50	14.7%
3 - Neither unlikely nor likely	63	18.5%
4 - Moderately likely	77	22.6%
5 - Extremely likely	81	23.8%
NA - Missing	3	0.9%
A patient requires immediate contraceptive counseling		
1 - Extremely unlikely	49	14.4%
2 - Moderately unlikely	44	12.9%
3 - Neither unlikely nor likely	67	19.6%
4 - Moderately likely	92	27.0%
5 - Extremely likely	87	25.5%
NA - Missing	2	0.6%
A patient requires medication abortion or emergency contraception immediately		
1 - Extremely unlikely	74	21.7%
2 - Moderately unlikely	36	10.6%
3 - Neither unlikely nor likely	34	10.0%
4 - Moderately likely	8	2.3%
5 - Extremely likely	112	32.8%
NA - Missing	2	0.6%
A patient requires timely STI/STD screening		
1 - Extremely unlikely	29	8.5%
2 - Moderately unlikely	29	8.5%
3 - Neither unlikely nor likely	35	10.3%
4 - Moderately likely	113	33.1%
5 - Extremely likely	133	39.0%
NA - Missing	2	0.6%

Table 8 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
A patient requires immediate IPV and/or contraceptive coercion screening		
1 - Extremely unlikely	54	15.8%
2 - Moderately unlikely	41	12.0%
3 - Neither unlikely nor likely	71	20.8%
4 - Moderately likely	73	21.4%
5 - Extremely likely	98	28.7%
NA - Missing	4	1.2%
A patient requires immediate reproductive-related cancer screening and prevention		
1 - Extremely unlikely	78	22.9%
2 - Moderately unlikely	60	17.6%
3 - Neither unlikely nor likely	68	19.9%
4 - Moderately likely	66	19.4%
5 - Extremely likely	68	19.9%
NA - Missing	1	0.3%
A patient requires timely contraception counseling		
1 - Extremely unlikely	43	12.6%
2 - Moderately unlikely	51	15.0%
3 - Neither unlikely nor likely	60	17.6%
4 - Moderately likely	99	29.0%
5 - Extremely likely	85	24.9%
NA - Missing	3	0.9%
A patient requires timely resources and intervention for FSD		
1 - Extremely unlikely	83	24.3%
2 - Moderately unlikely	49	14.4%
3 - Neither unlikely nor likely	82	24.0%
4 - Moderately likely	60	17.6%
5 - Extremely likely	63	18.5%
NA - Missing	4	1.2%
I am aware of all services provided by RBCs		
1 - Extremely unlikely	52	15.2%
2 - Moderately unlikely	52	15.2%
3 - Neither unlikely nor likely	94	27.6%
4 - Moderately likely	80	23.5%
5 - Extremely likely	53	15.5%
NA - Missing	10	2.9%

Table 8 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
I am aware of provider quality of training at RBCs		
1 - Extremely unlikely	69	20.2%
2 - Moderately unlikely	57	16.7%
3 - Neither unlikely nor likely	76	22.3%
4 - Moderately likely	75	22.0%
5 - Extremely likely	61	17.9%
NA - Missing	3	0.9%
I am confident in the care and services provided by RBCs		
1 - Extremely unlikely	59	17.3%
2 - Moderately unlikely	52	15.2%
3 - Neither unlikely nor likely	78	22.9%
4 - Moderately likely	85	24.9%
5 - Extremely likely	64	18.8%
NA - Missing	3	0.9%

Table 8 demonstrates participant intent to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs across various scenarios. The situations in which a majority of the respondents ranked the most likely (moderately likely (4) and extremely likely (5)) included if/when: a patient requires timely STI/STD screening (N=246, 72.1%); a patient requires timely intervention or after-hours care and I am unable to treat that patient (N=231, 67.7%); and a patient requires immediate pregnancy testing (N=229, 67.2%). The scenarios in which a majority of participants were moderately unlikely (4) or extremely unlikely (5) to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs included if/when: a patient requires immediate reproductive-related cancer screening and prevention (N=138, 40.5%); a patient requires timely resources and intervention for FSD (N=132, 38.7%); and I am unable to treat a patient (N=130, 38.1%). Close contenders followed when providers were aware of provider quality of training at RBCs (N=126, 37.0); and when providers could not accept new patients in their practice (N=125, 36.7%).

Table 9 displays responses from the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) for Question 6 of the survey. Participants ranked each question (and sub-question) based upon their intention to and the degree in which they would recommend the following SRH services in RBCs. The response data from these questions helped to answer Research Question 2 by determining the likelihood of advanced practice clinicians to recommend or refer patients to retail-based clinics (RBCs) as a means of seeking sexual and reproductive healthcare (SRH).

Table 9. Summary of Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) for Question 6

PATRBCS	Frequency Reported (n=341)	Percentage
I would recommend RBCs for the following services, targeted towards female patients, ages 18 to 45 years:		
Pregnancy testing		
1 - Extremely unlikely	17	5.0%
2 - Moderately unlikely	11	3.2%
3 - Neither unlikely nor likely	26	7.6%
4 - Moderately likely	120	35.2%
5 - Extremely likely	164	48.1%
NA - Missing	3	0.9%
Preconception counseling		
1 - Extremely unlikely	62	18.2%
2 - Moderately unlikely	62	18.2%
3 - Neither unlikely nor likely	63	18.5%
4 - Moderately likely	75	22.0%
5 - Extremely likely	74	21.7%
NA - Missing	5	1.5%
Counseling for unintended pregnancy, including discussions about emergency contraception and abortion		
1 - Extremely unlikely	52	15.2%
2 - Moderately unlikely	56	16.4%
3 - Neither unlikely nor likely	54	15.8%
4 - Moderately likely	93	27.3%
5 - Extremely likely	84	24.6%
NA - Missing	2	0.6%

Table 9 (continued)

PATRBCS	Frequency Reported (n=341)	Percentage
Contraceptive counseling		
1 - Extremely unlikely	45	13.2%
2 - Moderately unlikely	52	15.2%
3 - Neither unlikely nor likely	58	17.0%
4 - Moderately likely	101	29.6%
5 - Extremely likely	82	24.0%
NA – Missing	3	0.9%
STI/STD screening and prevention		
1 - Extremely unlikely	28	8.2%
2 - Moderately unlikely	22	6.5%
3 - Neither unlikely nor likely	40	11.7%
4 - Moderately likely	126	37.0%
5 - Extremely likely	119	34.9%
NA – Missing	6	1.8%
IPV and/or contraceptive coercion screening and counseling		
1 - Extremely unlikely	51	15.0%
2 - Moderately unlikely	41	12.0%
3 - Neither unlikely nor likely	63	18.5%
4 - Moderately likely	95	27.9%
5 - Extremely likely	86	25.2%
NA – Missing	5	1.5%
Screening for reproductive-related cancers, including breast, thyroid and cervical cancers		
1 - Extremely unlikely	73	21.4%
2 - Moderately unlikely	66	19.4%
3 - Neither unlikely nor likely	57	16.7%
4 - Moderately likely	78	22.9%
5 - Extremely likely	65	19.1%
NA – Missing	2	0.6%
Screening and counseling for FSD		
1 - Extremely unlikely	79	23.2%
2 - Moderately unlikely	60	17.6%
3 - Neither unlikely nor likely	68	19.9%
4 - Moderately likely	68	19.9%
5 - Extremely likely	60	17.6%
NA – Missing	6	1.8%

The results of Table 9 show participant intent to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs for various SRH services. The services the majority of respondents thought ranked the most likely (moderately likely (4) and extremely likely (5)) to recommend patients to RBCs included: pregnancy testing (N=284, 83.3%) and STI/STD screening and prevention (N=245, 71.8%). The services in which the majority of participants were moderately unlikely (4) or extremely unlikely (5) to recommend RBCs for female patients, ages 18 to 45 years, included equally: screening for reproductive-related cancers, including breast, thyroid and cervical cancers (N=139, 40.8%); and, screening and counseling for FSD (N=139, 40.8%).

Table 10 looks at PATRBCS and overall average participant response.

Table 10. Summary Survey Statistics of the Participant Toward Retail-Based Clinics Scale (PATRBCS)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?					
Deliver comprehensive SRH care to all female patients of reproductive age	340	4	3.84	1.18	0.9758
Offer pregnancy testing by way of urine or blood tests to female patients	340	5	4.4	0.85	0.9762
Conduct a preconception intake and counseling for female patients considering family planning	339	4	3.77	1.19	0.9758
Collect family planning intentions	339	4	3.94	1.06	0.9759
Discuss family planning options with women (i.e. abortion, emergency contraception)	341	5	4.22	1.01	0.9758

Table 10 (continued)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
Provide contraceptive counseling	339	5	4.3	0.98	0.9757
Administer contraceptive options	341	5	4.23	1.03	0.9758
Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants	341	4	3.71	1.33	0.9758
Offer STI/STD screening through medical intake, physical exams, and lab testing	341	5	4.44	0.86	0.9758
Take a sexual risk behavior intake at all clinical visits	339	4	4.07	1.13	0.976
Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening	341	4	3.72	1.27	0.9756
Provide HPV vaccine administration with counseling	340	5	4.38	0.89	0.9759
Provide education and care for female sexual dysfunction	338	3	3.33	1.3	0.9758
Include a questionnaire about intimate partner violence (IPV) and contraception coercion	341	5	4.36	0.97	0.9759
Provide resources for IPV and contraceptive coercion	341	5	4.35	0.98	0.976
Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	337	4	4.05	1.07	0.9756

Table 10 (continued)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	340	4	4.03	1.07	0.9757
Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	339	4	4.15	1.02	0.9756
Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	338	4	3.52	1.28	0.9761
Supplement SRH in RBCs with the traditional primary care visit	338	4	3.83	1.09	0.9758
How responsible are:					
RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	334	3	3.21	1.22	0.9757
Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	336	4	3.93	1.1	0.9762
RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	332	4	3.57	1.14	0.9756
RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	330	4	3.59	1.15	0.9756

Table 10 (continued)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	331	4	3.69	1.19	0.9757
RBCs that are providing the following services to female patients, ages 18 to 45 years, are doing something positive for the patient and providing a worthwhile service:					
Offer contraceptive counseling	340	5	4.46	0.81	0.9759
Administer contraception, including the insertion of intrauterine devices and implants	338	5	4.18	1.07	0.9758
Dispense emergency contraception	339	5	4.62	0.77	0.9761
Offer pregnancy testing	339	5	4.62	0.71	0.976
Administer preconception intakes and family planning counseling	339	5	4.24	0.98	0.9758
Conduct STI/STD screening through physical exams, medical intakes, and lab testing	339	5	4.54	0.78	0.9759
Provide STI/STD counseling	338	5	4.56	0.76	0.9759
Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	340	4	4.06	1.1	0.9757
Administer the HPV vaccine in tandem with HPV counseling for prevention	339	5	4.5	0.82	0.9759
Provide IPV and contraceptive coercion screening and resources	338	5	4.46	0.9	0.9759
Provide FSD screening and resources	336	4	4.16	1.01	0.9758

Table 10 (continued)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
How confident are you that RBCs:					
Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	339	2	2.38	1.22	0.9758
Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	340	3	3.07	1.21	0.9756
Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	340	3	3.19	1.24	0.9756
Provide pregnancy testing to female patients, ages 18 to 45 years?	339	4	4.09	1.07	0.976
Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	339	3	3.11	1.32	0.9756
Offer contraceptive counseling to female patients, ages 18 to 45 years?	340	3	3.29	1.28	0.9757
Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	340	3	2.77	1.39	0.9757

Table 10 (continued)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	339	3	3.24	1.33	0.9758
Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	340	4	3.64	1.25	0.9759
Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	339	3	3	1.33	0.9756
Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	338	4	3.72	1.24	0.9759
Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	337	3	3.37	1.32	0.9758
Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	338	2	2.62	1.37	0.9757
I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:					
A patient does not have insurance.	338	3	3.23	1.45	0.9757
I cannot accept new patients in my practice	338	3	3.01	1.43	0.9758
I am unable to treat a patient	339	3	3.04	1.46	0.9758
A patient requires timely intervention or after-hours care and I am unable to treat that patient	340	4	3.74	1.31	0.9758

Table 10 (continued)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
A patient requires immediate pregnancy testing	340	4	3.76	1.35	0.9759
A patient requires preconception counseling after hours	338	3	3.16	1.45	0.9757
A patient requires timely contraception counseling	339	4	3.36	1.56	0.9756
A patient requires medication abortion or emergency contraception immediately	339	4	3.37	1.37	0.9759
A patient requires immediate contraceptive counseling	339	4	3.86	1.26	0.9756
A patient requires timely STI/STD screening	337	4	3.36	1.42	0.9758
A patient requires immediate IPV and/or contraceptive coercion screening	340	3	2.96	1.45	0.9757
A patient requires immediate reproductive-related cancer screening and prevention	338	4	3.39	1.35	0.9757
A patient requires timely resources and intervention for FSD	337	3	2.91	1.43	0.9757
I am aware of all services provided by RBCs	331	3	3.09	1.29	0.9762
I am aware of provider quality of training at RBCs	338	3	3.01	1.39	0.9762
I am confident in the care and services provided by RBCs	338	3	3.13	1.36	0.9759
I would recommend RBCs for the following services, targeted towards female patients, ages 18 to 45 years:					
Pregnancy testing	338	4	4.19	1.05	0.9759
Preconception counseling	336	3	3.11	1.42	0.9757

Table 10 (continued)

PATRBCS	Frequency Reported (n=341)	M	Average	Std Dev	alpha
Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	339	4	3.3	1.4	0.9757
Contraception counseling	338	4	3.36	1.35	0.9756
STI/STD screening and prevention	335	4	3.85	1.21	0.9758
IPV and/or contraceptive coercion screening and counseling	336	4	3.37	1.38	0.9757
Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	339	3	2.99	1.43	0.9756
Screening and counseling for FSD	335	3	2.91	1.43	0.9757

Table 10 is an overview of each question in the PATRBCs, including summary statistics, the average score, standard deviation, and alpha. This provides a quick snapshot of the previously dissected tables into one outline. Cronbach's alpha was applied to this data set to establish an objective measure of reliability. Typically, Cronbach's alpha is used to assess the reliability of a rating scale composed of specified variables (Tavokol & Dennick, 2011). Cronbach's alpha is also a best practice when analyzing Likert scales and clustering, a common practice when averaging total score for scale items. Alpha tests are a best practice technique to provide additional supporting evidence that constructs of the scale are properly correlated and measure the intended variables (Jamieson, 2004; Likert, 1932; Norman, 2010; Sullivan & Artino, 2013). The scales are composed of standardized item score (mean = 0 and the variance = 1). The total alpha score is 0.97612, indicating that the unstandardized scores look similar and are consistent. According to Tavokol and Dennick (2011), the reliability is "closely associated with validity" (p. 53) in survey instruments, particularly in health or medical research (p. 53). The support from

Cronbach's alpha is a technique to support the evidence that components of the scale best measure the intended variable (Sullivan & Artino, 2013).

To determine attitude, based on numerical weight, Table 11 highlights the overall positive and negative percentages per demographic identifier in response to Question 3 on the Participant Attitude Toward Retail-Based Clinics Scale in definition with "positive" attitudes towards a particular response. Positive attitude is defined as "all responses ranked as 4 or 5."

Table 11. Attitude (≤ 4 or 5 ranking) for Q3 in the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Demographic Identifier	<i>Total</i>	<i>Positive Attitude (< 4 or 5)</i>	<i>Negative Attitude (≥ 3, 2, 1 or 0)</i>
Male	25	44.0%	56.0%
Female	313	59.4%	40.6%
Other	3	100.0%	0.0%
18 to 24 years	1	100.0%	0.0%
25 to 34 years	56	64.3%	35.7%
35 to 44 years	87	62.1%	37.9%
45 to 54 years	66	60.6%	39.4%
55 to 64 years	103	49.5%	50.5%
65 and older	27	66.7%	33.3%
NA	1	0.0%	100.0%
Midwest	72	61.1%	38.9%
Northeast	82	56.1%	43.9%
Northwest	54	64.8%	35.2%
Southeast	69	59.4%	40.6%
Southwest	58	55.2%	44.8%
NA	6	33.3%	66.7%

Table 11 (continued)

Demographic Identifier	Total	Positive Attitude (<4 or 5)	Negative Attitude (≥ 3 , $2, 1$ or 0)
Medical Doctor (MD)	82	52.4%	47.6%
Doctor of Osteopathic Medicine (DO)	3	100.0%	0.0%
Nurse Practitioner (NP)	158	58.9%	41.1%
Physician Assistant (PA)	14	64.3%	35.7%
Registered Nurse (RN)	68	69.1%	30.9%
Certified Nurse Midwife (CNM)	50	52.0%	48.0%
Health Educator	13	53.8%	46.2%
Fellow/Resident	9	33.3%	66.7%
Other	6	100.0%	0.0%
General Practice	15	86.7%	13.3%
Internal Medicine	4	50.0%	50.0%
Family Practice	71	62.0%	38.0%
Obstetrics/Gynecology	196	56.6%	43.4%
Other	76	57.9%	42.1%
Private Practice individual practice	21	52.4%	47.6%
Private Practice group practice	55	54.5%	45.5%
Federally Qualified Health Center	49	55.1%	44.9%
Hospital - non-teaching	15	73.3%	26.7%
Hospital - teaching	61	54.1%	45.9%
Academia	44	52.3%	47.7%
Community Health Center	81	61.7%	38.3%
Other	89	56.2%	43.8%
Currently seeing patients/practicing	327	59.0%	41.0%
Resident/Fellow	14	50.0%	50.0%
Almost never (10 patients or less per month)	24	62.5%	37.5%
Sometimes (11-20 patients per week)	51	62.7%	37.3%
Often (20-30 patients per week)	62	59.7%	40.3%
Always (30 or more patients per week)	204	56.9%	43.1%

Table 11 (continued)

Demographic Identifier	<i>Total</i>	<i>Positive Attitude (<4 or 5)</i>	<i>Negative Attitude (≥ 3, $2, 1$ or 0)</i>
Never (0 hours per week)	8	62.5%	37.5%
Almost never (5-9 hours per week)	46	52.2%	47.8%
Sometimes (10-20 hours per week)	69	60.9%	39.1%
Often (21-29 hours per week)	64	56.3%	43.8%
Always (30 or more hours per week)	150	60.7%	39.3%
NA	4	50.0%	50.0%
0-1 years	8	62.5%	37.5%
1-5 years	48	72.9%	27.1%
5-10 years	63	65.1%	34.9%
10-15 years	53	52.8%	47.2%
15-20 years	47	51.1%	48.9%
20+ years	122	54.9%	45.1%
1 credit per year	1	0.0%	100.0%
More than one credit per year	100	58.0%	42.0%
1 credit per month	56	58.9%	41.1%
More than one credit per month	154	59.7%	40.3%
Does not apply	29	58.6%	41.4%
NA	1	0.0%	100.0%
Not at all knowledgeable	25	72.0%	28.0%
Not very knowledgeable	88	56.8%	43.2%
Neutral	52	57.7%	42.3%
Somewhat knowledgeable	142	59.9%	40.1%
Very knowledgeable	34	50.0%	50.0%

The majority of respondents, across demographic identifiers, have an overall positive attitude compared to an overall negative one.

Table 12 also examines the responses to Question 3 on the Participant Attitude Toward Retail-Based Clinics Scale in definition with “positive” attitudes toward a particular response. Positive attitude is defined as “all responses ranked as 4 or 5.”

Among 341 respondents, 200 (58.7%) had an overall positive attitude toward the integration of SRH services into alternative primary care settings, whereas 141 (41.3%) did not. Table 11 breaks down the responses by numerical average of ranked answer; the numerical average for positive attitude (ranking response of greater or equal to 4 or 5 (strongly agree)); and the numerical average answer for negative attitude (ranking response of less than or equal to 3, 2, 1 (strongly disagree, or missing)).

Table 12 directly correlates to Question 3 of on the PATRBCs, examining the distribution of positive (agree (4) or strongly agree (5)) and subsequent negative attitude (neutral (3), disagree (2), and strongly disagree (1)). The rationale for scoring and ranking was adopted from attitudinal research and best practices for clustering Likert Scales, particularly when measuring more abstract concepts like attitude or confidence (Jamieson, 2004; Likert, 1932; Norman, 2010; Sullivan & Artino, 2013).

Table 12. Positive Attitude (≤ 4 or 5 ranking) for Q3 in the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

PATRBCS	<i>Average Answer (All)</i>	<i>Average Answer for Positive Attitude (≤ 4 or 5)</i>	<i>Average Answer for Negative Attitude ($\geq 3, 2, 1$ or missing)</i>
Offer contraceptive counseling	4.46	4.79	4.00
Administer contraception, including the insertion of intrauterine devices and implants	4.18	4.73	3.38
Dispense emergency contraception	4.62	4.84	4.29
Offer pregnancy testing	4.62	4.82	4.33
Administer preconception intakes and family planning counseling	4.24	4.71	3.58
Conduct STI/STD screening through physical exams, medical intakes, and lab testing	4.54	4.82	4.14

Table 12 (continued)

PATRBCS	<i>Average Answer (All)</i>	<i>Average Answer for Positive Attitude (≤ 4 or 5)</i>	<i>Average Answer for Negative Attitude (≥ 3, 2, 1 or missing)</i>
Provide STI/STD counseling	4.56	4.82	4.17
Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	4.06	4.67	3.18
Administer the HPV vaccine in tandem with HPV counseling for prevention	4.50	4.80	4.09
Provide IPV and contraceptive coercion screening and resources	4.46	4.79	3.98
Provide FSD screening and resources	4.16	4.67	3.40

In Table 12, the two lowest categorical scores were “Administer contraception, including the insertion of intrauterine devices and implants,” averaging at 3.38 in participant response and “Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer,” averaging at 3.18 in participant response. The two highest categorical scores were “dispense emergency contraception,” averaging at 4.84, and “offer pregnancy testing,” averaging at 4.82. These data are consistent with other findings.

Based on Table 12, the two services with the lowest categorical scores were further analyzed to determine any significant interactions and/or correlations with demographic identifiers and attitude ranking in Table 13.

Table 13. Attitude and Demographics Correlation, Q3 on the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Demographic	Administer contraception, including the insertion of intrauterine devices and implants			Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer		
	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)
Male	24	79.2%	20.8%	25	72.0%	28.0%
Female	311	78.5%	21.5%	312	74.7%	25.3%
Other	3	100.0%	0.0%	3	100.0%	0.0%
18 to 24 years	1	100.0%	0.0%	1	100.0%	0.0%
25 to 34 years	56	85.7%	14.3%	56	80.4%	19.6%
35 to 44 years	86	86.0%	14.0%	87	74.7%	25.3%
45 to 54 years	65	80.0%	20.0%	66	77.3%	22.7%
55 to 64 years	102	68.6%	31.4%	102	69.6%	30.4%
65 and older	27	77.8%	22.2%	27	74.1%	25.9%
NA	1	0.0%	100.0%	1	100.0%	0.0%
Midwest	70	77.1%	22.9%	71	77.5%	22.5%
Northeast	81	81.5%	18.5%	82	68.3%	31.7%
Northwest	54	87.0%	13.0%	54	81.5%	18.5%
Southeast	69	73.9%	26.1%	69	75.4%	24.6%
Southwest	58	75.9%	24.1%	58	74.1%	25.9%
NA	6	66.7%	33.3%	6	66.7%	33.3%
Medical Doctor (MD)	80	75.0%	25.0%	82	65.9%	34.1%
Doctor of Osteopathic Medicine (DO)	3	100.0%	0.0%	3	100.0%	0.0%
Nurse Practitioner (NP)	158	75.3%	24.7%	158	76.6%	23.4%
Physician Assistant (PA)	14	100.0%	0.0%	14	78.6%	21.4%
Registered Nurse (RN)	67	88.1%	11.9%	67	82.1%	17.9%
Certified Nurse Midwife (CNM)	50	78.0%	22.0%	50	76.0%	24.0%
Health Educator	13	92.3%	7.7%	13	76.9%	23.1%
Fellow/Resident	9	44.4%	55.6%	9	44.4%	55.6%
Other	6	100.0%	0.0%	6	100.0%	0.0%

Table 13 (continued)

Demographic	Administer contraception, including the insertion of intrauterine devices and implants			Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer		
	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)
General Practice Internal Medicine	15	86.7%	13.3%	15	93.3%	6.7%
Family Practice	4	100.0%	0.0%	4	100.0%	0.0%
Obstetrics/ Gynecology	71	81.7%	18.3%	71	74.6%	25.4%
Other	194	75.8%	24.2%	196	74.0%	26.0%
Private Practice (individual practice)	75	82.7%	17.3%	75	74.7%	25.3%
Private Practice (group practice)	20	85.0%	15.0%	21	76.2%	23.8%
Federally Qualified Health Center	55	72.7%	27.3%	55	74.5%	25.5%
Hospital -non-teaching	49	83.7%	16.3%	49	75.5%	24.5%
Hospital -teaching	15	93.3%	6.7%	15	86.7%	13.3%
Academia	60	73.3%	26.7%	61	68.9%	31.1%
Community Health Center	43	69.8%	30.2%	44	70.5%	29.5%
Other	81	81.5%	18.5%	81	77.8%	22.2%
Currently seeing patients/ practicing	88	78.4%	21.6%	88	70.5%	29.5%
Resident/Fellow	324	79.3%	20.7%	326	75.2%	24.8%
Almost never (10 patients or less per month)	14	64.3%	35.7%	14	64.3%	35.7%
Sometimes (11-20 patients per week)	24	83.3%	16.7%	24	75.0%	25.0%
Often (20-30 patients per week)	50	76.0%	24.0%	50	80.0%	20.0%
	62	82.3%	17.7%	62	69.4%	30.6%

Table 13 (continued)

Demographic	Administer contraception, including the insertion of intrauterine devices and implants			Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer		
	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)
Always (30 or more patients per week)	202	77.7%	22.3%	204	75.0%	25.0%
Never (0 hours per week)	8	87.5%	12.5%	8	62.5%	37.5%
Almost never (5-9 hours per week)	44	77.3%	22.7%	45	75.6%	24.4%
Sometimes (10-20 hours per week)	69	79.7%	20.3%	69	79.7%	20.3%
Often (21-29 hours per week)	64	79.7%	20.3%	64	70.3%	29.7%
Always (30 or more hours per week)	149	78.5%	21.5%	150	75.3%	24.7%
NA	4	50.0%	50.0%	4	50.0%	50.0%
0-1 years	8	75.0%	25.0%	8	62.5%	37.5%
1-5 years	48	91.7%	8.3%	48	85.4%	14.6%
5-10 years	63	87.3%	12.7%	63	76.2%	23.8%
10-15 years	53	73.6%	26.4%	53	73.6%	26.4%
15-20 years	47	70.2%	29.8%	47	66.0%	34.0%
20+ years	119	74.8%	25.2%	121	74.4%	25.6%
1 credit per year	0			0		
More than one credit per year	99	75.8%	24.2%	100	77.0%	23.0%
1 credit per month	56	69.6%	30.4%	56	69.6%	30.4%
More than one credit per month	153	83.0%	17.0%	154	76.0%	24.0%
Does not apply	29	86.2%	13.8%	29	69.0%	31.0%
NA	1	0.0%	100.0%	1	100.0%	0.0%

Table 13 (continued)

Demographic	Administer contraception, including the insertion of intrauterine devices and implants			Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer		
	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)	Total	Positive (4 or 5)	Negative (1, 2, 3, or missing)
Not at all knowledgeable	25	88.0%	12.0%	25	84.0%	16.0%
Not very knowledgeable	87	78.2%	21.8%	88	68.2%	31.8%
Neutral	52	76.9%	23.1%	52	71.2%	28.8%
Somewhat knowledgeable	141	80.9%	19.1%	141	79.4%	20.6%
Very knowledgeable	33	66.7%	33.3%	34	70.6%	29.4%

Using this same definition of positive attitude (ranks 4 or 5—extremely likely), odds ratios were computed for Questions 5 and 6 variables whereby Questions 5 and 6 were the dependent variables and attitude was the independent variable. Results are presented in Table 14. These results seek to establish the relationship between those clinicians reporting having a positive attitude versus a negative attitude and their response to Questions 5 and 6 on the PATRBCS. Odds ratios (along with corresponding 95% confidence intervals) specifically establish that among those reporting a positive attitude, the likelihood, how much more likely are they to recommend select SRH services and practices to females, ages 18-45 years, to seek care from RBCs.

These odds ratios were computed for each item across the PATRBCS. For example, the odds ratio of 2.248 for “a patient does not have insurance” implies that the odds of a clinician’s intent to recommend a patient without insurance to a RBC is 2.248 times higher among those with a positive attitude. For all those odds ratios listed in Table 14, it corresponds to collective respondents (Q5, N=41; Q6, N=87) with positive attitudes

(responses are a 4 or 5 across both Questions 5 and 6) and their likelihood of their intention to recommend for SRH services in RBCs to females, aged 18 to 45 years.

Table 14. Attitude Assessment from Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS) Questions 5 and 6

Variable	Odds Ratios	Std. Err.	z	P>z	Confidence Interval	
I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:						
A patient does not have insurance.	2.248	0.448	4.067	0.000	1.521	3.322
I cannot accept new patients in my practice	2.357	0.473	4.273	0.000	1.591	3.492
I am unable to treat a patient	2.914	0.590	5.288	0.000	1.960	4.333
A patient requires timely intervention or after-hours care and I am unable to treat that patient	2.803	0.577	5.007	0.000	1.872	4.196
A patient requires immediate pregnancy testing	1.637	0.330	2.446	0.014	1.103	2.430
A patient requires preconception counseling after hours	3.004	0.611	5.411	0.000	2.017	4.474
A patient requires timely contraception counseling	2.967	0.603	5.348	0.000	1.991	4.419
A patient requires medication abortion or emergency contraception immediately	2.179	0.438	3.872	0.000	1.469	3.233
A patient requires immediate contraceptive counseling	2.393	0.479	4.357	0.000	1.616	3.544
A patient requires timely STI/STD screening	1.790	0.365	2.855	0.004	1.200	2.669
A patient requires immediate IPV and/or contraceptive coercion screening	1.823	0.362	3.025	0.002	1.235	2.690
A patient requires immediate reproductive-related cancer screening and prevention	2.863	0.579	5.199	0.000	1.926	4.256
A patient requires timely resources and intervention for FSD	2.381	0.478	4.316	0.000	1.606	3.530

Table 14 (continued)

Variable	Odds Ratios	Std. Err.	z	P>z	Confidence Interval	
I am aware of all services provided by RBCs	1.449	0.287	1.870	0.062	0.982	2.137
I am aware of provider quality of training at RBCs	1.409	0.275	1.756	0.079	0.961	2.065
I am confident in the care and services provided by RBCs	1.718	0.338	2.754	0.006	1.169	2.526
I would recommend RBCs for the following services, targeted towards female patients, ages 18 to 45 years:						
Pregnancy testing	1.326	0.277	1.347	0.178	0.880	1.997
Preconception counseling	2.019	0.403	3.526	0.000	1.366	2.985
Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	1.963	0.389	3.405	0.001	1.331	2.894
Contraception counseling	1.947	0.386	3.360	0.001	1.320	2.871
STI/STD screening and prevention	1.629	0.332	2.393	0.017	1.092	2.429
IPV and/or contraceptive coercion screening and counseling	1.676	0.332	2.608	0.009	1.137	2.471
Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	3.763	0.780	6.394	0.000	2.507	5.649
Screening and counseling for FSD	2.565	0.519	4.658	0.000	1.725	3.812

Using odds ratios and the recommended definition of positive attitude, odds ratios with corresponding confidence intervals was performed to determine any correlations between attitude (TBP constructs) and intention to recommend (behavioral intention/motivation) for Question 5 and Question 6. Several categories demonstrate a statistical significance ($p < .05$). In fact, all but pregnancy testing, awareness of all services provided by RBCs, and awareness of provider quality of training at RBCs were statistically significant, despite their odds ratios above 1. This demonstrates that the odds

ratios were not statistically significant. The odds ratios and corresponding confidence intervals for all other variables show the likelihood of those respondents with a positive attitude (in Questions 5 and 6) and their intent to recommend RBCs to female patients, ages 18 to 45 years, for the corresponding specified SRH service.

This research is relatively new to the field of sexual and reproductive health and, therefore, there was not a usable, validated survey available for administration. While survey items were adopted from validated survey measures, Cronbach's alpha was used to test and demonstrate the internal consistency of questions. Appendix E displays an overview of the survey questions and intersecting demographic variables. Pearson's Chi-Squared test was performed to check the likelihood of occurrences, associations, and interactions based on independent demographic variables—and how these identifiers might affect one's response, or in other words, attitude and behavioral intention (Abramson et al., 2011). Assumptions include a random and large sampling, independence, and cells are large enough.

In the review and analysis of data, there were several interesting data points that prompted additional investigation and were worthy of more exploration. For example, for the question, "*How confident are you that RBCs... screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening,*" there was a statistical significance ($p < .05$) in responses among age ($p = .001$) and clinical degree (MDs) ($p = .003$). Another example of statistical significance ($p = .003$) among this data set was for those advanced practice clinicians in academic clinical setting for the question "*I would recommend female patients seek SRH care from RBCs if/when ... I am unable to treat a patient.*" Likewise, differences in frequency of interaction with patients also presented statistical significance. For example, a p value of .003 yielded statistical significance for the question "*I would recommend RBCs for the following services, targeted towards female patients ... counseling for unintended pregnancy, including discussions about emergency contraception and abortion.*"

As shown in Appendix E, there were several other categories and demographic identifiers that demonstrated statistical significance among responses, like region, practice specialty, and practice setting. However, those interactions with the greatest significance will be further explored in subsequent tables. It is also important to note that some categories that demonstrate a strong statistical significance, like gender, practice setting (other), and professional status show a strong statistical significance similar to those that are further explored. However, given the distribution of participants, gender would be too small to calculate a reliable regression. Professional status was an eligibility requirement and, like gender, would be too small of a sample size to perform a reliable regression. Lastly, setting (“other”) may include a variety of responses that are not specified, and without additional detail, an additional regression analysis seemed inappropriate.

While a Chi-Squared test reveals differences in categories and is used to check the likelihood of occurrences of multiple categorical values, given their total distribution, it does not demonstrate in which direction those differences trend. Therefore, further investigation is needed. Odds ratios, by way of ordered logit regression, was applied to each significant correlation to determine the probability (or likelihood) of these events happening in one category (or cohort) versus another. That is, what is the likelihood of those providers 55-64 years of age versus those providers not within that age category; MDs rating a category higher than non-MDs; and ratings of providers in academic settings versus those in non-academic settings? This breakdown is demonstrated in Appendices F-J.

There are several categories of significance within Appendix F. However, of interesting note, the question that asks, “*How confident are you that RBCs ... are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?*” three cohorts show significance: ages 35 to 44 years (0.48 (0.26, 0.87)); ages 55 to 64 years (0.48 (0.27, 0.86)); and ages 65 years + (0.37 (0.16, 0.88)). Similarly, for the

question, “*How confident are you that RBCs ... screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?*” two cohorts showed significance within ages 55 to 64 (0.43 (0.24, 0.76)) and ages 65 years + (0.38 (0.17, 0.88)). In parallel, two cohorts also demonstrated significance for the question, “*How important is it for RBCs to... provide HPV vaccine administration with counseling ... for female patients, ages 18 to 45 years?*” with odds ratios and confidence intervals of ages 45 to 54 (0.36 (0.17, 0.74)) and ages 55 to 64 (0.45 (0.23, 0.89)).

Appendix G demonstrates odds ratios of data displayed in Appendix E. The coefficient reveals the odds of an event happening; and this case, the odds of an MD rating an answer more positively than compared to non-MDs. The assumptions here suggest the dependent variable is ordered; the order does matter, but the magnitude does not. For more exploration of data, refer to Table 14, Appendices E-I.

Tables 15-21 are presented to demonstrate a test and the degree of internal consistency and reliability of Participant Attitude Toward Retail-Based Clinics Scale items. Cronbach’s alpha was performed to test the relative internal consistency for each individual question and sub-question in Tables 15-21. Table 21 displays the total alpha for the entire Participant Attitude Toward Retail-Based Clinics Scale as a summary of Tables 15-21.

Table 15 demonstrates alpha values for Question 1 of the Participant Attitude Toward Retail-Based Clinics Scale. Cronbach’s alpha assesses the reliability of a rating scale composed of the variables specified. The scales are composed of standardized item scores (mean = 0, variance = 1). The total alpha for all questions in the Scale is 0.97612, and the total alpha for Question 1, including all sub-questions, is 0.96113. While also sub-question scores demonstrated internal consistency, the category with the highest alpha was “*pregnancy testing by way of urine or blood tests,*” with an alpha score of 0.96204. This is consistent with other statistical findings. The overall alpha score demonstrates internal consistency for Question 1.

Table 15. Cronbach's Alpha for Question 1 of the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Question	Sub-Question	Alpha
	Total Alpha ALL Qs	0.97612
	Total Alpha for Q1	0.96113
How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?	Deliver comprehensive SRH care to all female patients of reproductive age	0.95839
	Offer pregnancy testing by way of urine or blood tests to female patients	0.96204
	Conduct a preconception intake and counseling for female patients considering family planning	0.95904
	Collect family planning intentions	0.95915
	Discuss family planning options with women (i.e. abortion, emergency contraception)	0.95828
	Provide contraceptive counseling	0.95770
	Administer contraceptive options	0.95831
	Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants	0.95876
	Offer STI/STD screening through medical intake, physical exams, and lab testing	0.95889
	Take a sexual risk behavior intake at all clinical visits	0.95992
	Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening	0.95864
	Provide HPV vaccine administration with counseling	0.95998
	Provide education and care for female sexual dysfunction	0.95926
	Include a questionnaire about intimate partner violence (IPV) and contraception coercion	0.95974
	Provide resources for IPV and contraceptive coercion	0.96026
	Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	0.95759
	Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	0.95787
	Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	0.95769
	Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	0.96186
	Supplement SRH in RBCs with the traditional primary care visit	0.95960

Table 16. Cronbach's Alpha for Question 2 of the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Question	Sub-Question	Alpha
	Total Alpha ALL Qs	0.97612
	Total Alpha for Q2	0.92029
How responsible are:	RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.90920
	Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.95177
	RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	0.87863
	RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	0.87759
	RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	0.88481

Table 16 demonstrates alpha values for Question 2 of the Participant Attitude Toward Retail-Based Clinics Scale. The total alpha for all questions in the scale is 0.97612, and the total alpha for Question 2, including all sub-questions, is 0.92029. While also sub-question scores demonstrated internal consistency, the category with the highest alpha was “*traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years,*” with an alpha score of 0.95177. This is consistent with other statistical findings. To note, alpha scores depend on how many variables are in comparison. Given the small cohort of sub-questions in Question 2, the alpha scores are slightly lower, yet still demonstrate an overall internal consistency. The overall alpha score demonstrates internal consistency for Question 2.

Table 17. Cronbach's Alpha for Question 3 of the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Question	Sub-question	Alpha
	Total Alpha ALL Qs	0.97612
	Total Alpha Q3	0.95626
RBCs that provide the following services to patients, 18 to 45 years, are doing something positive for the patient and providing a worthwhile service:	Offer contraceptive counseling	0.95071
	Administer contraception, including the insertion of intrauterine devices and implants	0.95337
	Dispense emergency contraception	0.95346
	Offer pregnancy testing	0.95167
	Administer preconception intakes and family planning counseling	0.95235
	Conduct STI/STD screening through physical exams, medical intakes, and lab testing	0.95007
	Provide STI/STD counseling	0.94980
	Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	0.95388
	Administer the HPV vaccine in tandem with HPV counseling for prevention	0.95212
	Provide IPV and contraceptive coercion screening and resources	0.95180
	Provide FSD screening and resources	0.95366

Table 17 demonstrates alpha values for Question 3 of the Participant Attitude Toward Retail-Based Clinics Scale. The total alpha for all questions in the scale is 0.97612, and the total alpha for Question 3, including all sub-questions, is 0.95626. While also sub-question scores demonstrated internal consistency, the category with the highest alpha was “*conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer,*” with an alpha score of 0.95388. This is consistent with other statistical findings. The overall alpha score demonstrates internal consistency for Question 3.

Table 18. Cronbach's Alpha for Question 4 of the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Question	Sub-Question	Alpha
	Total Alpha ALL Qs	0.97612
	Total Alpha Q4	0.95916
How confident are you that RBCs:	Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	0.95816
	Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	0.95566
	Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	0.95594
	Provide pregnancy testing to female patients, ages 18 to 45 years?	0.95990
	Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	0.95434
	Offer contraceptive counseling to female patients, ages 18 to 45 years?	0.95348
	Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	0.95566
	Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	0.95438
	Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	0.95537
	Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	0.95518
	Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	0.95721
	Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	0.95511
	Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	0.95609

Table 18 demonstrates alpha values for Question 4 of the Participant Attitude Toward Retail-Based Clinics Scale. The total alpha for all questions in the scale is 0.97612, and the total alpha for Question 4, including all sub-questions, is 0.95916. While also sub-question scores demonstrated internal consistency, the category with the

highest alpha was “provide pregnancy testing to female patients, ages 18 to 45 years,” with an alpha score of 0.95990. This is consistent with other statistical findings. The overall alpha score demonstrates internal consistency for Question 4.

Table 19. Cronbach’s Alpha for Question 5 of the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Question	Sub-Question	Alpha
	Total Alpha ALL Qs	0.97612
	Total Alpha Q5	0.94193
I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:	A patient does not have insurance	0.93800
	I cannot accept new patients in my practice	0.93750
	I am unable to treat a patient	0.93832
	A patient requires timely intervention or after-hours care and I am unable to treat that patient	0.93967
	A patient requires immediate pregnancy testing	0.93960
	A patient requires preconception counseling after hours	0.93734
	A patient requires timely contraception counseling	0.93582
	A patient requires medication abortion or emergency contraception immediately	0.93894
	A patient requires immediate contraceptive counseling	0.93501
	A patient requires timely STI/STD screening	0.93764
	A patient requires immediate IPV and/or contraceptive coercion screening	0.93664
	A patient requires immediate reproductive-related cancer screening and prevention	0.93592
	A patient requires timely resources and intervention for FSD	0.93678
	I am aware of all services provided by RBCs	0.94279
	I am aware of provider quality of training at RBCs	0.94235
I am confident in the care and services provided by RBCs	0.93991	

Table 19 demonstrates alpha values for Question 5 of the *Participant Attitude Toward Retail-Based Clinics Scale*. The total alpha for all questions in the scale is 0.97612, and the total alpha for Question 5, including all sub-questions, is 0.94193. While also sub-question scores demonstrated internal consistency, the category with the highest alpha was “I am aware of all services provided by RBCs,” with an alpha score of 0.94279. The overall alpha score demonstrates internal consistency for Question 5.

Table 20. Cronbach's Alpha for Question 6 of the Participant Attitude Toward Retail Based Clinics Scale (PATRBCS)

Question	Sub-Question	Alpha
	Total Alpha ALL Qs	0.97612
	Total Alpha Q6	0.94489
I would recommend RBCs for the following services, targeted towards female patients ages 18 to 45 years:	Pregnancy testing	0.95031
	Preconception counseling	0.93410
	Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	0.93427
	Contraception counseling	0.93210
	STI/STD screening and prevention	0.93967
	IPV and/or contraceptive coercion screening and counseling	0.93444
	Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	0.93621
	Screening and counseling for FSD	0.93793

Table 20 demonstrates alpha values for Question 6 of the *Participant Attitude Toward Retail-Based Clinics Scale*. The total alpha for all questions in the scale is 0.97612, and the total alpha for Question 6, including all sub-questions, is 0.94489. While also sub-question scores demonstrated internal consistency, the category with the highest alpha was “*pregnancy testing*,” with an alpha score of 0.95031. This is consistent with other statistical findings. The overall alpha score demonstrates internal consistency for Question 6.

Table 21. Cronbach's Alpha for the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Question	Sub-Question	Alpha
	Total Alpha	0.97612
How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?	Deliver comprehensive SRH care to all female patients of reproductive age	0.97575
	Offer pregnancy testing by way of urine or blood tests to female patients	0.97616
	Conduct a preconception intake and counseling for female patients considering family planning	0.97581
	Collect family planning intentions	0.97588
	Discuss family planning options with women (i.e. abortion, emergency contraception)	0.97577
	Provide contraceptive counseling	0.97565
	Administer contraceptive options	0.97575
	Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants	0.97579
	Offer STI/STD screening through medical intake, physical exams, and lab testing	0.97579
	Take a sexual risk behavior intake at all clinical visits	0.97601
	Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening	0.97564
	Provide HPV vaccine administration with counseling	0.97589
	Provide education and care for female sexual dysfunction	0.97578
	Include a questionnaire about intimate partner violence (IPV) and contraception coercion	0.97593
	Provide resources for IPV and contraceptive coercion	0.97595
	Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	0.97564
	Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	0.97568
	Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	0.97561
	Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	0.97607
Supplement SRH in RBCs with the traditional primary care visit	0.97579	

Table 21 (continued)

Question	Sub-Question	Alpha
How responsible are:	RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.97570
	Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.97618
	RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	0.97564
	RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	0.97564
	RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	0.97567
RBCs that provide the following services to patients, 18 to 45 years, are doing something positive for the patient and providing a worthwhile service:	Offer contraceptive counseling	0.97585
	Administer contraception, including the insertion of intrauterine devices and implants	0.97580
	Dispense emergency contraception	0.97608
	Offer pregnancy testing	0.97604
	Administer preconception intakes and family planning counseling	0.97577
	Conduct STI/STD screening through physical exams, medical intakes, and lab testing	0.97590
	Provide STI/STD counseling	0.97594
	Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	0.97575
	Administer the HPV vaccine in tandem with HPV counseling for prevention	0.97593
	Provide IPV and contraceptive coercion screening and resources	0.97592
Provide FSD screening and resources	0.97584	
How confident are you that RBCs:	Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	0.97576
	Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	0.97560
	Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	0.97562
	Provide pregnancy testing to female patients, ages 18 to 45 years?	0.97604
	Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	0.97562
	Offer contraceptive counseling to female patients, ages 18 to 45 years?	0.97565

Table 21 (continued)

Question	Sub-Question	Alpha
	Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	0.97569
	Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	0.97576
	Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	0.97585
	Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	0.97557
	Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	0.97591
	Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	0.97581
	Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	0.97569
I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:	A patient does not have insurance.	0.97574
	I cannot accept new patients in my practice	0.97578
	I am unable to treat a patient	0.97583
	A patient requires timely intervention or after-hours care and I am unable to treat that patient	0.97578
	A patient requires immediate pregnancy testing	0.97595
	A patient requires preconception counseling after hours	0.97574
	A patient requires timely contraception counseling	0.97563
	A patient requires medication abortion or emergency contraception immediately	0.97592
	A patient requires immediate contraceptive counseling	0.97561
	A patient requires timely STI/STD screening	0.97577
	A patient requires immediate IPV and/or contraceptive coercion screening	0.97570
	A patient requires immediate reproductive-related cancer screening and prevention	0.97566
	A patient requires timely resources and intervention for FSD	0.97570
	I am aware of all services provided by RBCs	0.97620
	I am aware of provider quality of training at RBCs	0.97619
I am confident in the care and services provided by RBCs	0.97595	

Table 21 (continued)

Question	Sub-Question	Alpha
I would recommend RBCs for the following services, targeted towards female patients ages 18 to 45 years:	Pregnancy testing	0.97592
	Preconception counseling	0.97567
	Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	0.97568
	Contraception counseling	0.97563
	STI/STD screening and prevention	0.97576
	IPV and/or contraceptive coercion screening and counseling	0.97570
	Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	0.97562
	Screening and counseling for FSD	0.97572

Table 21 demonstrates overall alpha values for the entire *Participant Attitude Toward Retail-Based Clinics Scale*. Cronbach's alpha assesses the reliability of a rating scale composed of the variables specified. The scales are composed of standardized item scores (mean = 0, variance = 1). The total alpha for all questions in the Scale is 0.97612. The overall alpha score demonstrates internal consistency for the *Participant Attitude Toward Retail-Based Clinics Scale*. It is important to note that these alpha scores vary slightly from Tables 14-19. Alpha scores are dependent upon the number of variables in comparison calculation. Since each individual alpha score for sub-questions in Table 21 is being calculated with all other questions and sub-questions, the alpha scores are slightly higher than when compartmentalized with other individual questions and sub-questions. That is, each question in Table 21 is compared to all other questions in the survey, whereas each question in Tables 15-20 is only compared to other sub-questions within that one question.

Table 22. Summary of Cronbach's Alpha for the Participant Attitude Toward Retail-Based Clinics Scale (PATRBCS)

Question 1 Total Alpha	0.96113
Question 2 Total Alpha	0.92029
Question 3 Total Alpha	0.95626
Question 4 Total Alpha	0.95916
Question 5 Total Alpha	0.94193
Question 6 Total Alpha	0.94489
Overall Survey Alpha	0.97612

Table 22 provides a synopsis of Tables 15-21. In sum, all questions within the scale demonstrate an alpha value close to 1. Therefore, internal consistency is demonstrated for both individual questions and for the entire scale.

Qualitative Results

The data for the last two open-ended questions of the survey aimed to capture provider opinion on barriers and benefits to the implementation and integration of SRH services in RBCs. The responses were themed (with sub-themes) and coded for analysis. Among the 598 respondents, 336 participated in the last two open-ended questions, all of which were eligible responses. Analysis of the data collected in the open-ended question resulted in the identification of several themes and categories that highlighted provider attitude regarding the benefits of the integration of SRH in RBCs and the barriers of the integration of SRH in RBCs that might help or inhibit one's intention to recommend, refer, and/or support this integration.

The data from these questions also directly address Research Question 3 to understand the perceived barriers among advanced practice clinicians in the implementation of quality and comprehensive sexual and reproductive healthcare services in RBCs. Understanding identified perceived barriers (or benefits) to SRH implementation in RBCs might reveal how often one might intend (or plan) to refer,

recommend, advocate, or support this model of healthcare. Since the Theory of Planned Behavior links behaviors and beliefs, the insight into beliefs might demonstrate or predict one's behavior.

Benefits of Integrating Sexual and Reproductive Health into Retail-Based Clinics

Table 23 displays qualitative responses from participants. Participants were asked to share their opinions about the potential benefits of integrating more quality and comprehensive SRH care into alternative primary care settings, like RBCs, and would encourage participants to recommend these services to patients. The response data from this question sought to directly address Research Question 3 by understanding the perceived benefits among advanced practice clinicians to the integration of quality and comprehensive sexual and reproductive healthcare services in RBCs. According to TPB, attitudes and beliefs, like perceived benefits (i.e., a behavior control), directly correlate to one's intentions to perform a particular behavior—and in this case, recommend, refer, or support the integration of SRH in RBCs.

Table 23. Qualitative Response—Benefits

Theme	Frequency Reported (n=336)	Percentage
Access	245	72.9%
More opportunities for intervention	171	50.9%
Availability of services	133	39.6%
Convenience	183	54.5%
Cost	51	15.2%
Continuity of Care	9	2.7%
Comprehensive Care	25	7.4%
Confidentiality	33	9.8%
Provider Training	9	2.7%
Innovative Approach	2	0.6%
Normalizing SRH	1	0.3%
Avoid ER visit	5	1.5%
Expanding SRH Education	190	56.5%

When accessing respondent data regarding benefits of the implementation and integration of SRH in alternative primary care sites, specifically RBCs, the majority of respondents (72.9%) agreed that it would improve access to and availability of care. Among this (nearly) 73% of participants that saw “access” as a benefit of implementation, 15% agreed that this would bridge gaps for special populations (i.e., in rural environments) that may not otherwise have access to SRH services.

Another noteworthy statistic showed that 50.9% of respondents think RBCs offer more opportunities for interventions with the availability of services (39.6%). Some specifically noted services that include: STI screening, prevention, and intervention (18%), contraception counseling and administration (10%), vaccination (2%), emergency contraception (3%), IPV screening, intervention, and prevention (2%), and UTI management (4%).

Fifty-six and a half percent of participants felt this model of care advanced patient education, particularly in the areas of contraception, emergency contraception, and contraceptive counseling. Likewise, 54.5% of respondents felt that convenience was an important benefit, with 30% of respondents highlighting the perk of after-hours care and 19% of respondents mentioning the advantage of immediate care.

Over 15% of participants (15.2%) saw cost (i.e., transparency, scale of services, and affordability to non-insured patients) as a benefit of SRH integration to RBCs. Other notable benefits included themes such as anonymity, confidentiality, and the avoidance of provider bias or stigma (9.8%), comprehensive care services (7.4%), continuity of care (2.7%), provider training (2.7%), avoidance of emergency room visits (1.5%), and an innovative approach that normalizes sexual health (0.6%). One respondent also mentioned that this integration might normalize SRH in clinical practice (0.3%).

Notable quotes in the qualitative section of the survey supported many of the findings from the quantitative portion of the questionnaire. For example, most participant responses included the primary benefit of access. Comments included, “*Greater access*

within the community is the primary benefit” and “It would be beneficial to have increased access to clinical SRH services for women to who may not have easy access to these services in an immediate care manner.” Other comments like, “It would be great to see more reproductive health services in these clinics, as we are seeing more and more loss of access, especially in rural areas. This would improve access, especially after hours or on weekends when traditional clinics are closed” and “Patients would have less barriers to care and easier access to health education, contraception and STI testing. Some women’s health concerns are time sensitive (ECP and abortion) and having after-hours care is crucial for women to make informed decisions about family planning” target the convenience and availability as cornerstones of increased access.

Many comments also highlighted the benefit of SRH in RBCs for patients that live in rural or underserved areas that may not have access to comprehensive SRH care regularly. *“Benefits of having more comprehensive sexual and reproductive Health Care in alternative Primary Care settings include access to a wider base of patients, including those living in rural areas, the possibility of treating patients at a lesser cost than what might be expected at a private office, and the ability to offer the services on nights and weekends when patients working different schedules might need their appointments.”* Likewise, other comments mentioned access in terms of narrowing gaps in disparities, including quotes like *“[It] fills in the gaps, and provides care for women that need it on the women’s time table to close inequity gap”* and *“Huge benefits, reaching more people in need, especially since these clinics seem very widespread and especially in underserved areas. This would provide women with more options for care.”*

While many comments cited the benefits of SRH in RBCs (i.e., increased access) they also included skepticism regarding the quality of care and type of services offered. Comments reflected this, as well. *“I am always in favor of patients having more access to quality care. Having a RBC that has extended hours with a qualified provider can certainly benefit the patient in need of SRH care. As a FNP and CNM, my main concern*

is the quality of care women would receive in this type of setting, particularly for the list of comprehensive services mentioned in this survey, like LARC insertion and PAP testing” and, “We need more places that don’t shy away from discussing sexual health - so if it becomes a specialty of RBC, I would welcome that option for patients. We need MORE places, so this can only be a good thing! But an assurance of quality, accuracy of diagnostics and provider training will need to be undertaken before I could fully support this integration.” Lastly, comments that specifically allude to a respondent’s intention to recommend and support SRH in RBCs based on their degree of confidence was demonstrated by, *“This would be great for women’s access to SRH but I would need to be convinced and feel confident that the quality of SRH was high before I would recommend women access services there.”*

Barriers to Integrating Sexual and Reproductive Health into Retail-Based Clinics

Table 24 displays qualitative responses from participants concerning barriers to the integration of SRH into RBCs. Participants were asked to share their opinions about the potential barriers of integrating more quality and comprehensive SRH care into alternative primary care settings, like RBCs. The response data from this question sought to directly address Research Question 3 by understanding the perceived barriers among advanced practice clinicians to the integration of SRH in RBCs. Constructs within the TPB highlight perceived barriers (i.e., control beliefs) that may dictate or predispose a behavior, and in this case, one’s recommendation, referral, or support of the integration of SRH in RBCs.

Table 24. Qualitative Response—Barriers

Theme	Frequency Reported (n=336)	Percentage
Quality Assurance (Clinical)	282	83.9%
Provider Training	141	42.0%
Cost	38	11.3%
Stigma	15	4.5%
Facility	51	15.2%
Continuity of Care	45	13.4%
Provider Education	57	17.0%
Patient Education	10	3.0%
Privacy	17	5.1%
Time Constraints	31	9.2%
Limitation of Services	17	5.1%
Competition to Current Practice	7	2.1%
Limited Knowledge of RBCs	61	18.2%
Variations by State	6	1.8%
Community of Practice	4	1.2%
Industry/Conflict of Interest	19	5.7%

When accessing respondent data regarding barriers to the implementation and integration of SRH in alternative primary care sites, specifically RBCs, the majority of respondents felt that quality assurance (83.9%) was the greatest barrier to support and recommendation of or referral to these sites. Aspects of quality of care (15%), potential biases of providers (8%), quality of family planning counseling (3%), STI testing (4%), and follow-up (3%) were other notable indicators among the 83.9%.

The next most commonly noted barrier to support, recommendation, and/or referral to RBCs for SRH care was the concern of provider training (42%). Among the 42% of respondents that marked provider training as a barrier, 3% felt RBC staff lack the experience and expertise in SRH, including concerns about SRH counseling (3%) or

perform PAP smears (3%), LARC insertion/removal (3%), pelvic exams (1%), or adequate cancer screening (1%). Other sub-themes mentioned included the recruitment of trained and qualified SRH professionals (10%). Seventeen percent thought provider education and staying up-to-date on SRH issues was a barrier to quality patient care and hindered their confidence and intention to recommend and refer patients to RBCs.

The next frequently noted barrier to support, recommendation, and/or referral to RBCs for SRH care was respondent degree of knowledge of RBCs and scope of SRH services offered (17.0%). Facility concerns (15.2%) was another common barrier, including sub-themes of concerns or barriers regarding space issues to perform pelvic exams (3%), proper staff supervision (2%), lack of support staff (1%), policies (1%), and availability of stock (i.e., contraception) (1%). Additionally, participants noted continuity of care (13.4%) with a noteworthy comment about limited access to EMR/medical history (3%) and lack of patient relationships (1%); out-of-pocket cost concerns for patients (11.3%); time constraints (9.2%); limitation of services (5.1%); and RBC stigma (4.5%) as barriers to the integration, recommendation, and/or referral of SRH into alternative primary care settings. Also to note, several participants (5.7%) felt that RBCs are industry-driven and create a conflict of interest in the care and supervision of patient health and SRH services. Lastly, a few respondents marked privacy and confidentiality (5.1%), attitudes and stigma (4.5%), patient education (3%), competition to current practice (2.1%), variations by state (1.8%), and lack of community of practice (1.1%). A portion of respondents (18.2%) said they would recommend and/or refer patients to RBCs for SRH services but admitted that their limited knowledge and awareness coupled with misconceptions of RBCs inhibit their ability to do so.

An interesting finding between Tables 23 and 24 includes the categories of provider training and cost. These themes were mentioned both as barriers and benefits. While provider training was more frequently cited (42% versus 2.7%) as a barrier to support, recommendation, and/or referral of SRH care in alternative primary care

settings, cost was more frequently cited as a benefit (15.2% versus 11.3%) to the support, recommendation, and/or referral of SRH care in alternative primary care settings.

Notable quotes that support these analytics most often include an element of quality assurance. Some examples of participants responses are, *“Barriers are quality assurance, in NP training for SRH, clinical equipment and space, and lack of knowledge or competency in current screening/guidelines”* and *““Lack of training of staff. Lack of education specific to this service and not knowing what resources to offer this client. How can we ensure that providers are delivering quality care in these clinics? Quality control!”*

Some admit they are unaware of the degree of SRH training and knowledge of providers that staff RBCs but still see that as a concern and barrier, *“I have no idea what the training or competence level is in these clinics. I’m not clear on the ability of these clinics to follow up with patients to be sure they are using their contraception correctly, etc. I have seen these clinics over-diagnose PID, UTI, etc. I don’t feel confident in their skills to adequately offer LARC contraception other than Depo”* or *“My only concern is that I don’t yet know much about the level of training that the staff at these clinics will receive. If they are getting comprehensive training to ensure safe, confidential, accurate, and unbiased information then this would make me feel much more comfortable in referrals to these alternative care settings. Another barrier, is our own client retention...I would be concerned that continuity of care would be a barrier.”*

Similarly, a respondent noted, *“I worry about the consistency and quality of follow up care for screening tests as a barrier to SRH care in RBCs. I assume most retail based clinics would not be equipped to handle colposcopy for abnormal PAPs, so there would have to be some agreement or arrangement to refer those patients out and then follow up on the results or stock clinics with the proper tools and equipment to conduct these screenings.”*

Others targeted specific SRH areas in their degree of perceived barriers among provider training, provider knowledge and quality assurance. *“The greatest barrier I see is provider training level. Many of these providers may not have back-up or an MA assist. Many may be mid-level providers and likely have very different experience levels with SRH. I would have a hard time trusting that these providers would be doing a competent job at a retail clinic for appropriate provision of LARCs, counseling for partner violence, or especially preconception or sexual dysfunction workup/counseling. I would be skeptical that these can be done well for a patient at a clinic that is focused on one-problem semi-urgent level care without a fully functional follow up system.”*

However, some respondents felt that the integration of SRH in RBCs would be a benefit for patients if barriers could be overcome. For example, one respondent said, *“My biggest concern regarding these retail based clinics would be related to the amount of training and knowledge the providers have in managing more comprehensive female sexual reproductive health issues. While testing for STDs and doing pregnancy tests are fairly straightforward, counseling somebody on their risk for breast cancer or on aspects related to preconception counseling can be quite challenging at times. They often involve taking thorough histories, and if this is not done, the patient might have a false sense of any potential future risks. Also, I would love for these retail based clinics to offer placement of contraceptive devices. However, I have seen in my practice patients who have had their contraceptive devices placed at sites where the provider was not proficient in what they were doing, either through lack of education or lack of experience, and the patient has been left suffering because of it. I would hope the providers at these sites would get ample training and education in proper placement of the contraceptive devices, as well as have enough patience wanting them often enough to keep their skills up in placing them. Then I could not imagine a potential barrier to offering more SRH care to more women.”* Another participant stated, *“The greatest barrier is ensuring consistent, quality training in this area. Nursing programs often don’t have education in this area,*

and clinicians rarely get additional training in this area. If I knew that the providers were well trained in SRH, I would happily refer patients. In fact, I think more nursing programs and professional education SHOULD encourage providers to be trained in SRH to help close these gaps in inequities across our nation” and “I would need assurance of the training and credentials of the Clinicians. After that, I would fully support this.”

Summary

This chapter has provided an overview of the participant sample demographics, their responses to the survey items, thematic analysis of respondent answers, select demographic and categorical correlations, and quantitative and qualitative findings. The next chapter provides a discussion of the results, implications for the future, limitations, delimitations, and conclusions of the current study.

Chapter V

DISCUSSION, FUTURE IMPLICATIONS, DELIMITATIONS, LIMITATIONS, AND CONCLUSIONS

This chapter presents a discussion of the study and is divided into the following categories: (1) Summary of Study Background, Purpose and Rationale, (2) Summary of Key Findings, (3) Future Implications, (4) Delimitations, (5) Limitations, (6) Study Conclusions, and (7) Disclosures.

Summary of Study Background, Purpose, and Rationale

Primary care settings are a pivotal point of access for comprehensive health services that could profoundly impact patient health status and outcomes (Curtis, Mohllajee, & Peterson, 2006; Healthy People, 2017c; Leeman, 2007). Despite the challenges that surround the SRH community, there remain opportunities to address the growing needs, bridge the gaps in health inequities, and meet the objectives of *Healthy People 2020*. The facilitation and integration of SRH care in diverse and alternative primary care environments meet this challenge by “improving access to comprehensive, quality healthcare services” (Healthy People, 2017c). The implementation of complete, comprehensive, and quality SRH care into all primary care settings ensures prevention efforts that also address the gaps in health disparities and meet the objectives in *Healthy People 2020* by reducing new cancer rates through screening (Healthy People, 2017d), the prevention of unintended pregnancy (Healthy People 2020, 2017a), decreasing rates

of STIs and HIV (Healthy People 2020, 2017a), lowering rates of preventable infectious disease through vaccination (Healthy People 2020, 2017b), advancing maternal, infant, child, and family health (Healthy People 2020, 2017e), and promoting healthy sexual behaviors and fostering informed decision making through the access to quality care services (Healthy People 2020, 2017f).

The literature has demonstrated gaps in current SRH practice, including the necessity and benefits of expansion (Callegari et al., 2015; Curtis, et al., 2006; Edelman et al., 2015; Finney-Rutten et al., 2017; Guttmacher, 2015; Hurst & Linton, 2015; Leeman, 2007; McElwaine et al., 2014; Roan, 2009; Trussell, 2007). However, despite this clinical opportunity to expand accessible and available SRH, barriers to its integration exist and persist. Traditionally, alternative primary care clinics (i.e., RBCs) have been a point of service for acute primary care. While this is still a relatively new model of healthcare delivery, the integration of soft SRH services, like HPV vaccination and pregnancy testing, have begun in several RBCs nationwide; however, more in-depth SRH care, like contraceptive and family planning counseling, IPV screening, or reproductive-related cancer screenings, is still slowly assimilating. Trends have shown that primary care and SRH are merging to include more touchpoint opportunities to educate patients and offer preventive and/or intervention services. As such, primary care providers have a unique opportunity to deliver quality and comprehensive healthcare, which includes SRH.

Studies show that provider opinion matters to patients, even beyond the clinical walls (Callegari et al., 2015; Curtis, et al., 2006; Edelman et al., 2015; Hurst & Linton, 2015; Leeman, 2007; McElwaine et al., 2014; Roan, 2009; Trussell, 2007). Their recommendation or referral can support or hinder patient experience, adherence, and compliance to behaviors, or in this case, seeking care or integrating SRH in alternative primary care settings. However, gaps in the literature do not show what current advanced practice clinicians think about the integration of SRH services in alternative primary care

settings. The identification and understanding of provider attitudes toward SRH in RBCs could reveal additional hurdles to this implementation to address these barriers on micro and macro scales (i.e., continuing education, policy change, evidence-based best practice, provider training), while recognizing benefits that are worth capitalizing on that also predict behavioral intention to support the integration of services and recommend and/or refer patients to RBCs. In response, this study sought to answer the following research questions to address to these gaps:

1. What are the beliefs among a national sample of advanced practice clinicians, specifically about the following constructs: (a) the importance of integrating sexual and reproductive healthcare (SRH) in retail-based clinics (RBCs); (b) the responsibility of offering comprehensive sexual and reproductive care in retail-based clinics; and (c) the quality of the sexual and reproductive healthcare services currently offered in retail-based clinics?
2. What is the relationship between the attitudes of advanced practice clinicians regarding retail-based clinics and their likelihood of recommending or referring patients to retail-based clinics (RBCs) as a means of seeking sexual and reproductive healthcare (SRH)?
3. What do advanced practice clinicians perceive as the potential benefits of and potential barriers to the integration of quality and comprehensive sexual and reproductive healthcare services in retail-based clinics?

Guided by research on the Theory of Planned Behavior (Ajzen, 1971, 1985, 1991, 2006; Ajzen & Fishbein, 1977), this study utilized constructs to inform questionnaires that captured attitudes, behavioral beliefs, behavioral controls, and normative beliefs to determine degrees of motivation and behavioral intention. TPB links personal beliefs that may impact and affect behavior (Resnick & Siegel, 2013). It is often preferred theory method when examining behavioral intentions and associations with attitudes or beliefs (Ajzen, 1991; Resnick & Siegel, 2013). Since this study examined how/if provider biases

about alternative primary care settings might influence their behavioral intentions and decision-making, this theory was the most appropriate among the adult learning theories.

Utilizing the membership database at the Association of Reproductive Health Professionals (ARHP), an electronic survey was distributed in October 2017 to nearly 12,028 of ARHP's members who had chosen to opt in for electronic communication. Among the 12,028 emails sent, 11,506 were successfully delivered. There was a total of 598 responses; however, the final sample population was N=341 because 8 participants had an invalid IP address; 2 participants did not agree to consent and therefore were disqualified; 187 participants did not fully complete the survey; 59 participants were disqualified due to exclusion criteria ("not currently practicing," "retired," "NA," "never see patients of reproductive age," and did not fall within the specified clinical degree).

The perceived risks in the study were very minimal. Given the length of the study and the questions asked, participants might have felt some reading fatigue. To address this, participants were informed that they were permitted to stop the survey at any time. Another minimal risk that was outlined in the informed consent included a potential professional or personal trigger that might elicit a memory or problem encountered in a clinical setting that might cause distress. To address this, participants were informed that should they feel distress, they were welcome to skip any question they chose not to answer or end the survey at any time. Participants might also be worried that answers would be shared with their employers. They were assured that all information would be kept confidential and would not be disclosed to their colleagues, supervisors, or constituents.

Summary of Key Study Results

Demographic Identifiers

Analysis of the data collected from closed and open-ended questions produced several results, including a description of how sample demographics and differences in identifier variables intersect with select survey questions to address the research aims. Specifically, data showed that a majority of respondents were female (91.8%); between the ages of 55 and 64 years (30.2%); practiced in the Northeast (24.0%); were currently seeing patients (95.9%); always (30 or more patients per week) interacted with female patients of reproductive age (ages 18-45 years) (59.8%); always (30 or more hours per week) provided SRH care to females patients of reproductive age (ages 18 to 45 years) (44.0%); had been in practice for more than 20 years (35.8%); engaged in more than one credit per month of continuing education (45.2%); and self-reported as somewhat knowledgeable about RBCs (41.6%). Clinical degrees, practice specialties, and clinical practice settings were not mutually exclusive; however, the most frequent categories selected were nurse practitioners (46.3%); practice specialties of obstetrics and gynecology (57.5%); and “other” for clinical practice setting (26.1%).

Importance of Sexual and Reproductive Health in Retail-Based Clinics

Among survey responses, the majority of respondents felt that it was extremely important for RBCs to offer STI/STD screening through physical exams, blood work, or lab testing (61.6%); include a questionnaire about IPV and contraceptive coercion (59.8%) and provide resources for IPV and contraceptive coercion (59.8%); offer pregnancy testing by way of urine or blood tests (57.8%); provide HPV vaccination administration with counseling (56.6%); provide contraceptive counseling (54.8%); administer contraceptive options (51.6%) ; and discuss family planning options (i.e., abortion, emergency contraception) (50.4%) to women of reproductive ages (18 to 45 years). The categories that ranked among the lowest, as not at all important for RBCs to

provide education and care for FSD (10.9%); offer LARC, including the insertion and removal of IUDs and implants (10.3%); and include a women-only clinic that provides comprehensive SRH as the next phase of RBCs to female patients of reproductive ages, 18 to 45 years. This demonstrates that most advanced practice clinicians might support the integration of more SRH services in RBCs, as more categories of SRH services were deemed as “extremely important” offerings than those that were not.

Responsibility of Retail-Based Clinics to Offer Sexual and Reproductive Health

Despite the importance of RBCs offering these services, most respondents felt that traditional primary care settings were responsible (30.8%) or extremely responsible (38.1%) for the delivery of SRH to female patients ages 18 to 45 years. However, participants did note a degree of responsibility (somewhat responsible, 28.5%, or responsible, 23.5%) of RBCs in the delivery of comprehensive SRH care to female patients of reproductive ages, 18 to 45 years. Likewise, 31.7% felt that alternative primary care settings that offer SRH are responsible for broadening the access to SRH care among female patients, ages 18 to 45 years, and 31.7% thought alternative primary care settings that offer SRH are responsible for expanding the availability of SRH care for female patients, ages 18 to 45 years. Moreover, a majority of respondents thought alternative primary care settings that offer SRH were extremely responsible (30.8%) and responsible (27.0%) in helping to close the gaps in health inequities and health disparities across the communities.

Confidence of Sexual and Reproductive Health in Retail-Based Clinics

While a majority of respondents felt SRH services in RBCs were worthwhile, positive, and important, many lacked confidences in several aspects of implementation which compromised their perception of the quality of services offered. Just over 30% were not confident at all, and 27.0% were only slightly confident that RBCs are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years. Likewise,

28.4% felt not at all confident and 21.4% only slightly confident in RBCs to screen and educate female patients, ages 18 to 45 years, for female sexual dysfunction. Twenty-four and six-tenths percent were confident, whereas 23.2% were only slightly confident that RBCs could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance. Similarly, 24.3% were not at confident and 22.6% only slightly confident in RBCs to administer contraception options, including LARC, barrier methods, and oral contraception, to female patients, ages 18 to 45 years.

The category with the greatest degree of confidence was in the delivery of pregnancy testing, as many (45.7%) felt extremely confident in RBCs to provide pregnancy testing to female patients, ages 18 to 45 years. Thirty-four percent also felt extremely confident, and 29.3% felt confident in RBCs to administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination. In parallel, 31.7% felt extremely confident, 26.4% felt confident, and 23.5% felt somewhat confident in RBCs to screen and counsel female patients, ages 18 to 45 years, for STIs/STDs.

There also several categories with interesting distributions among participant responses. For instance, 21.4% were slightly confident, 25.2% were somewhat confident, and 25.8% were confident that RBCs could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention. There seemed to be a close split among those respondents that felt extremely confident (20.5%), only slightly confident (22.0%), and somewhat confident (25.8%) in RBCs to administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years.

Likewise, another close divide occurred among those respondents that felt extremely confident (23.2%), only slightly confident (20.5%), and somewhat confident (25.5%) in RBCs to offer contraceptive counseling to female patients, ages 18 to 45 years. A close distribution was also seen among respondents that felt extremely confident

(23.2%), confident (21.1%), and somewhat confident (24.3%) in RBCs to counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion. Also, this parallel division included 25.5% extremely confident, 23.5% confident, and 23.2% somewhat confident in RBCs to screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years. Lastly, 26.1% were somewhat confident and 21.1% confident in RBCs to screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams, and cervical cancer screening.

Attitudes Regarding the Integration of Sexual and Reproductive Health in Retail-Based Clinics

In an assessment of attitudes, most respondents had a favorable (or positive) attitude to the integration of most SRH services in RBCs. Most strongly agreed that RBCs are doing something positive for the patient and providing a worthwhile service by providing the following SRH care to female patients, ages 18 to 45 years: dispense emergency contraception (73.0%); offer pregnancy testing (69.8%); provide STI/STD counseling (66.3%); conduct STI/STD screening through physical exams, medical intakes, and lab testing (66.0%); administer the HPV vaccine in tandem with HPV counseling for prevention (64.2%) and provide IPV and contraceptive coercion screening and resources (64.2%); offer contraceptive counseling (59.8%); administer preconception intakes and family planning counseling (51.3%); and administer contraception, including the insertion of intrauterine devices and implants (51.0%). Very few respondents strongly disagreed (1.5% to 3.8%) that RBCs providing the listed SRH services were doing something positive for the patient and providing a worthwhile service to female patients, ages 18 to 45 years.

Intent to Recommend, Refer, or Advocate for Sexual and Reproductive Health in Retail-Based Clinics

Also seen with quantitative result data are those provider responses with intent to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs within various scenarios. Among the scenarios listed, there was a mix of distributive results. For example, 40.5% reported to be extremely likely to recommend when a patient requires immediate pregnancy testing and closely following, while 39.0% reported an extremely likely and 33.1% moderately likely intent to recommend if/when a patient requires timely STI/STD screening. Thirty-five and eight-tenths percent were extremely likely and 32.0% likely to recommend if/when a patient requires timely intervention or after-hours care and providers are unable to treat that patient.

The other distributions among categories were disproportionately and others almost evenly spread across likelihoods of intention. For example, 24.9% of participants reported being extremely likely and 29.0% moderately likely to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs if/when a patient requires timely contraception counseling. Likewise, 28.7% felt extremely likely, 21.4% moderately likely, and 20.8% neither unlikely or likely to recommend if/when a patient requires immediate IPV and/or contraceptive coercion screening. Other apportionments include 24.6% feeling moderately likely and 24.3% likely to recommend if/when a patient does not have insurance; 25.5% feeling extremely likely and 27.0% moderately likely if/when a patient requires immediate contraceptive counseling; 22.5% felt extremely unlikely, 23.2% moderately likely, and 20.5% extremely likely to recommend if/when unable to treat a patient; and 22.0% felt extremely unlikely whereas 22.0% neither likely or unlikely, 21.1% moderately likely, and 19.4% likely to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs if/when they could not accept new patients into practice. While these responses revealed the attitudes and opinions of

providers regarding SRH care in RBCs, it also revealed what providers also thought about the quality of SRH services in RBCs (Research Question 1(c)).

Two scenarios in which respondents were across the spectrum in variance were for those 24.3% of respondents who reported being extremely unlikely and 24.0% neither likely or unlikely to recommend if/when a patient requires timely resources and intervention for FSD. Correspondingly, 32.8% report feeling extremely likely and 21.7% extremely unlikely if/when a patient requires medication, abortion, or emergency contraception immediately. This was the widest variance among Likert extremes.

The category with the most even distributions across all Likert scales included the intent to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs if/when a patient requires immediate reproductive-related cancer screening and prevention, with 22.9% extremely unlikely, 17.6% moderately unlikely, 19.9% neither unlikely or likely, 19.4% moderately likely, and, 19.9% extremely likely to recommend. Similarly, 15.2% reported feeling extremely unlikely, 15.2% moderately unlikely, 27.6% neither likely or unlikely, 23.5% moderately likely, 15.5% extremely likely to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs if/when they were aware of all services provided by RBCs. Other close distributions include 20.2% of respondents feeling extremely unlikely, 16.7% moderately unlikely, 22.3% neither likely or unlikely, 22.0% moderately likely, 17.9% extremely likely to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs if/when they were aware of provider quality of training at RBCs. Lastly, 17.3% reported feeling extremely unlikely, 15.2% moderately unlikely, 22.9% neither likely or unlikely, 24.9% moderately likely, 18.8% extremely likely to recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs if/when they were confident in the care and services provided by RBCs.

In complement, the last closed-ended question of the survey asked respondents how likely they are to recommend RBCs for several SRH services treating and managing

the care of female patients, ages 18 to 45 years. Similar to previous questions, the categories with the highest intention (extremely likely to recommend) were for pregnancy testing (48.1%). Categories with the lowest intention (extremely unlikely to recommend) were screening and counseling for FSD (23.2%) and screening for reproductive-related cancers, including breast, thyroid, and cervical cancers (21.4%). However, despite those services having the majority with ratings of unlikely, they were also closely distributed. For example, 19.4% felt moderately unlikely, 16.7% felt neither unlikely or likely, 22.9% felt moderately likely, and 19.1% felt extremely likely to recommend that RBCs screen for reproductive-related cancers, including breast, thyroid, and cervical cancers. Likewise, 17.6% felt moderately unlikely, 19.9% felt neither unlikely or likely, 19.9% felt moderately likely, and 17.6% felt extremely likely to recommend that RBCs screen and counsel female patients, ages 18 to 45 years, for FSD. In parallel, another seemingly evenly distributed category was preconception counseling, whereby 18.2% of respondents felt extremely unlikely, 18.2% felt moderately likely, 18.5% felt neither likely or unlikely, 22.0% felt moderately likely, and, 21.7% felt extremely likely to recommend RBCs for preconception counseling.

Most other categories were evenly distributed with intention to recommend, including preconception counseling, where 18.2% reported feeling extremely unlikely, 18.2% moderately unlikely, 18.5% neither unlikely or likely, 22.0% moderately likely, and 21.7% extremely likely to recommend RBCs to female patients, ages 18 to 45 years. Most were extremely likely (34.9%) and moderately likely (37.0%) to recommend RBCs in STI/STD screening and prevention, and most were extremely likely (25.2%) and moderately likely (27.9%) to recommend RBCs in IPV and/or contraceptive coercion screening and counseling.

Theory of Planned Behavior and Intentions to Recommend, Refer, or Advocate for Sexual and Reproductive Health in Retail-Based Clinics

These are interesting results. TBP assumes that behavioral beliefs and attitudes impact behavioral intentions. This theory was chosen specifically because of its strength in understanding associations between attitudes and behavioral intentions that can offer insight into understanding personal beliefs (i.e. biases, cohort norms) and their impact on decision-making. Results shown here demonstrate how various behavioral attitudes, normative beliefs, and behavioral controls impact behavioral intentions, particularly within and across constructs of SRH services. For those scenarios in which providers are least likely to recommend that female patients seek SRH care from RBCs, it might create a research opportunity to understand why, in those particular response categories, providers find the least confidence and intent to recommend. The same application might consider examining those categories with the highest intent to recommend. Moreover, perhaps demographic variables play a role in intention to recommend that females of reproductive age seek SRH services from RBCs. This calls for additional future research.

Attitude Assessment of Respondent Data

When examining overall attitude of participant responses, they are mainly positive (≥ 4 and 5). Overall, most participants found it to be important for RBCs to offer SRH services; albeit some of services more important than others. For example, most participants thought it was important for RBCs to offer STI/STD screening through medical intake, physical exams, and lab testing (average weighted score, 4.44). Participants ranked this particular SRH service more important than RBCs providing education and care for female sexual dysfunction (average weighted score, 3.33). However, when asked about how responsible RBCs are in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years, respondents felt that traditional primary care settings were more responsible for SRH delivery, with scores of 3.21 average weighted score (RBCs) versus 3.93 average weighted score (traditional

primary care settings). Likewise, providers were generally mixed in the responsibility of RBCs to offer SRH services. While the average weighted score were more positive and favorable than negative or unfavorable, they ranged from 3.21 to 3.93, indicating more of a spectrum response.

The category with the highest weighted responses included the opinion of providers that RBCs are doing a positive and worthwhile service to patients, ages 18 to 45 years, by offering several SRH services. The average weighted scores were between 4.06 and 4.62. Despite the belief that offering SRH services in RBCs would be worthwhile to female patients of reproductive age, the category with the lowest scores (most unfavorable attitude) was confidence levels of respondents for RBCs to execute these services. The average weighted scores here ranged from 2.38, in which providers did not feel confident that RBCs were equipped to provide complete and quality SRH to female patients, ages 18 to 45 years. The highest average ranking score among participants was the confidence in RBCs to administer and counsel female patients, ages 18 to 45 years about the HPV vaccine (average weighted score 3.72).

These results demonstrate that a national sample of advanced practice clinicians think it is important for RBCs to offer SRH services but are not unanimously confident in their ability to provide it. While most providers did feel it was responsible for RBCs to offer degrees of SRH, the scores were neutral rather than highly positive. These results support the test hypothesis in Research Question 1.

When examining the overall attitudes of providers and their intention to recommend or refer patients to RBCs for SRH, the test hypothesis for Research Question 2 was proven correct. Positive attitudes, degree of confidence, and awareness of RBC services directly correlated with one's intention to recommend overall SRH in RBCs and vice versa. Several subcategories were ranked with a more favorable attitude than others. For example, for services that require after-hours or timely interventions, providers were more likely to recommend that patients seek care from RBCs than for

female sexual dysfunction. This was also the subcategory that was ranked the least favorable (average weighted scores 2.91) among intent to recommend female patients seek care from RBCs. Pregnancy testing remained the highest score for the intention to recommend with the most favorable attitude among survey participants. Furthermore, examining odds ratios determined the likelihood of those with a more positive attitude to be more willing and likely to recommend select SRH services to females, ages 18 to 45 years, to seek care from RBCs. This was true for all but pregnancy testing, awareness of all services provided by RBCs, and awareness of provider quality of training at RBCs. The probability of having a positive attitude and likelihood of recommendation was not significant for those categories, indicating that providers may still recommend or not recommend based on their awareness of services and knowledge of provider quality of training. Given the collective responses for pregnancy testing in RBCs, it is safe to assume that most providers would still recommend that female patients, ages 18 to 45 years, seek pregnancy testing from RBCs despite their individual attitudes about or beliefs toward RBCs.

Demographic Identifiers and Attitudes

Demographic identifiers were also examined in response to positive responses. The largest discrepancy in responses was seen across age of provider, MDs versus non-MDs, practice setting, and frequency of interaction with patients. These categories produced the strongest variance in response, demonstrating significance across a few categories of SRH services. For example, the age of providers showed a varying response for how important it is for RBCs to offer LARC services or screen patients for reproductive-related cancers, whereas MDs showed variance from non-MDs in their response to questions regarding RBCs that offer a questionnaire about IPV and if they thought that RBCs could be a supplement to traditional primary care for SRH after-hours. Those in an academic setting (versus a non-academic setting) also showed significance in how they

answered questions about their intent to recommend RBCs for STI/STD screening and prevention and pregnancy testing. Lastly, frequency of interaction with patients also showed variance in the intention to recommend patients to RBCs if they were unable to treat a patient, if they were aware of services provided, or if a patient required immediate contraception counseling. Given the enormity and vast metrics that could be performed with all variables and demographic identifiers, there was not enough capacity, time, or resources to run all of the potential interactions and correlations. Only the most significant interactions were explored. However, this could potentially inform future research endeavors and perhaps add additional insight into any demographic identifiers that might impact attitudes, beliefs, and behavioral intention.

Perceived Benefits of Sexual and Reproductive Health Integration in Retail-Based Clinics

Open-ended responses also support the quantitative close-ended responses, as most participants (72.9%) felt that RBCs broadened access to and for SRH to patients nationwide, particularly in remote areas. A majority (54.5%) also felt RBCs offered convenience and more opportunities for SRH intervention care (50.9%). These benefits were cited several times, even within questions pertaining to barriers of SRH integration in RBCs. Overall, it seems that advanced practice clinicians support the idea of SRH integration into more alternative primary care sites in order to combat health disparities, health inequities, and expand access to all persons. However, several barriers might still prevent full support, advocacy, recommendation, and referral of this integration.

Perceived Barriers to the Integration of Sexual and Reproductive Health Integration in Retail-Based Clinics

In parallel to close-ended responses, participants felt that quality assurance (83.9%) was the biggest barrier to SRH integration and the strongest factor for recommendation. Most were concerned about the quality of the SRH services, including the training of

providers (42.0%) to manage the SRH of female patients, ages 18 to 45 years. Issues of continuity of care and follow-up (13.4%), as well as concerns with monitoring patient care from various types of RBCs (Target versus Walmart), quality of staff and utility, staff supervision, provider bias, and quality of patient education and up-to-date training (17.0%) were other notable barriers to the support for integration and recommendation. These results, coupled with summarized responses and analysis from *Scale* questions, support the test hypothesis in Research Question 3 that providers have varied degrees of perceived barriers and benefits that might impact their likelihood of recommendation, referral, or support for the integration of SRH in RBCs.

Summary of Overall Results

In review of data results and analysis, it seems that providers would need to feel more confident about the quality, clinical environment, and provider training in RBCs in order to advocate for its support and/or recommend that female patients, ages 18 to 45 years, seek SRH care from RBCs. While most all agree that the integration of more SRH services would be beneficial to all persons by increasing access to and availability of SRH services nationwide, there are still a multitude of factors that affect its complete integration (i.e., staffing, stocking of supplies (contraception), training of staff, RBC regulation, evidence-based best practices). This research highlights these factors but the extent by which these factors influence complete integration could be explored in future research.

Likewise, most RBCs are individually owned and operated, despite several recent and upcoming mergers and acquisitions. Policies to regulate the quality assurance and patient care are needed, particularly as more RBCs expand across the US. A goal of Healthy People 2020 is to “improve access to comprehensive, quality healthcare services” (Healthy People, 2017c) in order to achieve health equity and quality of life for all (Healthy People, 2017c). Should the integration of more quality and comprehensive

SRH expand into more RBCs nationwide, it could offer more access to comprehensive and quality healthcare services that impact prevention, intervention, and quality of life (Healthy People, 2017c), particularly if more advanced practice clinicians were recommending, referring, and advocating for it. This would, in turn, help to eliminate health disparities and health inequities by offering more opportunities for healthcare access.

This research demonstrates that health educators, including those with clinical, non-clinical and/or educational training, are central to the delivery of women's health care services. These findings also suggest a gap in awareness about RBCs and biases among health professionals about the integration of comprehensive sexual and reproductive health care services for females ages, 18 to 45 years. There are opportunities for more health educators to advance their understanding, knowledge and awareness about sexual and reproductive health care, barriers to care and access, and the advancement of services through complementary and alternative delivery platforms. For example, all certified health professionals are required to maintain certifications through continuing education. Perhaps more educational opportunities targeted at these topics could build awareness around these issues or training opportunities in residency programs, fellowships and intern placements could offer SRH exposure to those not immersed in the field of women's health. As we see the trends of primary care and sexual and reproductive health care merge, with more general practitioners or internists offering SRH care (i.e. contraceptive counseling, family planning counseling, HPV vaccination), and more SRH-specialists, like ob/gyns, deliver primary care to patients (i.e. monitor blood pressure, blood counts), it creates the opportunity to expand education and training in both spaces to ensure patients are receiving comprehensive care across all clinical interactions.

Sexual and reproductive health continues to shift and evolve—and what we know about sexual and reproductive health also continues to change the landscape of practice,

behaviors, attitudes, and intentions. Health professionals rely on trusted education and training to stay informed and up-to-date about available and upcoming field developments that could impact patient care and clinical practice (ACOG, 2009; Guttmacher, 2015; Sonfield et al., 2011). Continuing education opportunities help providers build knowledge, competencies, and skills while overcoming barriers and biases that impact the delivery, availability, and access to SRH care (Callegari et al., 2015; Hall et al., 2015; HRSA, 2016; Hurst & Linton, 2015).

This research demonstrates the need for more targeted intervention, education and training surrounding sexual and reproductive health care among those that staff or support alternative primary care settings a vehicle by which to provide comprehensive SRH services. Advancing the quality of care begins with the access to available health care services in order to overcome notable barriers and increase opportunities for prevention and intervention for all persons across the United States. By offering more points of care (i.e. through RBCs) and growing the number of sites that are equipped and able to offer SRH services, it creates greater opportunities for access. With more opportunities for access, the space can expand to include comprehensive services (i.e. pregnancy testing, reproductive cancer screening, LARC insertion/removal, FDS screening, etc.). In order to ensure the quality of comprehensive care, health care professionals must be skilled to offer the range of services defined by the current parameters of SRH. Through training and educational opportunities, advanced practice clinicians, primary care providers, and more health educators can be equipped to deliver patient education, counseling and/or comprehensive and quality care to patients in order to expand their access to these services.

Future Implications

This research has the potential to lead to future analysis and understanding of provider and perhaps patient attitudes of SRH in RBCs. This study shows there is a collective agreement and shared importance to offer more SRH services in alternative care settings, particularly to expand access to and availability of SRH care. This is important for the elimination of health inequities and health disparities, as they continue to perpetuate across the nation. As the new HealthyPeople topics and objectives are crafted for 2030, perhaps the inclusion of RBCs as a hub for SRH and primary care could be in consideration to help expand access to more health services for all people, or perhaps the barriers to overcome existing obstacles in this integration might be addressed.

RBCs are still a relatively new vehicle for healthcare delivery, especially for SRH. As more SRH services assimilate onto the RBC service menu, there are still several gaps in clinical practice that ought to be addressed. For example, RBCs are privately owned and offer variations of services across the nation. Perhaps policy recommendations for standards of care within and across RBCs could be helpful to ensure that all patients that are seeking and utilizing RBCs as primary care providers are not limited by the scope of services corporate offers but rather ensured comprehensive prevention and intervention services. This might also help to establish best clinical practices.

Likewise, should the integration on more SRH reach alternative primary care sites, quality assurance methods could help to ensure that all requirements for its provision are met. For example, staff and provider training or continuing education could ensure that all members of the RBC healthcare team are up-to-date on current recommendations, guidelines, and best practices for SRH services. This also might include information on billing, coding, and medical stockroom inventory to ensure that providers are properly compensated and willing or able to offer complete and comprehensive services while patients are not inhibited by provider restrictions. Stocking contraception options for

women (and men) also might help to safeguard against missed clinical opportunities to counsel, offer, and administer these options for patients and consumers nationwide. Lastly, the assurance of medical equipment for a safe, conducive, and efficient clinical environment might assist in the ability of RBCs to offer more SRH, like PAP tests or IUC insertion or removal.

Similarly, there could be an opportunity to include more SRH education and training in medical school programs or health education credentials. Since the trends are showing this convergence in primary care and specialized sexual and reproductive health care, perhaps there is an opportunity for SRH certifications to ensure skilledness, preparation and quality assurance. For example, the opportunity for nurse navigators or health educators to specialize in more SRH workforces could ensure that patients are receiving quality care and give APCs more confidence in this delivery of SRH in alternative primary care sites. Training programs and certifications through the National Commission of Health Education Specialists for Certified Health Education Specialists or masters programs in recognized academic institutions fields of public health and/or medical schools might offer a new degree, coursework or certification in SRH specialty. For example, the American Association of Sexuality Educators, Counselors and Therapists (AASECT) offers a certification and courses specializing in SRH. There could be an opportunity to expand this for those that staff and support alternative primary care sites to ensure more specialized training in SRH be infused into the delivery of services. This could also address barriers in quality assurance and provider training recognized in these research findings. For those already trained or staffing private practice(s) or public SRH sites, like Planned Parenthood and Title X centers, it could create opportunities for additional qualified and trained support in order to treat more patients. This creates a notable and recognizable field need and offers solutions to fill this gap, which ultimately advances performance in practice leading to increased access and better health outcomes for patient populations.

While this survey examines what providers think about SRH and RBCs, it might be interesting to learn about patient experiences, biases, thoughts, and feelings. This might also include patient reliance on RBC and their attitudes and behavioral intentions about SRH services in RBCs. Additional research may explore the benefits of offering SRH in RBCs for victims of human trafficking, contraceptive coercion, and intimate partner violence. Survey results demonstrate how various behavioral attitudes, normative beliefs, and behavioral controls impact behavioral intentions, particularly within and across constructs of SRH services. Future research might explore the scenarios by which providers are least likely to recommend that female patients seek SRH care from RBCs to understand why, in those particular response categories, providers find the least confidence and intent to recommend. The same application might consider examining those categories with the highest intent to recommend and perhaps how different demographic identifiers influence these categories.

Similarly, this same questionnaire might also be fielded solely to those providers and health care support teams that primarily staff alternative primary care satellite spaces and retail-based clinics across the country to perhaps offer another perspective on the delivery of SRH in this model of health care delivery. There is also an opportunity to increase the response rate by expanding this survey to organizations and memberships outside of ARHP's database. There are several federal agencies, non-governmental organizations (NGOs), non-profits (specialty and general), academic institutions, industry companies and coalitions that might consider forming a consortium of sorts to partner and distribute this survey to both increase response rate and broaden the reach of the target population to gain additional insight. Organizations like, the Nurse Practitioners in Women's Health (NPWH), American Association of Nurse Practitioners (AANP), or the American College of Obstetricians (ACOG) could collaborate on the distribution of this survey to their members and followers. By doing so, it can empower more health professionals and health educators to get involved in the advocacy and support for more

accessible health care and address this crisis in America. Health professionals and health educators present with opportunities to social market this message, join organizations or volunteer on boards of organizations like, the American Sexual Health Association (ASHA) or HealthyWomen, that have a large following both among consumers and professionals. By empowering health professionals to not only learn about this topic but to get involved and apply the information in a way that can empower others, creates more opportunities for action, message diffusion and change.

On another note, this survey instrument was best designed and adapted from validated survey tools, including the support of evidence-based science and extensive research. While Cronbach's alpha was utilized to establish internal validity, a recommendation to conduct confirmatory and exploratory factor analysis to establish psychometric properties is suggested for future analysis. This survey instrument may also serve as a mechanism for future research in the additional, deeper analysis of categorical correlation across SRH themes, all demographic identifiers, and how the elements correlate and intersect with one another. Given the enormity and vast metrics that could be performed with all variables and demographic identifiers, there was not enough capacity, time, or resources to run all of the possible interactions and correlations. Only the most significant interactions were explored. However, future research could investigate all possible interactions and SRH categorical comparisons that might reveal information that could impact attitudes, beliefs, and behavioral intention.

Delimitations

This study sought to capture attitudes of providers toward the integration of SRH in alternative primary care settings. Through the understanding of attitudes of providers, it may help dictate behavioral intention and identify barriers to the expansion and implementation of more SRH opportunities that infringe upon patient access and

availability to these critical services. Moreover, if providers are more inclined to recommend or refer patients to these SRH points of care, they may also be more likely to work collaboratively with the health professionals in these settings. This could bridge the gaps in communication and healthcare while offering patients more options and opportunities for immediate access, prevention, and intervention.

This study has not chosen to focus solely on those providers practicing at RBCs in the hope of understanding any biases outside of that immediate practice setting that may be inhibiting RBC utilization. This study has also chosen to focus on practicing clinicians and not those that are retired or those that do not interact with patients in order to get a current and accurate landscape of SRH and RBCs today, including if and how health professionals may be influenced by their degree of attitudes with a patient to seeking or needing SRH care at RBCs.

ARHP is an informed and progressive organization that educates its members with unbiased, relevant, and comprehensive information. The reasoning to solicit ARHP membership in this survey rather than another constituent organization is due to its diverse and eclectic membership composition. ARHP, compared to the American Congress of Obstetricians and Gynecologists (ACOG), Planned Parenthood Federation of America, American Public Health Association (APHA), or the American Academy of Family Physicians (AAFP), already includes members from these diverse organizations without discrimination to a particular area of focus, interest, or practice. ARHP is one of the few membership organizations that is all-inclusive, all-encompassing, and interdisciplinary, attracting a broad spectrum of advanced healthcare professionals. Most members may support and value sexual and reproductive health but are also interested in other concurrent health-related issues, like chronic conditions. ARHP's portfolio of programmatic work and continuing education includes a vast array of programs unrelated to SRH and a myriad of health-related topics that are not limited to only SRH. Surveying

this particular membership base ensures a diverse group of individual responses for a more accurate assessment and representation of data.

Those members that are already SRH-versed and both supportive and informed about SRH in alternative and diverse primary care settings may have knowledge gaps and attitude biases that create conscious and subconscious barriers to integration.

Recognizing those inconsistencies in attitudes and behavioral intentions, even among the most advanced professionals may help to locate barriers and predict provider behavior that could impact cracks in SRH integration and expansion requiring attention and intervention through policy, public awareness, continuing education, practice recommendations, clinical regulations, advocacy, and de-stigmatization.

Limitations

ARHP is a progressive organization that attracts diverse members across specialties and geographic locations. It could be argued that many members may already subscribe to the idea of integrating SRH in primary care and/or already do integrate comprehensive SRH in their clinical settings, since many of ARHP's continuing medical education activities promote this idea in some way. This may or may not impact findings about barriers to SRH in primary care settings; however, no current ARHP programs have targeted or advocated for RBCs.

There were several limitations within the data. To determine how demographic variables interacted with attitude and, in turn, behavioral predictions and intentions, ideally a regression analysis of all variables would be run. However, the demographic variables were far too vast with the different categories and sub-categories to run a detailed regression with all variables included. Categories, like age, could not be run as a continuous, linear variable because they require individual categories. This was the same for frequency of interactions and academic settings. Data showed more potential

interactions between demographic identifiers and attitude scales. Due to limited time, capacity, and capability, all interactions were not able to be explored. This could potentially inform future research or meta-analysis of variables.

The parameters and definitions of SRH continue to shift and change. The operational definitions utilized in this study, while chosen from and rooted in evidence-based science and supportive literature, are also limited in nature, as many other aspects not explored affect and include SRH. For example, the role of chronic conditions, chronic pain, acute prenatal care, or questions with overlapping comorbidities were not explored.

Study Conclusions

Study conclusions establish the shared belief among advanced practice clinicians that it is important and responsible to offer quality and comprehensive SRH in RBCs for the expansion of access to and availability of prevention and intervention services. However, a majority of advanced practice clinicians are not entirely confident in the ability and capacity of RBCs to offer comprehensive and quality SRH services. Quality assurance, including provider training and knowledge of diverse SRH issues, was also a limiting factor in one's confidence to recommend, refer, or advocate for SRH integration in RBCs. Degree of knowledge and awareness of RBCs, including scope of services offered, was also a predictor of behavioral intention to recommend or refer patients to RBCs for SRH care. Advanced practice clinicians demonstrated varying degrees of confidence, attitudes, perceived benefits, and perceived barriers toward particular SRH services that might be offered in RBCs, which directly correlated to intent to recommend, refer, or advocate for services. As such, most also agree that traditional primary care settings are still best for the comprehensive delivery of quality SRH services. However, despite variations in attitudes and opinions, almost all participants thought that RBCs are

an important and useful resource for patients seeking immediate preventive or intervention care.

Disclosures

Alayna Effron, the principal investigator, is the Associate Director of Development at the Association of Reproductive Health Professionals and has access to a membership listserv that maintains email addresses for the 15,000 healthcare practitioners and providers. While the PI may interact with members of the organization from time to time, data collected for study purposes were anonymous, and the PI will be unable to identify individuals based on survey responses. All professional and demographic identifiers were categorized, coded, and analyzed during the data collection process.

Summary

This chapter presented a discussion of the study results, future implications, delimitations, limitations, and study conclusions.

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Appendix A

Samples of Retail-Based Clinics' Scope of Services

*Sources: Walgreens Healthcare-clinic, CVS Minute Clinic Services, RediClinic

Clinical Services, Walmart Care Clinics, and the Little Clinic (at Kroger and Dillions)

	Walgreens: HealthCare Clinic*	CVS/Target: Minute Clinic****	Rite Aid: RediClinic
Prevention and Wellness:			
Vaccination	Chickenpox series (Varicella) ages 7+; Flu (Influenza); Hepatitis A series ages 7+; Hepatitis B series ages 7+; Measles, Mumps, Rubella(MMR) ages 7+; Meningitis (Meningococcal) ages 11-55; Meningitis B series ages 10-25; Pneumonia (Pneumococcal) ages 65+, ages 19-64 who smoke or have asthma, ages 7+ with long-term health conditions; Shingles (Herpes Zoster) ages 50+; Tetanus, Diphtheria, Pertussis/Whooping Cough (Tdap) ages 10+; Tetanus & Diphtheria (Td) ages 7; Inactivated Typhoid; Inactivated Polio; Japanese Encephalitis; Rabies; Yellow Fever; **Human Papillomavirus series (HPV) ages 9-26	DTaP (diphtheria, tetanus, pertussis); Flu; Hepatitis A (adult & child); Hepatitis B (adult & child); HPV (human papillomavirus); IPV (polio) Meningitis; MMR (measles, mumps, rubella); Pneumonia; Td (tetanus, diphtheria); Tdap (tetanus, diphtheria, pertussis); Typhoid.	DTaP (diphtheria, tetanus, pertussis); Flu; Hepatitis A (adult & child); Hepatitis B (adult & child); HPV (human papillomavirus); Japanese Encephalitis (child & adult); MMR (child & adult); Pneumococcal; Poliovirus; Tdap; Tetanus & Diphtheria; TB; Typhoid (oral & vaccine); Varicella; Yellow Fever; Zoster (Shingles); HPV
Injections		Birth control; Vitamin B12	
Physicals and Wellness Visits	Sports, school and camp physicals; Administrative physicals (i.e. premarital physicals, child care provider physicals); Smoking cessation consultation	General medical exams (excludes annual physicals); Camp physicals; DOT physicals; Sports physicals; Contraceptive care; Ear wax removal; Epinephrine injection pen refills; Malaria; Motion sickness prevention; One-time medication renewal; Pregnancy tests; Start to Stop® smoking cessation program; TB testing; Traveler's diarrhea prevention & care; Weight loss program;	Height and weight; Blood pressure; Vision; Eyes, ears, nose, and throat; Neck and chest; Heart and abdomen; Lymph nodes; Skin and muscles; Joints and spine; smoking cessation

<p>Health screenings & Testing</p>	<p>Blood pressure screening & counseling ages 18+; Cholesterol screening & counseling : ages 18+; Diabetes screening & counseling: ages 18+ (no gestational); ***Health screening with health risk assessment ages 18+; PPD/Tuberculosis testing</p>	<p>Basic health screenings; Cholesterol screenings; Comprehensive health screenings; Diabetes screenings (glucose); Hepatitis C screening tests(New York and Hawaii only)</p>	<p>Lipid Profile; Glucose; Kidney Function; Liver Function; Electrolytes; Complete Blood Count (CBC);Thyroid Stimulating Hormone (TSH); Blood Pressure and Body; Mass Index; Prostate Specific Antigen (PSA) testing; Amylase; Comprehensive Metabolic Panel (CMP); C-Reactive Protein (CRP); Folic Acid; Hemoglobin A1C; Homocysteine; Lipase; Lipid Panel; Sedimentation Rate; Testosterone Free and Total; Thyroid Panel; T4 Free; Uric Acid; VAP Cholesterol Test; Vitamin B12; Vitamin D; Microalbumin Random Urine; TB Skin Test; Urinalysis; Urine Culture/Colony Count; Would Culture; TITERs testing (Hep A, B, MMR, Varicella)</p>
<p>Treatments:</p>			
<p>Illness, Aches and Pains</p>	<p>Allergies (seasonal); Bladder and urinary tract infections females ages 2+; Bronchitis; Cold; Cough Diarrhea, nausea & vomiting; Ear ache & ear infections; Fever; Flu; Headaches & migraines Joint pain; Laryngitis; Minor back pain; Mononucleosis (Mono); Pink eye and styes; Sinus infections; Sore throat & strep throat; Swimmer's ear; Upper respiratory infections</p>	<p>Allergy symptoms; Bronchitis & coughs; Earaches & infections; Flu-like symptoms; Gout; Indigestion & Heartburn; Mononucleosis (mono); Mouth and Oral conditions; Mouth and Oral pain; Nausea, Vomiting & Diarrhea; Pink eye & styes; Sinus infections & congestion; Sore & strep throats; Upper respiratory infections; Urinary tract & bladder infections; Zika</p>	<p>Strep and sore throats; Cold, cough, and flu; Sinus infections; Allergies; Bronchitis; Earaches and infections; Eye irritation; Pink eye; Styes; Vomiting and diarrhea; Nausea; Urinary tract infection; Bladder infection</p>
<p>Minor Injuries</p>	<p>Burns (minor); Corneal (eye) abrasions; Splinter removal; Sprains & strains</p>	<p>Blisters; Bug bites & stings; Tick bites Minor burns; Minor cuts, blisters & wounds; Splinter removal; Sprains, strains & joint pain; Suture & staple removal</p>	

Skin Conditions	Acne; Eczema; Head lice; Hives; Impetigo; Mouth & cold sores; Poison ivy, poison oak & poison sumac; Rashes; Scabies; Skin infections & irritations; Skin tag removal; Tick/insect bites & stings	Acne; Athlete's foot Chicken pox; Cold, canker & mouth sores; Dermatitis, rashes & skin irritations; Hair Loss; Heat rash; Impetigo; Lice; Poison ivy & poison oak; Minor psoriasis; Ringworm; Rosacea; Scabies; Seborrheic dermatitis; Shingles; Sunburn; Swimmer's itch; Wart evaluation	Warts; Sunburns Poison ivy; Lice or insect bites; Acne; Minor skin rashes and infections
Monitoring and Management			
Ongoing Health Conditions	Acid reflux & acid indigestion; Asthma; Chronic bronchitis; Diabetes; Emphysema; High blood pressure; High cholesterol; Minor depression; Osteoarthritis; Osteoporosis; Thyroid disorders	A1c checks; Diabetes monitoring; High blood pressure monitoring; High cholesterol monitoring	
Medications and Treatments	Breathing treatments with nebulizer; EpiPen refills; Medication renewal; Travel medications		
Travel			
Consults and Vaccination	Travel medications; Travel vaccines: Inactivated Typhoid; Inactivated Polio; Japanese Encephalitis; Rabies; Yellow Fever	Malaria prevention medicines; Pre-Travel Consultation; Motion sickness; Traveler's Diarrhea Prevention & Care; Typhoid vaccine; Zika	An immunization certificate; Prescriptions; A report containing travel tips and destination-specific information; A post-travel review Vaccines
Women's & Men's Health Services (SRH)			
	HPV vaccination; premarital physicals; bladder and urinary tract infections	Birth control care; Birth control injection; HPV vaccines; Pregnancy testing; Urinary tract & bladder infections; Yeast infection; pregnancy testing	STI testing (gonorrhea & chlamydia testing); Urinary tract infection; Bladder infection; A Prostate Specific Antigen (PSA) testing; HPV vaccine; Folic Acid testing; Testosterone Free and Total; Thyroid Panel; T4 Free; Vitamin B12 testing; Vitamin D testing; Microalbumin Random Urine; Urinalysis; Urine Culture/Colony Count;

Other			
Cosmetic		Eyelash lengthening consultation	Latisse Consultation®; Lustra Constulation®; Vaniqua Constulation®

*Services vary by state and location

Among the entities features, Walgreens included links with services to education about services.

**For example, with the HPV vaccination, Walgreens includes a link imbedded within the HPV vaccination offerings to include an explanation of what HPV is, the benefits of HPV vaccination, risks associated with HPV, the recommendations and types of HPV vaccinations currently available, inclusion/exclusion vaccination criteria and possible associated side effects of the vaccine. Here is an example of the language found on the Walgreens' website:

What is HPV? Genital human papillomavirus (HPV) is the most common sexually transmitted virus in the United States. More than half of sexually active men and women are infected with HPV at some time in their lives. Most HPV infections don't cause any symptoms, and go away on their own. But HPV can cause cervical cancer in women. Cervical cancer is the 2nd leading cause of cancer deaths among women worldwide. In the United States, about 12,000 women get cervical cancer every year. HPV is also associated with several less common cancers, such as vaginal and vulvar cancers in women and other types of cancer in both men and women. It can also cause genital warts and warts in the throat. There is no cure for HPV infection, but some of the problems it causes can be treated.

HPV vaccine: Why get vaccinated? The HPV vaccine is available for the prevention of the diseases caused by the human papillomavirus. The vaccine can be given to both females and males to prevent HPV infection. This vaccine can prevent most cases of cervical cancer in females, if it is given before exposure to the virus. In addition, it can prevent vaginal and vulvar cancer in females, and genital warts and anal cancer in both males and females. Protection from HPV vaccine is expected to be long-lasting. Vaccination is not a substitute for cervical cancer screening however, and women should still get regular Pap tests.

What is the HPV vaccine? There are currently three HPV vaccines: GARDASIL, GARDASIL-9, and CERVARIX. Each vaccine offers coverage against a number of HPV types which are associated with various cancers and infections.

GARDASIL: Recommended for girls and boys; Types 6, 11, 16, 18; Indicated for the prevention of cervical, vulvar, vaginal and anal cancer and genital warts

GARDASIL-9: Recommended for girls and boys; Types 6, 11, 16, 18, 31, 33, 45, 52, and 58; Indicated for the prevention of cervical, vulvar, vaginal, and anal cancer and genital warts

CERVARIX: Recommended only for girls; Types 16 and 18; Indicated for the prevention of cervical cancers

Each vaccine is a three-dose series administered over six months. The second and third doses should be given at two and six months (respectively) after the first dose. The HPV vaccine may be given at the same time as other vaccines.

Who should get the HPV vaccine? All kids who are 11 or 12 years old should get the three dose series of HPV vaccine. Teen boys and girls who did not get the vaccine when they were younger should get it now. Young women can get HPV vaccine through age 26, and young men can get vaccinated through age 21. The vaccine is also recommended for gay and bisexual young men (or any young man who has sex with men) and also for young men with compromised immune systems (including HIV) through age 26, if they did not get HPV vaccine when they were younger. For HPV vaccines to be effective, they should be given prior to exposure to HPV. There is no reason to wait until a teen is having sex to offer HPV vaccination to them. Preteens should receive all three doses of the HPV vaccine series long before they begin any type of sexual activity and are exposed to HPV. Also HPV vaccine produces a higher immune response in preteens than it does in older teens and young women.

Who should not get the HPV vaccine? The vaccine is not recommended for anyone who:

- Has ever had a life-threatening allergic reaction to any component of HPV vaccine, or to a previous dose of HPV vaccine. Tell your doctor if the person getting vaccinated has any severe allergies, including an allergy to yeast.
- Is moderately or severely ill. People who are mildly ill when a dose of HPV vaccine is planned can still be vaccinated.
- Is currently pregnant or planning pregnancy during the course of treatment

What are the side effects of the HPV vaccine? Mild-to-moderate problems:

Soreness, redness, or swelling where the shot was given; Fever and itching at the injection site

Severe problems (rare) may include serious allergic reactions, with symptoms including: Difficulty breathing; Wheezing; Hives; Pale skin

The HPV vaccine is available at: Healthcare Clinic for patients aged 11-

26. Walgreens Pharmacy. Ages vary by state (Walgreens, 2016).

*** “A health screening with health risk assessment is a service offered for men and women at all Healthcare Clinic locations to provide patients with the information they need to stay healthy. We will test your cholesterol levels, assess your diabetes risk by taking your blood glucose, screen your blood pressure and gauge your body mass. Then, our board-certified Family Nurse Practitioners and, in select markets, Physician Assistants, will sit down with you to evaluate your results and discuss ways you can improve your lifestyle for better health. For most accurate results, it is recommended that you fast for 9-12 hours before testing” (Walgreens).

**** Healthcare services provided by MinuteClinic, L.L.C. or one of its affiliates or subsidiaries will vary across states. MinuteClinic® walk-in medical clinics are staffed by nurse practitioners and physician assistants who specialize in family health. CVS MinuteClinic L.L.C acquired Target Clinic in 47 states, and the CVS/Pharmacy will be included in all new Target stores that offer pharmacy services. Seventy-nine Target clinic locations will be rebranded as MinuteClinic, and CVS Health will open up to 20 new clinics in Target stores by 2018. CVS has more than 9,500 retail pharmacies, more than 1,100 walk-in medical clinics, and more than 70 million plan members, serving more

than one million patients per year, and expanding specialty pharmacy

services: <https://www.cvshealth.com>. Target Corporation serves guests at 1,805 stores.

*****Walmart: Flu and vaccinations only, although which vaccination are not listed and vary by state

*****Kroger, LittleClinic: All services vary by state.

Appendix B

Participant Demographic Survey Assessment Tool

This study will utilize and examine participant demographic variables.

For provider gender, please select one:

- _____ Male
- _____ Female
- _____ Transgender Male
- _____ Transgender Female
- _____ Transgender Person
- _____ Bigender
- _____ Gender Questioning
- _____ Other

How old are you, please select one:

- _____ 18 to 24 years
- _____ 25 to 34 years
- _____ 35 to 44 years
- _____ 45 to 54 years
- _____ 55 to 64 years
- _____ 65 and older

Residence: Select one (drop down menu with all 50 states)

Location of Practice setting: Select one

- _____ Northeast
- _____ Southeast
- _____ Northwest
- _____ Southwest
- _____ Midwest

Clinical Degree: Select all that apply:

- _____ Medical Doctor (MD)
- _____ Doctor of Osteopathic Medicine (DO)
- _____ Nurse Practitioner (NP)
- _____ Physician Assistant (PA)
- _____ Registered Nurse (RN)
- _____ Certified Nurse Midwife (CNM)
- _____ Health Educator
- _____ Fellow/Resident
- _____ Other

Practice Specialty: Select all that apply:

- _____ General Practice
- _____ Internal Medicine
- _____ Family Practice
- _____ Obstetrics/Gynecology
- _____ Other

Clinical Practice Setting: Select all that apply:

- _____ Private Practice – individual practice
- _____ Private Practice – group practice
- _____ Federally Qualified Health Center
- _____ Hospital – non-teaching
- _____ Hospital - teaching
- _____ Academia
- _____ Community Health Center
- _____ Other

Professional Status: Select one:

- _____ Currently seeing patients/practicing
- _____ Not currently seeing patients/practicing
- _____ Resident/Fellow
- _____ Retired
- _____ Other

For the frequency of interaction with female patients of reproductive age (ages 18-45), please select one of the following:

- _____ Never (0 patients per month)
- _____ Almost never (10 patients or less per month)
- _____ Sometimes (11-20 patients per week)
- _____ Often (20-30 patients per week)
- _____ Always (30 or more patients per week)

How many hours a week do you spend providing SRH care to females of reproductive age (ages 18-45), please select one of the following:

- _____ Never (0 hours per week)
- _____ Almost never (5-9 hours per week)
- _____ Sometimes (10-20 hours per week)
- _____ Often (21-29 hours per week)
- _____ Always (30 or more hours per week)

Years in Practice: Select one:

- _____ 0-1 years
- _____ 1-5 years
- _____ 5-10 years
- _____ 10-15 years
- _____ 15-20 years
- _____ 20+ years

Frequency of continuing education: Select one:

- _____ 1 credit per month
- _____ 1 credit per year
- _____ More than one credit per month
- _____ More than one credit per year
- _____ Does not apply

What is your level of knowledge and awareness about retail-based clinics and the scope of services they offer? Select one:

- _____ Very knowledgeable
- _____ Somewhat knowledgeable
- _____ Neutral
- _____ Not very knowledgeable
- _____ Do not at all knowledgeable

In addition to an assessment of the demographic variables, the electronic survey aims to capture attitudes and behavioral intentions related to female sexual and reproductive healthcare in retail-based clinics through a participant self-reporting questionnaire.

Attitudes and behavioral intention will be captured on the Attitudes towards Retail Based Clinics Scale.

Appendix C

Participant Attitude Toward Retail-Based Clinics Scale Assessment Tool

The Attitudes Toward Retail-Based Clinics Scale (RBCs) for providers will consist of 7 categories that will measure attitudes and behavioral intentions about/towards RBCs using constructs from the Theory of Planned Behavior. The operational use of sexual and reproductive health (SRH), as it relates to services includes the frequency of the following for patients 18 through 45 years of age:

Service	Measure
Pregnancy testing	Urine or blood test
Preconception intake and counseling	Medical history intake for risk factors affecting preconception (i.e. chronic conditions); identification and discussion of risk assessment of current health behaviors; Discussion about patient intentions/fears/concerns regarding the preconception and conception period; Medication intake (i.e. contraindications for pregnancy))
Family planning intentions	Pregnancy intentions; Spacing between intended pregnancies; Discussion of options for unintended pregnancy (i.e. abortion, medication abortion, Plan B); (also congruent with contraceptive counseling)
Contraceptive counseling	Assessment of current contraceptive methods, including intentions, adherence and utilization; Dialogue about individualized satisfaction, drawbacks, barriers, and lifestyle choices for contraceptive method selection
Contraceptive administration	Prescription, intrauterine device or implant insertion or removal, condom distribution

STI/STD screening	Physical exams, blood work and lab testing
STI/STD counseling and intake	STI history intake; Sexual risk behavior intake; Discussion of STI prevention and intervention opportunities; How to communicate with your partner about your STI status; Discussion of prevention methods and strategies
Reproductive-related cancer screening and prevention	Breast and/or thyroid physical exams; Cervical cancer screening (i.e. Pap Smear, HPV testing, co-testing); HPV vaccine administration; HPV vaccination counseling
Female Sexual Dysfunction (FSD) screening and intervention	Intake, discussion, physical exam, provision of resources and references, recommendation of therapeutic and lifestyle interventions
Intimate Partner Violence (IPV) or contraceptive coercion screening and discussion	Intake, physical exam, provision of resources and references

The operational definition of retail based clinics is: an alternative primary care setting environment that has not historically provided comprehensive care, medical interventions and preventative services to community members, ages 18 to 45 years. Retail based clinics (RBCs) are an example of an alternative primary care setting, which includes retail spaces that offer comprehensive care, medical interventions and preventative services to community members, ages 18 to 45. Examples of RBCs include clinics at retailers like, Kroger, CVS, Target, RiteAid, Walgreens, or Walmart.

Please answer the questions by selecting one response, with the numbers 1 corresponding to *not important at all*; 2 corresponding to *slightly important*; 3 corresponding to *somewhat important*; 4 corresponding to *important*, and the number 5 corresponding to *extremely important* for the following statements:

How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?

a Deliver comprehensive SRH care to all female patients of reproductive age	Not important at all 1 2 3 4 5 Extremely important
B Offer pregnancy testing by way of urine or blood tests?	Not important at all 1 2 3 4 5 Extremely important
C Conduct a preconception intake and counseling for female patients considering family planning	Not important at all 1 2 3 4 5 Extremely important
D Collect family planning intentions	Not important at all 1 2 3 4 5 Extremely important
E Discuss family planning options with women (i.e. abortion, emergency contraception)	Not important at all 1 2 3 4 5 Extremely important
F Provide contraceptive counseling	Not important at all 1 2 3 4 5 Extremely important
G Administer contraceptive options	Not important at all 1 2 3 4 5 Extremely important
H Offer long acting reversible contraception (LARC), including the insertion and removal of intrauterine devices (IUDs) and implants	Not important at all 1 2 3 4 5 Extremely important
I Offer STI/STD screening through physical exams, blood work and lab testing	Not important at all 1 2 3 4 5 Extremely important
J Take a sexual risk behavior intake at all clinical visits	Not important at all 1 2 3 4 5 Extremely important
K Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening	Not important at all 1 2 3 4 5 Extremely important
L Provide HPV vaccination administration with counseling	Not important at all 1 2 3 4 5 Extremely important
M Provide education and care for female sexual dysfunction	Not important at all 1 2 3 4 5 Extremely important
N Include a questionnaire about intimate partner violence (IPV) and contraceptive coercion	Not important at all 1 2 3 4 5 Extremely important
O Provide resources for IPV and contraceptive coercion	Not important at all 1 2 3 4 5 Extremely important

P Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	Not important at all 1 2 3 4 5 Extremely important
Q Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	Not important at all 1 2 3 4 5 Extremely important
R Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	Not important at all 1 2 3 4 5 Extremely important
S Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	Not important at all 1 2 3 4 5 Extremely important
T Supplement SRH in RBCs with the traditional primary care visit	Not important at all 1 2 3 4 5 Extremely important

Please answer the questions by selecting one response, with the numbers 1 corresponding to *not responsible at all*; 2 corresponding to *slightly responsible*; 3 corresponding to *somewhat responsible*; 4 corresponding responsible, and the number 5 corresponding to *extremely responsible* for the following statements:

How responsible are:

a RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	Not responsible at all 1 2 3 4 5 Extremely responsible
B Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	Not responsible at all 1 2 3 4 5 Extremely responsible
C Alternative primary care settings that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	Not responsible at all 1 2 3 4 5 Extremely responsible
D Alternative primary care settings that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	Not responsible at all 1 2 3 4 5 Extremely responsible
E Alternative primary care settings that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	Not responsible at all 1 2 3 4 5 Extremely responsible

Please answer the questions by selecting one response, with the numbers 1 corresponding to *strongly disagree*; 2 corresponding to *disagree*; 3 corresponding to *neutral*; 4

corresponding *agree*; and, the number 5 corresponding to *strongly agree* for the following statements.

RBCs that are providing the following services to female patients, ages 18 to 45 years, are doing something positive for the patient and providing a worthwhile service:

A Offer contraceptive counseling	Strongly disagree 1 2 3 4 5 Strongly agree
B Administer contraception, including the insertion of intrauterine devices and implants	Strongly disagree 1 2 3 4 5 Strongly agree
C Dispense emergency contraception	Strongly disagree 1 2 3 4 5 Strongly agree
D Offer pregnancy testing	Strongly disagree 1 2 3 4 5 Strongly agree
E Administer preconception intakes and family planning counseling	Strongly disagree 1 2 3 4 5 Strongly agree
F Conduct STI/STD screening through physical exams, medical intakes, and lab testing	Strongly disagree 1 2 3 4 5 Strongly agree
G Provide STI/STD counseling	Strongly disagree 1 2 3 4 5 Strongly agree
H Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	Strongly disagree 1 2 3 4 5 Strongly agree
I Administer the HPV vaccine in tandem with HPV counseling for prevention	Strongly disagree 1 2 3 4 5 Strongly agree
J Provide IPV and contraceptive coercion screening and resources	Strongly disagree 1 2 3 4 5 Strongly agree
K Provide FSD screening and resources	Strongly disagree 1 2 3 4 5 Strongly agree

Please answer the questions by selecting one response, with the numbers 1 corresponding to *not confident at all*; 2 corresponding to *slightly confident*; 3 corresponding to *somewhat confident*; 4 corresponding to *confident*; and, the number 5 corresponding to *extremely confident* important for the following statements:

How confident are you that RBCs:

A Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	Not confident at all 1 2 3 4 5 Extremely Confident
B Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	Not confident at all 1 2 3 4 5 Extremely Confident
C Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	Not confident at all 1 2 3 4 5 Extremely Confident
D Provide pregnancy testing to female patients, ages 18 to 45 years?	Not confident at all 1 2 3 4 5 Extremely Confident
E Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	Not confident at all 1 2 3 4 5 Extremely Confident
F Offer contraceptive counseling to female patients, ages 18 to 45 years?	Not confident at all 1 2 3 4 5 Extremely Confident
G Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	Not confident at all 1 2 3 4 5 Extremely Confident
H Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	Not confident at all 1 2 3 4 5 Extremely Confident
I Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	Not confident at all 1 2 3 4 5 Extremely Confident
J Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	Not confident at all 1 2 3 4 5 Extremely Confident
K Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	Not confident at all 1 2 3 4 5 Extremely Confident

L Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	Not confident at all 1 2 3 4 5 Extremely Confident
M Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	Not confident at all 1 2 3 4 5 Extremely Confident

Please answer the questions by selecting one response, with the numbers 1 corresponding to *extremely unlikely*; 2 corresponding to *moderately unlikely*; 3 corresponding to *neither unlikely nor likely*; 4 corresponding to *moderately likely*; and, the number 5 corresponding to *extremely likely* for the following statements:

I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:

A A patient does not have insurance	Extremely unlikely 1 2 3 4 5 Extremely Likely
B I cannot accept new patients in my practice	Extremely unlikely 1 2 3 4 5 Extremely Likely
C I am unable to treat a patient	Extremely unlikely 1 2 3 4 5 Extremely Likely
D A patient requires timely intervention or after-hours care and I am unable to treat that patient	Extremely unlikely 1 2 3 4 5 Extremely Likely
E A patient requires immediate pregnancy testing	Extremely unlikely 1 2 3 4 5 Extremely Likely
F A patient requires preconception counseling after hours	Extremely unlikely 1 2 3 4 5 Extremely Likely
G A patient requires immediate contraceptive counseling	Extremely unlikely 1 2 3 4 5 Extremely Likely
H A patient requires medication abortion or emergency contraception immediately	Extremely unlikely 1 2 3 4 5 Extremely Likely
I A patient requires timely STI/STD screening	Extremely unlikely 1 2 3 4 5 Extremely Likely
J A patient requires immediate IPV and/or contraceptive coercion screening	Extremely unlikely 1 2 3 4 5 Extremely Likely
K A patient requires immediate reproductive-related cancer screening and prevention	Extremely unlikely 1 2 3 4 5 Extremely Likely

L A patient requires timely contraceptive counseling	Extremely unlikely 1 2 3 4 5 Extremely Likely
M A patient requires timely resources and intervention for FSD	Extremely unlikely 1 2 3 4 5 Extremely Likely
N I am aware of all services provided by RBCs	Extremely unlikely 1 2 3 4 5 Extremely Likely
O I am aware of provider quality of training at RBCs	Extremely unlikely 1 2 3 4 5 Extremely Likely
P I am confident in the care and services provided by RBCs	Extremely unlikely 1 2 3 4 5 Extremely Likely

Please answer the questions by selecting one response, with the numbers 1 corresponding to *extremely unlikely*; 2 corresponding to *moderately unlikely*; 3 corresponding to *neither unlikely nor likely*; 4 corresponding to *moderately likely*; and, the number 5 corresponding to *extremely likely* for the following statements:

I would recommend RBCs for the following services, targeted towards female patients, ages 18 to 45 years:

a Pregnancy testing	Extremely unlikely 1 2 3 4 5 Extremely Likely
B Preconception counseling	Extremely unlikely 1 2 3 4 5 Extremely Likely
C Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	Extremely unlikely 1 2 3 4 5 Extremely Likely
D Contraceptive counseling	Extremely unlikely 1 2 3 4 5 Extremely Likely
E STI/STD screening and prevention	Extremely unlikely 1 2 3 4 5 Extremely Likely
F IPV and/or contraceptive coercion screening and counseling	Extremely unlikely 1 2 3 4 5 Extremely Likely
G Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	Extremely unlikely 1 2 3 4 5 Extremely Likely
H Screening and counseling for FSD	Extremely unlikely 1 2 3 4 5 Extremely Likely

The final two questions of the electronic survey will be open-ended response questions.

Please use the space below to answer in your own words:

1. In your opinion, what are the potential benefits of integrating more quality and comprehensive sexual and reproductive healthcare into alternative primary care settings,

like retail based clinics that would encourage you to recommend these services to patients?

A large, empty rectangular box with a thin black border, intended for a written response to the question above.

2. In your opinion, what are the perceived barriers of integrating more quality and comprehensive sexual and reproductive healthcare into alternative primary care settings, like retail based clinics that would prevent you from recommending these services to patients?

A large, empty rectangular box with a thin black border, intended for a written response to the question above.

Appendix D

Informed Consent

Teachers College, Columbia University
525 West 120th Street
New York NY 10027
212 678 3000

Protocol Title: Expanding Access to Sexual and Reproductive Healthcare in Alternative Primary Care Settings

Principal Investigator: Alayna Effron, M.S. Teachers College with the Association of Reproductive Health Professionals
202-379-5462, arf2133@columbia.edu

INTRODUCTION

You are being invited to participate in this research study called “Expanding Access to Sexual and Reproductive Healthcare in Alternative Primary Care Settings.” You may qualify to take part in this research study because you are a member and/or associate of the Association of Reproductive Health Professionals (ARHP); have opted-in to email communication from ARHP; you are 18 years old or older; you are a U.S.-based, healthcare professional interested in sexual and reproductive health; educate and/or manage the care of patients of reproductive ages, 18 to 45 years; and are either an MD, DO, NP, PA, RN, CNM, Health Educator, or Resident/Fellow.

This study aims to capture a national sample and has been sent to ARHP members that have opted-in for email communication. Approximately 15,000 people will be emailed and asked to participate in this study and it will take approximately 20 to 25 minutes of your time to complete.

WHY IS THIS STUDY BEING DONE?

This study is being done to capture the attitudes and intentions of participants towards/about the integration of sexual and reproductive health in alternative primary care settings, (e.g., retail based clinics). This study will ask specific questions regarding the sexual and reproductive healthcare of female patients, ages 18 to 45 years, in retail based clinics.

WHAT WILL I BE ASKED TO DO IF I AGREE TO TAKE PART IN THIS STUDY?

If you decide to participate, you will be asked to complete an electronic questionnaire that includes a series of closed-ended questions and two open-ended questions. This survey is smartphone and tablet compatible and you are welcome to take this survey on any device that is convenient for you. This questionnaire will take approximately 20 to 25 minutes to complete and can be electronically submitted after completion. In order

to successfully complete the survey, please complete the survey in one sitting. However, you may choose to stop the survey entirely at any time if you wish to withdraw your participation or you may skip questions you choose not to answer. You may also choose to restart the survey at a later date, should you need to stop the survey during the 20 to 25 minute sitting but wish to complete it at a future point. This survey is anonymous.

WHAT POSSIBLE RISKS OR DISCOMFORTS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

This is a minimal risk study, which means the harms or discomforts that you may experience are not greater than you would ordinarily encounter in daily life while taking routine physical or psychological examinations or tests. However, there are some risks to consider. The survey takes approximately 20 to 25 minutes to complete; participants may feel some reading fatigue. **However, should you feel fatigued, you can stop the survey at any time.**

Also, survey questions may elicit a particular professional or personal reaction or trigger a memory of a problem that you encountered in a clinical setting that could cause you distress. Or you may be worried that your answers will be shared with your employer. **Should you feel distress or upset, you are welcome to skip any question you choose not to answer, and all information will be kept confidential and will not be disclosed to your supervisors, colleagues or constituents. You can stop participating in the study at any time without penalty.** This survey is anonymous. The principal investigator is not collecting any personal identifiers for the purpose of this study. All participant responses will be stored on a password- and username-protected computer.

WHAT POSSIBLE BENEFITS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

There is no direct benefit to you for participating in this study. Participation may benefit the field of sexual and reproductive health to better understand barriers to integrating sexual and reproductive care into alternative primary care settings, as well as gathering information that could be useful in the expansion of sexual and reproductive health services for communities nationwide. These findings could be useful for expanding access and availability of sexual and reproductive care for women across diverse populations and geographic locations to close gaps in health inequities and health disparities.

WILL I BE PAID FOR BEING IN THIS STUDY?

You will not be paid to participate; however, you will be entered into a raffle to win a \$100 VISA gift card if you choose to complete the survey. You are eligible to enter into the raffle only if you complete the entire survey. There are five eligible winners of the \$100 VISA gift card. There are no costs to you for taking part in this study. The final page of the survey will inform you that you have completed the survey. This page will include

an option to participate in a raffle by checking 'agree' and hitting 'next'. You can decline by checking 'no thanks' and hitting 'exit survey.' Should you choose to enter into the raffle and click on 'agree', the survey will be over and you will be led to a separate page that asks for your email address, only in order to send the gift card, should you win. Email addresses will only be utilized for the purpose of the raffle and will not be associated with previous survey answers. You will see a declaration notice of separation between your email address and survey answers. If you win, the gift card will be sent to you electronically from the principal investigator.

WHEN IS THE STUDY OVER? CAN I LEAVE THE STUDY BEFORE IT ENDS?

The study is over when you have completed the electronic questionnaire and have answered the last two open-ended questions, proceeding the closed-ended survey questions. You will be notified of your progress. However, you can leave the study at any time even if you haven't finished.

PROTECTION OF YOUR CONFIDENTIALITY

The investigator will keep all research-related materials and any and all electronic and digital information secured on a computer that is username and password protected and can only be accessed by the principle investigator.

HOW WILL THE RESULTS BE USED?

The results of this study may be published in journals and presented at academic conferences. Your name or any identifying information about you will not be published. This study is being conducted as part of the dissertation of the principal investigator.

WHO CAN ANSWER MY QUESTIONS ABOUT THIS STUDY?

If you have any questions about taking part in this research study, you should contact the principal investigator, Alayna Effron, at 202-379-5462 or at arf2133@tc.edu.

If you have questions or concerns about your rights as a research subject, you should contact the Institutional Review Board (IRB) (the human research ethics committee) at 212-678-4105 or email IRB@tc.edu. Or you can write to the IRB at Teachers College, Columbia University, 525 W. 120th Street, New York, NY 1002. The IRB is the committee that oversees human research protection for Teachers College, Columbia University.

PARTICIPANT'S RIGHTS

- I have read and discussed the informed consent with the researcher. I have had ample opportunity to ask questions about the purposes, procedures, risks and benefits regarding this research study.
- I understand that my participation is voluntary. I may refuse to participate or withdraw participation at any time without penalty.
- The researcher may withdraw me from the research at his or her professional discretion, should I be uncooperative.
- If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue my participation, the investigator will provide this information to me.
- Any information derived from the research study that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- I should receive a copy of the Informed Consent document.

Please check 'agree' if you agree to participate in this study, then click 'next' to begin the survey.

___ I agree to participate in this study.

___ I **do not** agree to participate in this study.

Click 'next' to begin the survey. Click 'exit' to opt-out of the survey.

years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening’ there was a statistical significance ($p < .05$) in responses among age ($p = .001$) and clinical degree (MDs) ($p = .003$). Another example of statistical significance ($p = .003$) among this data set for was those advanced practice clinicians in academic clinical setting for the question *‘I would recommend female patients seek SRH care from RBCs if/when...I am unable to treat a patient.’* Likewise, differences in frequency of interaction with patients also presented statistical significance. For example, a p value of $p = .003$ yielded statistical significance for the question *‘I would recommend RBCs for the following services, targeted towards female patients...counseling for unintended pregnancy, including discussions about emergency contraception and abortion.’*

Appendix F

Odds Ratios for Participant Age from the Participant
Attitude Toward Retail-Based Clinics Scale

PATRBCS		Odds Ratios with confidence intervals			
		<i>Ages 35-44</i>	<i>Ages 45-54</i>	<i>Ages 55-64</i>	<i>Ages 65+</i>
How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?	Deliver comprehensive SRH care to all female patients of reproductive age	1.00 (0.55, 1.82)	1.06 (0.56, 2.01)	0.77 (0.43, 1.38)	0.60 (0.26, 1.39)
	Offer pregnancy testing by way of urine or blood tests to female patients	1.59 (0.82, 3.10)	1.16 (0.58, 2.31)	0.89 (0.47, 1.66)	4.13 (1.37, 12.40)
	Conduct a preconception intake and counseling for female patients considering family planning	0.81 (0.44, 1.48)	1.36 (0.71, 2.59)	0.98 (0.54, 1.78)	1.11 (0.46, 2.68)
	Collect family planning intentions	1.08 (0.58, 2.00)	0.83 (0.43, 1.60)	0.88 (0.48, 1.62)	1.05 (0.44, 2.49)
	Discuss family planning options with women (i.e. abortion, emergency contraception)	0.97 (0.51, 1.84)	0.92 (0.47, 1.82)	0.71 (0.38, 1.32)	0.79 (0.32, 1.93)
	Provide contraceptive counseling	0.57 (0.30, 1.11)	0.62 (0.31, 1.24)	0.64 (0.34, 1.23)	0.65 (0.26, 1.61)
	Administer contraceptive options	0.56 (0.29, 1.07)	0.71 (0.35, 1.43)	0.53 (0.28, 1.01)	0.51 (0.21, 1.26)
	Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants	0.65 (0.36, 1.19)	0.67 (0.35, 1.26)	0.48 (0.26, 0.87)	0.47 (0.20, 1.10)
	Offer STI/STD screening through medical intake, physical exams, and lab testing	0.99 (0.51, 1.95)	0.61 (0.30, 1.22)	0.84 (0.43, 1.61)	1.42 (0.52, 3.91)
	Take a sexual risk behavior intake at all clinical visits	1.48 (0.80, 2.74)	1.03 (0.53, 1.97)	1.06 (0.58, 1.90)	2.35 (0.96, 5.77)

Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening	0.97 (0.54, 1.75)	0.96 (0.51, 1.79)	0.98 (0.54, 1.75)	0.86 (0.38, 1.95)
Provide HPV vaccine administration with counseling	0.57 (0.28, 1.16)	0.36 (0.17, 0.74)	0.45 (0.23, 0.89)	0.76 (0.29, 1.98)
Provide education and care for female sexual dysfunction	1.01 (0.57, 1.82)	1.08 (0.58, 2.01)	0.67 (0.38, 1.19)	1.06 (0.46, 2.45)
Include a questionnaire about intimate partner violence (IPV) and contraception coercion	0.84 (0.43, 1.64)	0.69 (0.34, 1.39)	0.71 (0.37, 1.36)	1.15 (0.43, 3.08)
Provide resources for IPV and contraceptive coercion	0.79 (0.41, 1.55)	0.54 (0.27, 1.10)	0.77 (0.40, 1.48)	1.01 (0.39, 2.61)
Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	1.00 (0.54, 1.85)	1.10 (0.57, 2.11)	0.82 (0.45, 1.48)	0.82 (0.35, 1.95)
Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	0.94 (0.51, 1.75)	0.98 (0.51, 1.88)	0.62 (0.34, 1.13)	0.84 (0.36, 1.99)
Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	0.78 (0.41, 1.49)	0.71 (0.36, 1.39)	0.50 (0.27, 0.93)	0.62 (0.25, 1.53)
Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	0.74 (0.40, 1.34)	1.04 (0.55, 1.99)	0.85 (0.47, 1.53)	0.86 (0.39, 1.91)
Supplement SRH in RBCs with the traditional primary care visit	0.79 (0.43, 1.45)	0.91 (0.48, 1.74)	0.70 (0.39, 1.28)	0.62 (0.27, 1.44)

How responsible are	RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.82 (0.45, 1.48)	0.81 (0.43, 1.53)	0.82 (0.46, 1.47)	0.78 (0.35, 1.78)
	Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	1.83 (0.97, 3.43)	1.46 (0.74, 2.88)	0.96 (0.52, 1.75)	0.72 (0.31, 1.65)
	RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	0.91 (0.50, 1.65)	1.17 (0.61, 2.25)	0.79 (0.44, 1.43)	0.91 (0.40, 2.06)
	RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	0.98 (0.54, 1.77)	1.16 (0.61, 2.24)	0.85 (0.47, 1.54)	0.97 (0.43, 2.17)
	RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	1.01 (0.56, 1.82)	1.28 (0.67, 2.45)	0.77 (0.43, 1.39)	1.15 (0.49, 2.68)
RBCs are doing something positive	Offer contraceptive counseling	0.85 (0.42, 1.73)	0.58 (0.28, 1.20)	0.52 (0.27, 1.01)	0.61 (0.24, 1.57)
	Administer contraception, including the insertion of intrauterine devices and implants	0.71 (0.37, 1.37)	0.56 (0.28, 1.11)	0.44 (0.23, 0.84)	0.47 (0.20, 1.12)
	Dispense emergency contraception	1.17 (0.54, 2.54)	0.70 (0.32, 1.52)	0.84 (0.41, 1.74)	1.52 (0.49, 4.77)
	Offer pregnancy testing	1.21 (0.58, 2.51)	0.71 (0.34, 1.50)	1.02 (0.51, 2.05)	2.64 (0.79, 8.83)
	Administer preconception intakes and family planning counseling	0.78 (0.42, 1.46)	0.90 (0.46, 1.77)	0.97 (0.52, 1.81)	0.66 (0.27, 1.58)

	Conduct STI/STD screening through physical exams, medical intakes, and lab testing	0.87 (0.42, 1.79)	0.64 (0.30, 1.35)	0.65 (0.33, 1.29)	1.16 (0.42, 3.26)
	Provide STI/STD counseling	1.07 (0.53, 2.16)	0.82 (0.40, 1.68)	0.96 (0.49, 1.88)	1.76 (0.61, 5.06)
	Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	0.86 (0.47, 1.58)	0.90 (0.47, 1.72)	0.92 (0.51, 1.69)	0.73 (0.32, 1.65)
	Administer the HPV vaccine in tandem with HPV counseling for prevention	0.78 (0.38, 1.62)	0.53 (0.25, 1.11)	0.67 (0.33, 1.35)	0.87 (0.31, 2.44)
	Provide IPV and contraceptive coercion screening and resources	0.81 (0.40, 1.63)	0.64 (0.31, 1.33)	1.00 (0.50, 2.00)	0.96 (0.37, 2.54)
	Provide FSD screening and resources	0.86 (0.45, 1.61)	0.97 (0.50, 1.90)	0.83 (0.45, 1.54)	0.84 (0.36, 1.99)
How confident are you that RBCs	Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	0.48 (0.26, 0.87)	0.71 (0.38, 1.34)	0.48 (0.27, 0.86)	0.37 (0.16, 0.88)
	Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	0.79 (0.44, 1.42)	0.75 (0.40, 1.40)	0.74 (0.42, 1.32)	0.78 (0.34, 1.78)
	Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	0.95 (0.53, 1.71)	0.85 (0.45, 1.58)	0.71 (0.40, 1.26)	0.69 (0.30, 1.58)
	Provide pregnancy testing to female patients, ages 18 to 45 years?	1.07 (0.58, 1.97)	1.05 (0.55, 2.01)	1.02 (0.56, 1.84)	2.45 (0.97, 6.22)
	Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	0.67 (0.37, 1.21)	0.84 (0.45, 1.56)	0.71 (0.40, 1.26)	0.92 (0.39, 2.20)

	Offer contraceptive counseling to female patients, ages 18 to 45 years?	0.53 (0.29, 0.96)	0.64 (0.35, 1.20)	0.59 (0.33, 1.04)	0.60 (0.25, 1.45)
	Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	0.60 (0.34, 1.09)	0.76 (0.41, 1.40)	0.52 (0.29, 0.92)	0.49 (0.20, 1.18)
	Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	0.70 (0.39, 1.25)	0.77 (0.42, 1.43)	0.71 (0.40, 1.26)	0.93 (0.39, 2.24)
	Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	0.70 (0.39, 1.27)	0.66 (0.35, 1.25)	0.60 (0.34, 1.07)	1.01 (0.44, 2.34)
	Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	0.53 (0.30, 0.94)	0.71 (0.39, 1.32)	0.62 (0.35, 1.11)	0.51 (0.22, 1.15)
	Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	0.76 (0.42, 1.39)	0.57 (0.30, 1.08)	0.63 (0.35, 1.14)	0.54 (0.23, 1.29)
	Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	0.60 (0.34, 1.09)	0.63 (0.34, 1.18)	0.68 (0.38, 1.19)	0.53 (0.23, 1.22)
	Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	0.57 (0.32, 1.04)	0.81 (0.43, 1.52)	0.43 (0.24, 0.76)	0.38 (0.17, 0.88)
I would recommend female patients seek SRH care from RBCs if/when	A patient does not have insurance.	1.03 (0.57, 1.85)	1.06 (0.57, 1.99)	0.84 (0.47, 1.50)	1.08 (0.47, 2.49)
	I cannot accept new patients in my practice	1.09 (0.61, 1.95)	1.18 (0.63, 2.21)	0.82 (0.46, 1.45)	1.46 (0.61, 3.45)
	I am unable to treat a patient	0.81 (0.45, 1.45)	0.96 (0.52, 1.78)	0.60 (0.34, 1.08)	1.01 (0.44, 2.30)

	A patient requires timely intervention or after-hours care and I am unable to treat that patient	0.92 (0.51, 1.66)	1.13 (0.60, 2.12)	0.72 (0.40, 1.29)	1.21 (0.52, 2.84)
I would recommend female patients seek SRH care from RBCs if/when	A patient requires immediate pregnancy testing	0.94 (0.51, 1.73)	0.91 (0.48, 1.76)	0.86 (0.47, 1.57)	1.25 (0.53, 2.93)
	A patient requires preconception counseling after hours	0.60 (0.34, 1.08)	0.77 (0.41, 1.45)	0.61 (0.34, 1.09)	0.54 (0.23, 1.26)
	A patient requires medication abortion or emergency contraception immediately	0.74 (0.41, 1.34)	1.12 (0.60, 2.11)	0.79 (0.44, 1.39)	1.49 (0.63, 3.53)
	A patient requires immediate contraceptive counseling	0.70 (0.38, 1.28)	0.82 (0.43, 1.57)	0.59 (0.33, 1.06)	1.03 (0.42, 2.53)
	A patient requires timely STI/STD screening	0.73 (0.41, 1.32)	1.24 (0.66, 2.32)	0.99 (0.56, 1.74)	1.23 (0.52, 2.91)
	A patient requires immediate IPV and/or contraceptive coercion screening	0.78 (0.43, 1.43)	1.01 (0.52, 1.96)	0.79 (0.43, 1.43)	1.74 (0.72, 4.18)
	A patient requires immediate reproductive-related cancer screening and prevention	1.03 (0.57, 1.87)	1.20 (0.64, 2.25)	0.96 (0.54, 1.71)	1.06 (0.45, 2.52)
	A patient requires timely contraception counseling	0.76 (0.43, 1.35)	0.81 (0.44, 1.50)	0.74 (0.42, 1.30)	0.76 (0.33, 1.74)
	A patient requires timely resources and intervention for FSD	0.83 (0.46, 1.53)	1.17 (0.62, 2.22)	0.93 (0.52, 1.67)	1.00 (0.44, 2.27)
	I am aware of all services provided by RBCs	0.77 (0.42, 1.41)	0.80 (0.42, 1.53)	0.75 (0.42, 1.34)	1.12 (0.45, 2.76)
	I am aware of provider quality of training at RBCs	0.72 (0.39, 1.32)	0.93 (0.49, 1.74)	0.76 (0.42, 1.35)	0.75 (0.33, 1.69)
	I am confident in the care and services provided by RBCs	0.70 (0.39, 1.25)	0.66 (0.35, 1.25)	0.66 (0.38, 1.17)	0.70 (0.31, 1.58)

I would recommend RBCs for the following services, targeted towards female patients	Pregnancy testing	1.38 (0.74, 2.58)	1.44 (0.73, 2.85)	1.28 (0.69, 2.36)	2.39 (0.95, 6.03)
	Preconception counseling	1.10 (0.61, 1.99)	1.56 (0.83, 2.93)	1.16 (0.65, 2.07)	1.27 (0.55, 2.94)
	Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	0.97 (0.54, 1.76)	1.10 (0.59, 2.05)	1.04 (0.59, 1.86)	1.00 (0.43, 2.37)
	Contraception counseling	0.88 (0.48, 1.60)	1.09 (0.57, 2.07)	0.90 (0.50, 1.60)	0.96 (0.40, 2.31)
	STI/STD screening and prevention	0.88 (0.48, 1.63)	0.86 (0.44, 1.67)	0.90 (0.49, 1.66)	1.75 (0.74, 4.17)
	IPV and/or contraceptive coercion screening and counseling	0.84 (0.46, 1.53)	1.13 (0.59, 2.13)	1.01 (0.56, 1.80)	0.88 (0.38, 2.02)
	Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	0.89 (0.49, 1.61)	1.09 (0.58, 2.03)	0.77 (0.43, 1.38)	1.08 (0.48, 2.45)
	Screening and counseling for FSD	0.98 (0.54, 1.80)	1.30 (0.69, 2.45)	0.87 (0.49, 1.57)	1.42 (0.59, 3.39)

There are several categories of significance which are bolded within the Table. However, of interesting note, the question that asks, ‘*How confident are you that RBCs...are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?*’ three cohorts show significance: ages 35 to 44 years (0.48 (0.26, 0.87)); ages 55 to 64 years (0.48 (0.27, 0.86)); and ages 65 years + (0.37 (0.16, 0.88)). Similarly, for the question, ‘*How confident are you that RBCs...screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?*’ two cohorts showed significance within

ages 55 to 64 (0.43 (0.24, 0.76)) and ages 65 years + (0.38 (0.17, 0.88)). In parallel, two cohorts also demonstrated significance for the question, “*How important is it for RBCs to... provide HPV vaccine administration with counseling...for female patients, ages 18 to 45 years?*” with odds ratios and confidence intervals of ages 45 to 54 (0.36 (0.17, 0.74)) and ages 55 to 64 (0.45 (0.23, 0.89)).

Appendix G

Odds Ratios for Medical Doctors from the Participant
Attitude Toward Retail-Based Clinics Scale

PATRBCS		<i>Odds Ratios of MDs</i>	<i>Std Err</i>	<i>z value</i>	<i>p value</i>	<i>conf interval</i>	
How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?	Deliver comprehensive SRH care to all female patients of reproductive age	0.645	0.148	-1.917	0.055	0.412	1.010
	Offer pregnancy testing by way of urine or blood tests to female patients	0.736	0.186	-1.216	0.224	0.449	1.206
	Conduct a preconception intake and counseling for female patients considering family planning	0.575	0.131	-2.422	0.015	0.367	0.900
	Collect family planning intentions	0.617	0.146	-2.043	0.041	0.388	0.981
	Discuss family planning options with women (i.e. abortion, emergency contraception)	0.904	0.220	-0.413	0.679	0.561	1.458
	Provide contraceptive counseling	0.857	0.212	-0.623	0.533	0.527	1.393
	Administer contraceptive options	0.810	0.195	-0.877	0.381	0.505	1.298
	Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants	0.751	0.170	-1.266	0.206	0.483	1.170
	Offer STI/STD screening through medical intake, physical exams, and lab testing	0.764	0.191	-1.075	0.282	0.468	1.248
	Take a sexual risk behavior intake at all clinical visits	0.609	0.143	-2.118	0.034	0.384	0.964
	Provide reproductive-related cancer	0.613	0.139	-2.159	0.031	0.393	0.956

screening as prevention, including breast, thyroid and cervical cancer screening							
Provide HPV vaccine administration with counseling	1.020	0.259	0.077	0.938	0.620	1.676	
Provide education and care for female sexual dysfunction	0.706	0.160	-1.537	0.124	0.453	1.100	
Include a questionnaire about intimate partner violence (IPV) and contraception coercion	0.513	0.125	-2.732	0.006	0.318	0.828	
Provide resources for IPV and contraceptive coercion	0.694	0.170	-1.490	0.136	0.429	1.122	
Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	0.543	0.127	-2.615	0.009	0.344	0.858	
Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	0.556	0.129	-2.535	0.011	0.353	0.875	
Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	0.673	0.157	-1.701	0.089	0.426	1.062	
Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	0.668	0.151	-1.785	0.074	0.429	1.040	
Supplement SRH in RBCs with the traditional primary care visit	0.681	0.156	-1.678	0.093	0.434	1.067	

How responsible are	RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.603	0.138	-2.212	0.027	0.385	0.944
	Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	1.145	0.275	0.562	0.574	0.715	1.833
	RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	0.637	0.146	-1.963	0.050	0.406	0.999
	RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	0.662	0.154	-1.780	0.075	0.420	1.043
	RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	0.686	0.158	-1.638	0.101	0.438	1.077
RBCs are doing something positive	Offer contraceptive counseling	1.085	0.281	0.317	0.751	0.654	1.803
	Administer contraception, including the insertion of intrauterine devices and implants	0.844	0.203	-0.706	0.480	0.527	1.351
	Dispense emergency contraception	0.905	0.258	-0.352	0.725	0.517	1.582
	Offer pregnancy testing	0.823	0.225	-0.713	0.476	0.482	1.405
	Administer preconception intakes and family planning counseling	0.862	0.211	-0.607	0.544	0.534	1.392
	Conduct STI/STD screening through physical exams, medical intakes, and lab testing	0.842	0.222	-0.655	0.512	0.502	1.410
	Provide STI/STD counseling	0.738	0.194	-1.155	0.248	0.440	1.236

	Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	0.819	0.194	-0.843	0.399	0.515	1.303
	Administer the HPV vaccine in tandem with HPV counseling for prevention	1.024	0.273	0.088	0.930	0.607	1.725
	Provide IPV and contraceptive coercion screening and resources	0.947	0.247	-0.210	0.834	0.568	1.577
	Provide FSD screening and resources	0.960	0.231	-0.172	0.864	0.598	1.538
How confident are you that RBCs	Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	0.556	0.131	-2.490	0.013	0.350	0.882
	Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	0.523	0.120	-2.815	0.005	0.333	0.821
	Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	0.679	0.151	-1.736	0.083	0.439	1.051
	Provide pregnancy testing to female patients, ages 18 to 45 years?	0.682	0.161	-1.623	0.105	0.430	1.083
	Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	0.571	0.128	-2.496	0.013	0.367	0.886
	Offer contraceptive counseling to female patients, ages 18 to 45 years?	0.569	0.129	-2.486	0.013	0.364	0.887

	Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	0.674	0.151	-1.768	0.077	0.435	1.044
	Counsel female patients about unintended pregnancy and options, like EC and abortion?	0.589	0.130	-2.391	0.017	0.381	0.909
	Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	0.730	0.164	-1.402	0.161	0.470	1.133
	Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	0.592	0.132	-2.348	0.019	0.382	0.917
	Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	0.849	0.193	-0.717	0.473	0.544	1.327
	Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	0.617	0.142	-2.095	0.036	0.393	0.969
	Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	0.809	0.182	-0.941	0.346	0.520	1.258
I would recommend female patients seek SRH care from RBCs if/when	A patient does not have insurance.	1.056	0.236	0.243	0.808	0.681	1.636
	I cannot accept new patients in my practice	0.770	0.171	-1.177	0.239	0.498	1.190
	I am unable to treat a patient	0.688	0.152	-1.692	0.091	0.447	1.061
	A patient requires timely intervention or after-hours care and I am unable to treat that patient	0.591	0.136	-2.278	0.023	0.376	0.929

A patient requires immediate pregnancy testing	0.608	0.139	-2.176	0.030	0.388	0.952
A patient requires preconception counseling after hours	0.712	0.161	-1.501	0.133	0.456	1.110
A patient requires medication abortion or emergency contraception immediately	0.565	0.129	-2.505	0.012	0.362	0.883
A patient requires immediate contraception counsel	0.911	0.205	-0.416	0.678	0.585	1.416
A patient requires timely STI/STD screening	0.691	0.156	-1.641	0.101	0.444	1.075
A patient requires immediate IPV and/or contraceptive coercion screening	0.755	0.174	-1.219	0.223	0.480	1.187
A patient requires immediate reproductive-related cancer screening and prevention	0.791	0.182	-1.021	0.307	0.503	1.241
A patient requires timely contraception counseling	0.581	0.131	-2.410	0.016	0.374	0.904
A patient requires timely resources and intervention for FSD	0.781	0.179	-1.079	0.280	0.498	1.224
I am aware of all services provided by RBCs	0.714	0.163	-1.477	0.140	0.457	1.116
I am aware of provider quality of training at RBCs	0.640	0.145	-1.973	0.048	0.411	0.997
I am confident in the care and services provided by RBCs	0.583	0.136	-2.320	0.020	0.370	0.920

I would recommend RBCs for the following services, targeted towards female patients	Pregnancy testing	0.821	0.197	-0.820	0.412	0.513	1.315
	Preconception counseling	0.681	0.155	-1.686	0.092	0.436	1.064
	Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	0.638	0.143	-2.003	0.045	0.411	0.990
	Contraception counseling	0.822	0.187	-0.861	0.389	0.527	1.283
	STI/STD screening and prevention	0.782	0.180	-1.072	0.284	0.498	1.226
	IPV and/or contraceptive coercion screening and counseling	0.733	0.169	-1.348	0.178	0.467	1.151
	Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	0.850	0.193	-0.714	0.475	0.545	1.327
	Screening and counseling for FSD	0.904	0.207	-0.443	0.658	0.577	1.414

Appendix H

Odds Ratios for Academic Setting from the Participant
Attitude Toward Retail-Based Clinics Scale

PATRBCS		<i>Odds Ratios of Practice Setting Academic</i>	<i>Std Err</i>	<i>z value</i>	<i>p value</i>	<i>conf interval</i>	
How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?	Deliver comprehensive SRH care to all female patients of reproductive age	1.486	0.464	1.270	0.204	0.806	2.740
	Offer pregnancy testing by way of urine or blood tests to female patients	1.858	0.656	1.753	0.080	0.929	3.713
	Conduct a preconception intake and counseling for female patients considering family planning	1.253	0.374	0.754	0.451	0.698	2.250
	Collect family planning intentions	0.968	0.294	-0.106	0.916	0.534	1.755
	Discuss family planning options with women (i.e. abortion, emergency contraception)	0.990	0.318	-0.030	0.976	0.527	1.860
	Provide contraceptive counseling	1.223	0.403	0.610	0.542	0.641	2.332
	Administer contraceptive options	1.271	0.423	0.722	0.470	0.663	2.439
	Offer LARC, including same-day insertion and removal of IUDs and implants	0.714	0.206	-1.170	0.242	0.405	1.256

Offer STI/STD screening through medical intake, physical exams, and lab testing	1.184	0.395	0.507	0.612	0.616	2.278
Take a sexual risk behavior intake at all clinical visits	1.110	0.346	0.335	0.738	0.603	2.044
Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening	0.987	0.288	-0.045	0.964	0.557	1.750
Provide HPV vaccine administration with counseling	2.133	0.776	2.082	0.037	1.045	4.353
Provide education and care for female sexual dysfunction	1.268	0.373	0.806	0.420	0.712	2.256
Include a questionnaire about intimate partner violence (IPV) and contraception coercion	0.922	0.299	-0.252	0.801	0.488	1.740
Provide resources for IPV and contraceptive coercion	1.269	0.432	0.700	0.484	0.651	2.473
Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	1.083	0.342	0.253	0.800	0.584	2.010
Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	1.001	0.306	0.003	0.998	0.549	1.824

	Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	1.158	0.362	0.469	0.639	0.628	2.137
	Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	0.901	0.265	-0.353	0.724	0.507	1.602
	Supplement SRH in RBCs with the traditional primary care visit	0.858	0.255	-0.514	0.607	0.479	1.538
How responsible are	RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.980	0.289	-0.067	0.946	0.551	1.746
	Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	1.050	0.334	0.154	0.877	0.564	1.957
	RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	0.950	0.282	-0.174	0.862	0.531	1.699
	RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	1.123	0.342	0.381	0.703	0.619	2.038
	RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	0.941	0.280	-0.205	0.838	0.525	1.687

RBCs are doing something positive	Offer contraceptive counseling	1.066	0.361	0.190	0.850	0.550	2.069
	Administer contraception, including the insertion of intrauterine devices and implants	0.958	0.309	-0.134	0.893	0.509	1.801
	Dispense emergency contraception	1.378	0.556	0.796	0.426	0.626	3.038
	Offer pregnancy testing	1.553	0.603	1.134	0.257	0.726	3.322
	Administer preconception intakes and family planning counseling	1.124	0.366	0.360	0.719	0.594	2.128
	Conduct STI/STD screening through physical exams, medical intakes, and lab testing	1.192	0.426	0.492	0.623	0.592	2.403
	Provide STI/STD counseling	1.280	0.470	0.673	0.501	0.624	2.627
	Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	1.046	0.323	0.146	0.884	0.571	1.915
	Administer the HPV vaccine in tandem with HPV counseling for prevention	1.997	0.768	1.799	0.072	0.940	4.243
	Provide IPV and contraceptive coercion screening and resources	1.180	0.422	0.461	0.645	0.585	2.380
	Provide FSD screening and resources	0.833	0.260	-0.584	0.559	0.452	1.536

How confident are you that RBCs	Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	0.732	0.217	-1.053	0.292	0.410	1.308
	Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	1.101	0.328	0.324	0.746	0.614	1.975
	Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	1.142	0.341	0.443	0.658	0.635	2.051
	Provide pregnancy testing to female patients, ages 18 to 45 years?	1.439	0.457	1.147	0.251	0.773	2.681
	Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	0.946	0.281	-0.186	0.852	0.528	1.694
	Offer contraceptive counseling to female patients, ages 18 to 45 years?	0.850	0.251	-0.549	0.583	0.476	1.517
	Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	0.837	0.242	-0.618	0.537	0.475	1.473

	Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	1.124	0.329	0.399	0.690	0.634	1.993
	Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	1.143	0.338	0.452	0.651	0.641	2.039
	Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	1.046	0.301	0.156	0.876	0.595	1.840
	Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	1.284	0.395	0.811	0.417	0.702	2.346
	Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	0.763	0.227	-0.907	0.364	0.426	1.368
	Screen and educate females, ages 18 to 45 years for FSD?	0.824	0.248	-0.644	0.519	0.457	1.485
I would recommend female patients seek SRH care from RBCs if/when	A patient does not have insurance.	1.439	0.409	1.281	0.200	0.825	2.510
	I cannot accept new patients in my practice	1.294	0.363	0.918	0.359	0.746	2.242
	I am unable to treat a patient	0.969	0.275	-0.112	0.911	0.555	1.690

A patient requires timely intervention or after-hours care and I am unable to treat that patient	1.171	0.351	0.525	0.600	0.650	2.107
A patient requires immediate pregnancy testing	1.946	0.620	2.090	0.037	1.042	3.635
A patient requires preconception counseling after hours	1.389	0.410	1.113	0.266	0.779	2.476
A patient requires medication abortion or emergency contraception immediately	1.377	0.407	1.082	0.279	0.771	2.459
A patient requires immediate contraceptive counseling	1.600	0.486	1.547	0.122	0.882	2.902
A patient requires timely STI/STD screening	1.260	0.378	0.770	0.441	0.700	2.270
A patient requires immediate IPV and/or contraceptive coercion screening	1.612	0.507	1.517	0.129	0.870	2.988
A patient requires immediate reproductive-related cancer screening and prevention	1.406	0.413	1.160	0.246	0.791	2.501
A patient requires timely contraception counseling	0.994	0.283	-0.023	0.982	0.568	1.737
A patient requires timely resources and intervention for FSD	1.088	0.325	0.282	0.778	0.606	1.953
I am aware of all services provided by RBCs	1.256	0.369	0.778	0.437	0.707	2.233
I am aware of provider quality of training at RBCs	1.071	0.317	0.232	0.817	0.600	1.911
I am confident in the care and services provided by RBCs	1.061	0.312	0.201	0.841	0.596	1.887

I would recommend RBCs for the following services, targeted towards female patients	Pregnancy testing	2.526	0.900	2.603	0.009	1.257	5.077
	Preconception counseling	1.213	0.368	0.635	0.525	0.669	2.199
	Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	1.511	0.457	1.366	0.172	0.836	2.733
	Contraception counseling	1.103	0.330	0.329	0.742	0.614	1.982
	STI/STD screening and prevention	2.001	0.625	2.220	0.026	1.085	3.691
	IPV and/or contraceptive coercion screening and counseling	1.193	0.353	0.598	0.550	0.668	2.132
	Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	1.452	0.421	1.289	0.198	0.823	2.562
	Screening and counseling for FSD	1.002	0.300	0.006	0.995	0.558	1.800

Appendix I

Odds Ratios for Frequency of Interaction with Patients from the Participant Attitude Toward Retail-Based Clinics Scale

PATRBCS		Odds Ratios with confidence intervals		
		Almost Never	Some-times	Always
How important is it for RBCs to offer the following for female patients, ages 18 to 45 years?	Deliver comprehensive SRH care to all female patients of reproductive age	1.03 (0.46, 2.28)	1.55 (0.88, 2.71)	1.07 (0.63, 1.82)
	Offer pregnancy testing by way of urine or blood tests to female patients	1.19 (0.48, 2.96)	1.04 (0.57, 1.92)	1.05 (0.59, 1.88)
	Conduct a preconception intake and counseling for female patients considering family planning	0.88 (0.41, 1.88)	1.65 (0.94, 2.91)	1.02 (0.61, 1.73)
	Collect family planning intentions	0.82 (0.39, 1.72)	1.69 (0.96, 2.98)	1.24 (0.72, 2.12)
	Discuss family planning options with women (i.e. abortion, emergency contraception)	1.32 (0.57, 3.09)	1.28 (0.71, 2.32)	0.95 (0.55, 1.64)
	Provide contraceptive counseling	1.31 (0.56, 3.08)	1.19 (0.65, 2.18)	0.68 (0.39, 1.17)
	Administer contraceptive options	1.96 (0.81, 4.76)	1.42 (0.78, 2.58)	0.86 (0.50, 1.47)
	Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants	1.08 (0.51, 2.29)	1.43 (0.81, 2.53)	0.86 (0.51, 1.44)
	Offer STI/STD screening through medical intake, physical exams, and lab testing	0.92 (0.39, 2.19)	1.17 (0.61, 2.23)	0.83 (0.47, 1.47)
	Take a sexual risk behavior intake at all clinical visits	0.79 (0.36, 1.75)	1.32 (0.72, 2.41)	0.81 (0.47, 1.40)
	Provide reproductive-related cancer screening as prevention	0.85 (0.41, 1.76)	1.92 (1.08, 3.39)	0.90 (0.53, 1.52)
	Provide HPV vaccine administration with counseling	1.02 (0.44, 2.37)	0.90 (0.49, 1.65)	0.62 (0.36, 1.09)

	Provide education and care for female sexual dysfunction	0.91 (0.44, 1.86)	1.66 (0.97, 2.84)	1.41 (0.84, 2.39)
	Include a questionnaire about intimate partner violence (IPV) and contraception coercion	1.10 (0.47, 2.60)	1.19 (0.64, 2.22)	1.01 (0.57, 1.78)
	Provide resources for IPV and contraceptive coercion	1.59 (0.63, 4.01)	0.92 (0.50, 1.69)	1.18 (0.67, 2.09)
	Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	1.01 (0.44, 2.29)	1.25 (0.70, 2.23)	1.08 (0.64, 1.84)
	Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	0.81 (0.38, 1.76)	1.28 (0.72, 2.28)	1.04 (0.61, 1.77)
	Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	1.32 (0.58, 3.01)	1.20 (0.66, 2.17)	0.82 (0.48, 1.39)
	Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	0.84 (0.38, 1.84)	1.09 (0.62, 1.90)	0.67 (0.40, 1.12)
	Supplement SRH in RBCs with the traditional primary care visit	1.25 (0.59, 2.67)	1.42 (0.80, 2.53)	1.13 (0.66, 1.94)
How responsible are	RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	0.96 (0.44, 2.09)	1.71 (0.98, 3.01)	1.03 (0.61, 1.74)
	Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	3.85 (1.50, 9.86)	1.56 (0.88, 2.78)	0.72 (0.43, 1.23)
	RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	0.95 (0.43, 2.10)	1.54 (0.88, 2.71)	0.83 (0.49, 1.40)

	RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	0.92 (0.42, 2.03)	1.47 (0.84, 2.57)	0.85 (0.50, 1.45)
	RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	1.29 (0.56, 2.93)	1.60 (0.90, 2.85)	0.73 (0.44, 1.22)
RBCs are doing something positive	Offer contraceptive counseling	1.18 (0.48, 2.92)	0.74 (0.40, 1.36)	0.90 (0.51, 1.58)
	Administer contraception, including the insertion of intrauterine devices and implants	1.92 (0.79, 4.69)	0.78 (0.44, 1.38)	1.06 (0.62, 1.82)
	Dispense emergency contraception	1.56 (0.50, 4.84)	0.65 (0.34, 1.25)	1.15 (0.59, 2.22)
	Offer pregnancy testing	1.02 (0.38, 2.76)	0.61 (0.32, 1.15)	1.18 (0.62, 2.24)
	Administer preconception intakes and family planning counseling	0.83 (0.38, 1.82)	0.89 (0.50, 1.59)	0.80 (0.46, 1.38)
	Conduct STI/STD screening through physical exams, medical intakes, and lab testing	1.15 (0.43, 3.08)	0.54 (0.29, 1.00)	0.91 (0.50, 1.66)
	Provide STI/STD counseling	1.21 (0.45, 3.22)	0.61 (0.32, 1.14)	0.99 (0.54, 1.81)
	Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	1.08 (0.48, 2.45)	1.03 (0.59, 1.81)	0.90 (0.53, 1.53)
	Administer the HPV vaccine in tandem with HPV counseling for prevention	0.72 (0.30, 1.72)	0.61 (0.33, 1.13)	0.70 (0.39, 1.24)
	Provide IPV and contraceptive coercion screening and resources	1.15 (0.46, 2.92)	0.55 (0.30, 1.00)	1.13 (0.61, 2.08)
	Provide FSD screening and resources	1.15 (0.50, 2.68)	0.82 (0.47, 1.43)	1.22 (0.71, 2.09)
How confident are you that RBCs	Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	0.98 (0.47, 2.04)	1.98 (1.14, 3.46)	1.66 (0.99, 2.80)

Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	1.06 (0.49, 2.30)	2.33 (1.34, 4.06)	1.40 (0.84, 2.31)
Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	1.40 (0.65, 2.99)	2.13 (1.21, 3.75)	1.30 (0.79, 2.14)
Provide pregnancy testing to female patients, ages 18 to 45 years?	0.77 (0.35, 1.71)	1.43 (0.79, 2.61)	1.15 (0.68, 1.94)
Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	1.04 (0.48, 2.24)	1.75 (1.01, 3.03)	1.00 (0.60, 1.65)
Offer contraceptive counseling to female patients, ages 18 to 45 years?	1.31 (0.60, 2.87)	1.69 (0.98, 2.91)	1.06 (0.65, 1.75)
Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	1.50 (0.71, 3.15)	2.37 (1.38, 4.10)	1.39 (0.84, 2.30)
Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	1.30 (0.61, 2.78)	1.71 (0.99, 2.95)	1.31 (0.79, 2.17)
Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	1.27 (0.58, 2.79)	1.52 (0.86, 2.66)	1.29 (0.78, 2.13)
Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	1.09 (0.52, 2.25)	1.97 (1.13, 3.45)	1.19 (0.72, 1.95)
Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	1.16 (0.53, 2.55)	1.71 (0.97, 3.03)	1.10 (0.66, 1.84)

	Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	1.29 (0.60, 2.78)	1.27 (0.73, 2.20)	1.15 (0.70, 1.89)
	Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	1.32 (0.63, 2.77)	2.46 (1.43, 4.24)	1.46 (0.88, 2.43)
I would recommend female patients seek SRH care from RBCs if/when:	A patient does not have insurance.	1.19 (0.56, 2.53)	1.32 (0.75, 2.31)	1.25 (0.75, 2.08)
	I cannot accept new patients in my practice	1.35 (0.65, 2.79)	1.68 (0.96, 2.93)	1.44 (0.86, 2.42)
	I am unable to treat a patient	1.19 (0.58, 2.46)	1.64 (0.94, 2.87)	1.81 (1.09, 3.03)
	A patient requires timely intervention or after-hours care and I am unable to treat that patient	1.75 (0.78, 3.90)	1.44 (0.81, 2.54)	1.51 (0.89, 2.56)
	A patient requires immediate pregnancy testing	1.91 (0.82, 4.44)	1.22 (0.70, 2.14)	1.48 (0.88, 2.50)
	A patient requires preconception counseling after hours	1.24 (0.58, 2.63)	1.53 (0.89, 2.64)	1.56 (0.93, 2.59)
	A patient requires medication abortion or emergency contraception immediately	2.09 (0.96, 4.59)	1.45 (0.83, 2.51)	1.17 (0.70, 1.95)
	A patient requires immediate contraceptive counseling	2.03 (0.94, 4.42)	1.46 (0.85, 2.52)	1.74 (1.02, 2.97)
	A patient requires timely STI/STD screening	1.82 (0.85, 3.92)	1.62 (0.92, 2.84)	1.45 (0.86, 2.43)
	A patient requires medication abortion or emergency contraception immediately	2.09 (0.96, 4.59)	1.45 (0.83, 2.51)	1.17 (0.70, 1.95)
	A patient requires immediate IPV and/or coercion screening	2.28 (0.99, 5.24)	1.15 (0.65, 2.03)	1.49 (0.88, 2.54)
	A patient requires immediate reproductive-related cancer screening and prevention	1.53 (0.74, 3.18)	1.43 (0.83, 2.46)	1.67 (0.98, 2.85)

	A patient requires timely contraception counseling	1.65 (0.79, 3.43)	1.97 (1.15, 3.37)	1.39 (0.83, 2.34)
	A patient requires timely resources and intervention for FSD	1.92 (0.91, 4.03)	1.39 (0.80, 2.39)	1.72 (1.02, 2.89)
	I am aware of all services provided by RBCs	1.05 (0.47, 2.35)	1.48 (0.85, 2.58)	1.28 (0.76, 2.16)
	I am aware of provider quality of training at RBCs	1.83 (0.83, 4.03)	1.52 (0.88, 2.61)	1.73 (1.03, 2.90)
	I am confident in the care and services provided by RBCs	1.81 (0.85, 3.86)	1.81 (1.05, 3.14)	1.67 (0.99, 2.80)
I would recommend RBCs for the following services, targeted towards female patients	Pregnancy testing	2.34 (0.97, 5.67)	1.48 (0.81, 2.69)	1.46 (0.84, 2.56)
	Preconception counseling	1.84 (0.86, 3.91)	2.37 (1.34, 4.20)	1.28 (0.76, 2.13)
	Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	1.83 (0.87, 3.82)	2.51 (1.42, 4.44)	1.61 (0.96, 2.71)
	Contraception counseling	2.29 (1.09, 4.80)	2.89 (1.61, 5.18)	1.46 (0.87, 2.44)
	STI/STD screening and prevention	2.25 (1.01, 4.99)	1.86 (1.02, 3.38)	1.61 (0.94, 2.76)
	IPV and/or contraceptive coercion screening and counseling	1.73 (0.82, 3.66)	1.68 (0.95, 2.97)	1.30 (0.78, 2.18)
	Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	1.97 (0.94, 4.15)	2.49 (1.44, 4.30)	1.38 (0.82, 2.34)
	Screening and counseling for FSD	1.90 (0.92, 3.92)	1.65 (0.94, 2.88)	1.48 (0.88, 2.49)

Appendix J

Screenshots of Disseminated Survey

Informed Consent



Teachers College, Columbia University
525 West 120th Street
New York NY 10027
212 678 3000

INFORMED CONSENT

Protocol Title: Expanding Access to Sexual and Reproductive Health Care in Alternative Primary Care Settings

Principal Investigator: Alayna Effron, M.S. Teachers College with the Association of Reproductive Health Professionals
202-379-5462, arf2133@columbia.edu

INTRODUCTION

You are being invited to participate in this research study called "Expanding Access to Sexual and Reproductive Health Care in Alternative Primary Care Settings." You may qualify to take part in this research study because you are a member and/or associate of the Association of Reproductive Health Professionals (ARHP); have opted-in to email communication from ARHP; you are 18 years old or older; you are a U.S.-based, health care professional interested in sexual and reproductive health; educate and/or manage the care of patients of reproductive ages, 18 to 45 years; and are either an MD, DO, NP, PA, RN, CNM, Health Educator, or Resident/Fellow.

This study aims to capture a national sample and has been sent to ARHP members that have opted-in for email communication. Approximately 15,000 people will be emailed and asked to participate in this study and it will take approximately 20 to 25 minutes of your time to complete.

WHY IS THIS STUDY BEING DONE?

This study is being done to capture the attitudes and intentions of participants towards/about the integration of sexual and reproductive health in alternative primary care settings, (e.g., retail based clinics). This study will ask specific questions regarding the sexual and reproductive health care of female patients, ages 18 to 45 years, in retail based clinics.

WHAT WILL I BE ASKED TO DO IF I AGREE TO TAKE PART IN THIS STUDY?

If you decide to participate, you will be asked to complete an electronic questionnaire that includes a series of closed-ended questions and two open-ended questions. This survey is smartphone and tablet compatible and you are welcome to take this survey on any device that is convenient for you. This questionnaire will take approximately 20 to 25 minutes to complete and can be electronically submitted after completion. In order to successfully complete the survey, please complete the survey in one sitting. However, you may choose to stop the survey entirely at any time if you wish to withdraw your participation or you may skip questions you choose not to answer. You may also choose to restart the survey at a later date, should you need to stop the survey during the 20 to 25 minute sitting but wish to complete it at a future point. This survey is anonymous.

WHAT POSSIBLE RISKS OR DISCOMFORTS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

This is a minimal risk study, which means the harms or discomforts that you may experience are not greater than you would ordinarily encounter in daily life while taking routine physical or psychological examinations or tests. However, there are some risks to consider. The survey takes approximately 20 to 25 minutes to complete; participants may feel some reading fatigue. **However, should you feel fatigued, you can stop the survey at any time.**

Also, survey questions may elicit a particular professional or personal reaction or trigger a memory of a problem that you encountered in a clinical setting that could cause you distress. Or you may be worried that your answers will be shared with your employer. **Should you feel distress or upset, you are welcome to skip any question you choose not to answer, and all information will be kept confidential and will not be disclosed to your supervisors, colleagues or constituents. You can stop participating in the study at any time without penalty.** This survey is anonymous. The principal investigator is not collecting any personal identifiers for the purpose of this study. All participant responses will be stored on a password- and username-protected computer.

WHAT POSSIBLE BENEFITS CAN I EXPECT FROM TAKING PART IN THIS STUDY?

There is no direct benefit to you for participating in this study. Participation may benefit the field of sexual and reproductive health to better understand barriers to integrating sexual and reproductive care into alternative primary care settings, as well as gathering information that could be useful in the expansion of sexual and reproductive health services for communities nationwide. These findings could be useful for expanding access and availability of sexual and reproductive care for women across diverse populations and geographic locations to close gaps in health inequities and health disparities.

WILL I BE PAID FOR BEING IN THIS STUDY?

You will not be paid to participate; however, you will be entered into a raffle to **win a \$100 VISA gift card** if you choose to complete the survey. You are eligible to enter into the raffle only if you complete the entire survey. There are five eligible winners of the \$100 VISA gift card. There are no costs to you for taking part in this study. The final page of the survey will inform you that you have completed the survey. This page will include an option to participate in a raffle by checking 'agree' and hitting 'next'. You can decline by checking 'no thanks' and hitting 'exit survey.' Should you choose to enter into the raffle and click on 'agree', the survey will be over and you will be led to a separate page that asks for your email address, only in order to send the gift card, should you win. Email addresses will only be utilized for the purpose of the raffle and will not be associated with previous survey answers. You will see a declaration notice of separation between your email address and survey answers. If you win, the gift card will be sent to you electronically from the principal investigator.

WHEN IS THE STUDY OVER? CAN I LEAVE THE STUDY BEFORE IT ENDS?

The study is over when you have completed the electronic questionnaire and have answered the last two open-ended questions, proceeding the closed-ended survey questions. You will be notified of your progress. However, you can leave the study at any time even if you haven't finished.

PROTECTION OF YOUR CONFIDENTIALITY

The investigator will keep all research-related materials and any and all electronic and digital information secured on a computer that is username and password protected and can only be accessed by the principle investigator.

HOW WILL THE RESULTS BE USED?

The results of this study may be published in journals and presented at academic conferences. Your name or any identifying information about you will not be published. This study is being conducted as part of the dissertation of the principal investigator.

WHO CAN ANSWER MY QUESTIONS ABOUT THIS STUDY?

If you have any questions about taking part in this research study, you should contact the principal investigator, Alayna Effron, at 202-379-5462 or at arf2133@tc.edu.

If you have questions or concerns about your rights as a research subject, you should contact the Institutional Review Board (IRB) (the human research ethics committee) at 212-678-4105 or email IRB@tc.edu. Or you can write to the IRB at Teachers College, Columbia University, 525 W. 120th Street, New York, NY 1002. The IRB is the committee that oversees human research protection for Teachers College, Columbia University.

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PARTICIPANT'S RIGHTS

- I have read and discussed the informed consent with the researcher. I have had ample opportunity to ask questions about the purposes, procedures, risks and benefits regarding this research study.
- I understand that my participation is voluntary. I may refuse to participate or withdraw participation at any time without penalty.
- The researcher may withdraw me from the research at his or her professional discretion, should I be uncooperative.
- If, during the course of the study, significant new information that has been developed becomes available which may relate to my willingness to continue my participation, the investigator will provide this information to me.
- Any information derived from the research study that personally identifies me will not be voluntarily released or disclosed without my separate consent, except as specifically required by law.
- I should receive a copy of the Informed Consent document.

Please check 'agree' if you agree to participate in this study, then click 'next' to begin the survey.

- I agree to participate in this study.
- I do not agree to participate in this study.

Click 'next' to begin the survey. Click 'exit' to opt-out of the survey.

- Next
- Exit



Participant Demographic Assessment Tool



PARTICIPANT DEMOGRAPHIC SURVEY ASSESSMENT TOOL

This study will utilize and examine participant demographic variables.

For provider gender, please select one

- Male
- Female
- Transgender Male
- Transgender Female
- Transgender Person
- Bigender
- Gender Questioning
- Other

How old are you, please select one:

- 18 to 24 years
- 25 to 34 years
- 35 to 44 years
- 45 to 54 years
- 55 to 64 years
- 65 and older

In which state do you currently reside?

Clinical Practice Setting: Select all that apply:

- Private Practice – individual practice
- Private Practice – group practice
- Federally Qualified Health Center
- Hospital – non-teaching
- Hospital - teaching
- Academia
- Community Health Center
- Other

Professional Status: Select one:

- Currently seeing patients/practicing
- Not currently seeing patients/practicing
- Resident/Fellow
- Retired
- Other

For the frequency of interaction with female patients of reproductive age (ages 18-45), please select one of the following:

- Never (0 patients per month)
- Almost never (10 patients or less per month)
- Sometimes (11-20 patients per week)
- Often (20-30 patients per week)
- Always (30 or more patients per week)

How many hours a week do you spend providing SRH care to females of reproductive age (ages 18-45), please select one of the following:

- Never (0 hours per week)
- Almost never (5-9 hours per week)
- Sometimes (10-20 hours per week)
- Often (21-29 hours per week)
- Always (30 or more hours per week)

Years in Practice: Select one:

- 0-1 years
- 1-5 years
- 5-10 years
- 10-15 years
- 15-20 years
- 20+ years

Frequency of continuing education: Select one:

- 1 credit per month
- 1 credit per year
- More than one credit per month
- More than one credit per year
- Does not apply

What is your level of knowledge and awareness about retail based clinics and the scope of services they offer? Select one:

- Very knowledgeable
- Somewhat knowledgeable
- Neutral
- Not very knowledgeable
- Not at all knowledgeable



Participant Attitude Towards Retail Based Clinics Scale Assessment Tool

TEACHERS COLLEGE
COLUMBIA UNIVERSITY

PARTICIPANT ATTITUDE TOWARDS RETAIL BASED CLINICS SCALE ASSESSMENT TOOL

In addition to an assessment of the demographic variables, the electronic survey will aim to capture attitudes towards and behavioral intentions related to female sexual and reproductive health care in retail based clinics through a participant self-reporting questionnaire. This will be captured on the Attitudes towards Retail Based Clinics Scale.

The Attitudes towards Retail Based Clinics Scale (RBCs) for providers will consist of 10 categories that will measure attitudes and behavioral intentions towards RBCs using constructs from the Theory of Planned Behavior.

The operational use of sexual and reproductive health (SRH), as it relates to services includes the frequency of the following for female patients, ages 18 through 45 years:

Service	Measure
Pregnancy testing	Urine or blood test
Preconception intake and counseling	Medical history intake for risk factors affecting preconception (i.e. chronic conditions); identification and discussion of risk assessment of current health behaviors; Discussion about patient intentions/fears/concerns regarding the preconception and conception period; Medication intake (i.e. contraindications for pregnancy)
Family planning intentions	Pregnancy intentions; Spacing between intended pregnancies; Discussion of options for unintended pregnancy (i.e. abortion, medication abortion, Plan B); (also congruent with contraceptive counseling)
Contraceptive counseling	Assessment of current contraceptive methods, including intentions, adherence and utilization; Dialogue about individualized satisfaction, drawbacks, barriers, and lifestyle choices for contraceptive method selection
Contraceptive administration	Prescription, intrauterine device or implant insertion or removal, condom distribution
STI/STD screening	Physical exams, blood work and lab testing
STI/STD counseling and intake	STI history intake; Sexual risk behavior intake; Discussion of STI prevention and intervention opportunities; How to communicate with your partner about your STI status; Discussion of prevention methods and strategies
Reproductive-related cancer screening and prevention	Breast and/or thyroid physical exams; Cervical cancer screening (i.e. Pap Smear, HPV testing, co-testing); HPV vaccine administration; HPV vaccination counseling
Female Sexual Dysfunction (FSD) screening and intervention	Intake, discussion, physical exam, provision of resources and references, recommendation of therapeutic and lifestyle interventions
Intimate Partner Violence (IPV) or contraceptive coercion screening and discussion	Intake, physical exam, provision of resources and references

The operational definition of retail based clinics is: "an alternative primary care setting environment that has not historically provided comprehensive care, medical interventions and preventative services to community members, ages 18 to 45 years." Retail based clinics (RBCs) are an example of an alternative primary care setting, which includes retail spaces that offer comprehensive care, medical interventions and preventative services to community members, ages 18 to 45 years. Examples of RBCs include clinics at retailers like, Kroger, CVS, Target, RiteAid, Walgreens, or Walmart.



Please answer the questions by selecting one response, with the numbers 1 corresponding to not important at all; 2 corresponding to slightly important; 3 corresponding to moderately important; 4 corresponding to very important; and, the number 5 corresponding to extremely important for the following statements.

How important is it for RBCs to offer the following services for female patients, ages 18 to 45 years?

	Not important at all (1)	Slightly Important (2)	Moderately Important (3)	Very Important (4)	Extremely Important (5)
Deliver comprehensive SRH care to all female patients of reproductive age	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offer pregnancy testing by way of urine or blood tests to female patients	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conduct a preconception intake and counseling for female patients considering family planning	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Collect family planning intentions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Discuss family planning options with women (i.e. abortion, emergency contraception)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide contraceptive counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administer contraceptive options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offer long acting reversible contraception (LARC), including same-day insertion and removal of intrauterine devices (IUDs) and implants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offer STI/STD screening through medical intake, physical exams, and lab testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Take a sexual risk behavior intake at all clinical visits	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide reproductive-related cancer screening as prevention, including breast, thyroid and cervical cancer screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide HPV vaccine administration with counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide education and care for female sexual dysfunction	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Include a questionnaire about intimate partner violence (IPV) and contraception coercion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide resources for IPV and contraceptive coercion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the questions by selecting one response, with the numbers 1 corresponding to not important at all; 2 corresponding to slightly important; 3 corresponding to moderately important; 4 corresponding to very important; and, the number 5 corresponding to extremely important for the following statements.

How important is it for RBCs to offer the following for female patients, ages 18 to 45 years:

	Not important at all (1)	Slightly Important (2)	Moderately Important (3)	Very Important (4)	Extremely Important (5)
Provide complete and quality SRH as a benefit to increase access and availability of SRH care and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide complete and quality SRH as a necessity to increase access and availability of SRH care and services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide complete and quality SRH help close the gaps in health inequities and health disparities across communities	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Include women-only clinics that provide comprehensive SRH as the next phase of RBCs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Supplement SRH in RBCs with the traditional primary care visit	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the questions by selecting one response, with the numbers 1 corresponding to *not responsible at all*; 2 corresponding to *slightly responsible*; 3 corresponding to *somewhat responsible*; 4 corresponding responsible; and, the number 5 corresponding to extremely responsible for the following statements:

How responsible are:

	Not responsible at all (1)	Slightly Responsible (2)	Moderately Responsible (3)	Very Responsible (4)	Extremely Responsible (5)
RBCs in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Traditional primary care settings in the delivery of comprehensive SRH care to female patients of reproductive age, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
RBCs that offer SRH in broadening access to SRH care for female patients, ages 18 to 45?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
RBCs that offer SRH in expanding availability of SRH care for female patients, ages 18 to 45?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
RBCs that offer SRH in helping to close the gaps in health inequities and health disparities across communities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>





Please answer the questions by selecting one response, with the numbers 1 corresponding to *strongly disagree*; 2 corresponding to *disagree*; 3 corresponding to *neutral*; 4 corresponding *agree*; and, the number 5 corresponding to *strongly agree* for the following statements.

RBCs that are providing the following services to female patients, ages 18 to 45 years, are doing something positive for the patient and providing a worthwhile service:

	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
Offer contraceptive counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administer contraception, including the insertion of intrauterine devices and implants	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Dispense emergency contraception	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offer pregnancy testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administer preconception intakes and family planning counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conduct STI/STD screening through physical exams, medical intakes, and lab testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide STI/STD counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Conduct reproductive cancer screenings, like breast exams, thyroid testing and cervical cancer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administer the HPV vaccine in tandem with HPV counseling for prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide IPV and contraceptive coercion screening and resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide FSD screening and resources	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please answer the questions by selecting one response, with the numbers 1 corresponding to *not confident at all*; 2 corresponding to *slightly confident*; 3 corresponding to *somewhat confident*; 4 corresponding to *confident*; and, the number 5 corresponding to *extremely confident important* for the following statements:

How confident are you that RBCs:

	Not confident at all (1)	Slightly confident (2)	Moderately confident (3)	Very confident (4)	Extremely confident (5)
Are equipped to provide complete and quality SRH to female patients, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Could be utilized as a supplement to traditional SRH clinical visits for female patients, ages of 18 and 45 years, with or without insurance?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Could be utilized as a supplement to traditional SRH clinical visits for female patients between the ages of 18 and 45 years, requiring after-hours attention?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Provide pregnancy testing to female patients, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administer preconception intakes and preconception counseling to female patients, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Offer contraceptive counseling to female patients, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administer contraception options, including LARC, barrier methods and oral contraception, to female patients, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counsel female patients, ages 18 to 45 years, about unintended pregnancy and options, like emergency contraception or abortion?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Screen and counsel female patients, ages 18 to 45 years for STIs/STDs?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Screen female patients, ages 18 to 45 years, for reproductive cancers by way of breast exams, thyroid exams and cervical cancer screening?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Administer and counsel female patients, ages 18 to 45 years, about the HPV vaccination?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Screen and provide resources for IPV and/or contraceptive coercion among female patients, ages 18 to 45 years?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Screen and educate female patients, ages 18 to 45 years for female sexual dysfunction?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Please answer the questions by selecting one response, with the numbers 1 corresponding to *extremely unlikely*; 2 corresponding to *moderately unlikely*; 3 corresponding to *neither unlikely nor likely*; 4 corresponding to *moderately likely*; and, the number 5 corresponding to *extremely likely* for the following statements:

I would recommend female patients, ages 18 to 45 years, seek SRH care from RBCs if/when:

	Extremely unlikely (1)	Moderately unlikely (2)	Neither unlikely nor likely (3)	Moderately likely (4)	Extremely likely (5)
A patient does not have insurance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I cannot accept new patients in my practice	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am unable to treat a patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires timely intervention or after-hours care and I am unable to treat that patient	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires immediate pregnancy testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires preconception counseling after hours	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires timely contraception counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires medication abortion or emergency contraception immediately	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires immediate contraceptive counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires timely STI/STD screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires immediate IPV and/or contraceptive coercion screening	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires immediate reproductive-related cancer screening and prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
A patient requires timely resources and intervention for FSD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware of all services provided by RBCs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am aware of provider quality of training at RBCs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am confident in the care and services provided by RBCs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Please answer the questions by selecting one response, with the numbers 1 corresponding to *extremely unlikely*; 2 corresponding to *moderately unlikely*; 3 corresponding to *neither unlikely nor likely*; 4 corresponding to *moderately likely*; and, the number 5 corresponding to *extremely likely* for the following statements:

I would recommend RBCs for the following services, targeted towards female patients, ages 18 to 45 years:

	Extremely unlikely (1)	Moderately unlikely (2)	Neither unlikely nor likely (3)	Moderately likely (4)	Extremely likely (5)
Pregnancy testing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Preconception counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Counseling for unintended pregnancy, including discussions about emergency contraception and abortion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Contraception counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
STI/STD screening and prevention	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
IPV and/or contraceptive coercion screening and counseling	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Screening for reproductive-related cancers, including breast, thyroid and cervical cancers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Screening and counseling for FSD	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



The final two questions of the electronic survey will be open-ended response questions. Please use the space below to answer in your own words.

In your opinion, what are the potential benefits of integrating more quality and comprehensive sexual and reproductive health care into alternative primary care settings, like retail based clinics that would encourage you to recommend these services to patients?

In your opinion, what are the perceived barriers of integrating more quality and comprehensive sexual and reproductive health care into alternative primary care settings, like retail based clinics that would prevent you from recommending these services to patients?

Thank you for taking this pilot test and participating in this survey. Please use this space to provide any and all feedback about the survey and your experience in participation. All suggestions will be considered in the revision and the refinement of this survey. Thank you for all of your help, insight and contribution.



Thank you for participating in this survey. We are grateful for all of your time and effort. If you would like to enter into a raffle to win a \$100 VISA gift card, please follow the link below to enter. This is not required.

https://tccolumbia.qualtrics.com/jfe/form/SV_2hQPBytLnsPB4rP

