The Development of a Nurse Practitioner-Led Sexual Health Clinic on Prince Edward Island

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Abstract

Youth on Prince Edward Island (PEI) are at risk for the development of sexual health concerns. They are prone to high risk behaviours such as binge drinking, increased numbers of sexual partners, and unsafe sexual practices (Leonard, Chevalier, Dias, Levasseuer, & Ratcliffe, 2012). On PEI the rates of chlamydia, syphilis, and hepatitis C have been on the rise since 2006 (Department of Health and Wellness, 2014). Sexual health education is provided by the schools but does not meet the needs of the students in areas of healthy relationships, gender, culture, or youth with disabilities (Schalet et al., 2014). A Nurse Practitioner (NP)-led primary care collaborative rights-based sexual health clinic developed with input of youth, community members, and relevant stakeholders will provide an innovative, cost-effective, and multidisciplinary approach based on best-practice and patient-centred care for the youth of PEI.

Keywords: youth, NP-led, collaboration, sexual health, nurse practitioner, rights-based

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Background

Sexual health, a component of sexuality, is integral to the physical and mental health of all individuals (World Health Organization [WHO], 2010). Sexuality describes the emotions, identities, relationships, and interactions that assist people to develop relationships that may or may not involve sexual intercourse (Schalet et al., 2014). Sexuality involves, and is influenced by, many factors which include: values and beliefs, attitudes, experiences, physical attributes, sexual characteristics, and societal expectations. Sexuality is the way religion, morals, friends, age, body concepts, goals, and self-esteem shape the self (Schalet et al., 2014).

Youth are prone to high-risk behaviours which include: multiple sex partners, unprotected sex, and substance abuse (Leonard et al., 2012). As youth seek to find their identity, they explore their sexuality. This population is more likely to experiment with multiple partners of different ages and sexual orientations. Experimentation could lead to increased risk of sexual exploitation, unsafe sexual practices, and sexual isolation. Youth are less likely to make use of safe-sex methods which may expose them to STIs. They may engage in sexual relationships under the influence of substances such as alcohol, opioids, or recreational drugs which increase an individual's risk for physical harm (Leonard et al., 2012). Young individuals make decisions that impact the rest of their lives and yet may not have the knowledge base or guidance to help make informed decisions.

Historically youth has been defined primarily by the criterion of age. For example, Statistics Canada defines youth from 16 to 28 years of age and Human Resources and Skills Development Canada identify youth as between 15 to 24 years of age (Youth Policy Labs, 2014).

As traditional, cultural, and societal roles evolve, it becomes increasingly less appropriate to identify youth as a particular age group. Youth as a heterogeneous group, are complex and diverse. They face multiple possible realities as they navigate towards adulthood. As such, sexual health services are not relevant for the short period during adolescence but are necessary to promote healthy sexual development as these individuals transition into early adulthood.

The WHO (2016) defines sexual health as:

> A state of physical, emotional, mental and social well-being in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity. Sexual health requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination, and violence. For sexual health to be attained and maintained, the sexual rights of all persons must be respected, protected and fulfilled. (para. 4)

Successful sexual health services (SHS) for underserved and vulnerable youth promote sexual well-being through a multidisciplinary approach, comprehensive health education, client consultation and counsel, and individualized treatment. With a goal to improve access to services for isolated youth, SHS that consider geographical location (urban versus rural) and social orientation (gender roles, race, social class, age, ability, religion, and sexual orientation) have been shown to be valuable (WHO, 2010). Research suggests the provision of comprehensive and holistic sexual health by health care providers (HCP) optimizes a patient's sexual health decisions (WHO, 2010). Health advice, contraceptive information, and counselling youth about healthy, respectful sexual relationships are important aspects of a comprehensive NP-led Sexual Health Clinic (Hayter & Harrison, 2008; Keefe, 2012).

Sexual health services strive to improve sexual health by improved access to sexual health clinics (Collins, 2013; Keefe, 2012; Leonard et al., 2012). Carleton University School of Social Work and Planned Parenthood of Ottawa executed a self-administered online sex-survey of 295 Ottawa youth in 2012 to assess consensual sex experiences, youth access to sexual health services, and barriers to access (Leonard et al., 2012). The participants identified three essential qualities of a sexual health clinic: non-judgemental staff, an atmosphere of openness and freedom to ask questions, and access to desired education and services (Leonard et al., 2012). Research has been completed on the sexual health needs of youth in other areas of Canada, but no research has been specifically done to determine the sexual health needs of youth on Prince Edward Island (PEI). This synthesis paper discusses the gap in access to sexual health services for youth on PEI, proposes an initiative for the development of a Nurse Practitioner (NP)-led Sexual Health Clinic for the youth of PEI to fill this gap, and provides a method of evaluation to measure the outcomes of this project.

Part 1: Needs Assessment

The Nature of the Need

Sexual health has been determined to be an intrinsic part of personal well-being, however many youth on PEI do not have access to sexual health services to support their sexual growth and development. It is important to support healthy sexual development throughout this time frame, as they make the important transition into early adulthood (WHO, 2015).

As evidenced by the data presented in Table 1, the rates of some reportable STIs are on the rise in Canada (e.g., chlamydia and syphilis) while the rates of others have declined over the years (e.g., hepatitis C and HIV). Prince Edward Island data show a similar trend for some STIs but raise concerns for others. The rates of newly acquired STIs on PEI have increased steadily

from 2002 to 2011 (Department of Health and Wellness, 2014). The data in Table 1 outline the rates of newly acquired reportable STIs in Canada. Chlamydia rates have risen on PEI (133.3 in 2005 to 173.6 in 2013 per 100,000) but, as evident in Table 1, have yet to reach national levels (Department of Health and Wellness, 2014). Between 1987 and 2009, only seven cases of syphilis were recorded on PEI. However, from April 2014 to July 2015, 15 new cases were diagnosed (Department of Health and Wellness, 2014). The rate of herpes on PEI has also increased steadily from 90.2 to 96.4 per 100,000 population from 2011 to 2014 (S. Burns MacKinnon, personal communication, February 22, 2016). Herpes is a non-reportable STI, therefore no accurate Canadian statistics are available. The Canadian rates for hepatitis C have declined in the last 10 years but the Island rates have increased from 18 new cases in 2000 to 40 in 2012 (Department of Health and Wellness, 2014). Provincial rates of hepatitis C continue to climb despite a decline in national rates (Department of Health and Wellness, 2014).

Table 1

New Cases of Reportable STIs in Canada

STI	2002	2010	2011
Chlamydia[a]	56266	93329	100044
Syphilis[a]	482	1698	1757
Hepatitis C[b]	50	30	30
HIV[c]	3250	3000	2800

Note. [a]Retrieved from Public Health Agency of Canada (PHAC) (2014). [b]Retrieved from Department of Health and Wellness (2014). [c]Retrieved from PHAC (2015).

Sexual health services available on PEI. Open access to dedicated SHS is essential to control infection, prevent outbreaks, and reduce unwanted pregnancies. Yet, such a sexual health centre for the youth of PEI does not exist. Instead, SHS on PEI are delivered in a fragmented way contingent upon population and geographical representation. For example, PEI recently launched a Women's Wellness Program (Health PEI, 2017b). Unfortunately, the very name of the program gives the impression that many Islanders, including males, transgender, and youth, may be excluded. It is a much needed program with a variety of services offered but is perceived not to be inclusive of other populations at risk. There are no drop-in appointments or evening clinics (Health PEI, 2017a). The University of PEI (UPEI) in Charlottetown has a student health centre; the hours are Monday to Friday, 8:30 am to 4:00 pm, but a health-care practitioner is not always immediately available to address youth sexual health needs during these scheduled times. Holland College Charlottetown and Summerside campuses offer healthcare services by an NP but are limited to a few hours a week. The PEI Rape and Sexual Assault Centre is a Charlottetown community-based, non-profit, government-funded organization that provides education and counseling for victims of sexual assault, but there is a waiting list for their services (PEI Rape and Sexual Assault Centre, 2017). Pride PEI, a non-profit organization, based in Charlottetown, that provides support to people who are lesbian, gay, bisexual, transgender, or questioning (LGBTQ) (Pride PEI, 2017). The junior high and high schools on PEI have a health education class for students in grade 9 and grade 10. It is a school-based curriculum that lacks a focus on healthy relationships, gender issues, and multiculturalism (Leonard et al., 2012).

These programs and groups offer some services, but there is limited focus on youth and inadequate access for youth not able to attend daytime clinics or who live in rural areas. A notable gap in access to sexual health services exists for persons 15 to 29 years of age on PEI.

Contributing Factors

Primary health care (PHC) is a philosophy and a process to deliver health care in a manner that encourages self-care, community partnerships, and equity in services. The philosophy incorporates the determinants of health (Munro et al., 2000). The determinants of health are important socio-political factors to consider and address when developing a community program and include: income and social status, education, social support networks, employment, social and physical environments, personal health practices and coping skills, healthy child development, biology and genetic endowment, health services, gender, and culture (McKenzie, Neiger, & Thackeray, 2013; PHAC, 2011). These determinants highlight the relationship between the patient and his/her environment, stress the socio-political importance of health care (Munro et al., 2000), and provide the framework for the proposed sexual health initiative. The factors on PEI that have contributed to the deficit of SHS are outlined within the following discussion on the determinants of health. Attention to social determinants during formative periods of growth and development can serve to develop population appropriate health initiatives (McKenzie et al., 2013).

Income. People with lower income are often unable to afford the necessities of life (Mikkonen & Raphael, 2010). Lower income leads to decreased self-esteem, poor life choices, and increased mortality and morbidity (Munro et al., 2000). There are also structural barriers for people living in poverty such as lack of accessibility, poor geographic location, and difficulty with transportation (Leonard et al., 2012). These challenges are associated with decreased access

to health promotion and disease prevention information, increased use of sex to fill an emotional gap, and increased sex-trade activity for economic gain (Harling, Subramanian, Barnighausen, & Kawachi, 2013). As a result, higher rates of STIs are experienced for which treatment is less likely to be sought (Leonard et al., 2012).

The provincial economy relies heavily on seasonal industries of agriculture, tourism, and aquaculture. With an average income of 35,208 dollars, PEI residents report the third lowest income in the nation (PEI Statistics Bureau, 2015). The Centers for Disease Control (CDC) and Prevention completed a study in 25 cities in the United States, between 2006 and 2007. It was an anonymous cross-sectional interview of men and women 18 to 50 years of age who had a sex partner of the opposite gender in the previous year. The researchers found that lower income is associated with less access to preventative information and health care and increased use of sex as a psychological coping mechanism (CDC, 2016).

Education. People require knowledge to make informed choices to promote good health (Munro et al., 2000). Sexual education promotes healthy sexual behaviours, positive self-concepts, meaningful relationships (Schalet et al., 2014), and increased condom and contraceptive use (Ontario and Physical and Health Education Association, 2013). In addition, sexual education may postpone the onset or decrease the breadth of sexual health behaviours (Ontario and Physical and Health Education Association, 2013). Two gaps in knowledge have been identified on PEI, delivery and content.

Potential delivery gap. Sexual health education on PEI is primarily delivered through the school system. In 2010, 21% of Islanders had not completed high school compared with the Canadian rate of 16% (Statistics Canada, 2010). Also, a number of students who move to PEI from another province or country (Canadian Broadcasting Corporation [CBC] News, 2015a),

may not have received health and wellness education as part of their curriculum. These facts suggest there may be a potential gap in the delivery of education related to sexual health for Islanders.

Content gap. Content delivered by the school system includes the biology of sexual changes, relationships, STIs, and methods of prevention (PEI Department of Education English Programs, 2007). Despite the provision of this education, STI rates on PEI continue to climb (Department of Health and Wellness, 2014). School-based sexual health education programs lack a focus on healthy relationships, sexual pleasure, multicultural information, sexual health in young people living with disabilities, youth in the sex trade, and information related to the LBGTQ community (Leonard et al., 2012). Youth who struggle with gender inequality and the stigma associated with LGBTQ can find support and understanding with appropriate sexual health education (Schalet et al., 2014). Sexual health education equips youth to make positive decisions related to sexuality. This newfound knowledge facilitates critical thinking among the youth which in turn enables them to challenge inequity related to gender, race, sexuality, and poverty (Schalet et al., 2014).

Culture. Family, community, and society have an important role in determining a population's access to sexual health services (WHO, 2010) and have been the traditional providers of sexual health education on PEI. The rate of change in sexual behaviours, lifestyles, and norms (e.g., early exposure to highly sexualized content via social media and other platforms) make it difficult for these conventional methods to provide the information youth need to make informed decisions. Research carried out by Island Life Cooperative to explore communities in the western end of PEI presented evidence of conservative values, a strong sense

of community social well-being, and sense of belonging to their community (LeVangie, Novaczek, Enman, MacKay, & Clough, 2009; PEI Department of Health and Wellness, 2010).

Competing cultural practices also limit the ability of youth to develop the skills necessary to grow their sexual identity and make healthy sexual decisions (WHO, 2010). For women, traditional gender roles may prevent them from rejecting unwanted sex and/or demand condom use. Similarly, traditional gender roles for males may limit their ability to develop intimate relationships without the expectation that sex is the essential aspect of a relationship (Schalet et al., 2014). Religious or social pressures that support abstinence make it more difficult for young people to obtain accurate information related to STIs, contraception, and sexual health (Bell, 2009).

The increase in cultural diversity on PEI influences the sexual culture. For example, 21% of the students at the University of PEI (UPEI) come from a country other than Canada (UPEI, 2016). The timing of the first sexual intercourse experience, sexual health behaviours, relationship development, and progression towards marriage are related to cultural norms, social and neighborhood environments, and cultural belief systems. These students are conflicted between the cultural norms of Canada, their traditional expectations, and a new sense of freedom (Spence & Brewster, 2010).

Employment. Employment is associated with a sense of purpose and identity, improved social status, and increased social contact (Davis, 2009). Unemployment is linked to negative psychosocial outcomes, increased rates of unprotected sex, multiple partners, and casual sexual encounters (Davis, 2009). With increased unemployment rates in rural areas, residents are forced to seek employment elsewhere (e.g., urban areas or out of province) (Stalker & Phyne, 2014). Out-migration extracts people from the community who contribute to the social well-being in the

rural setting. This departure has an impact on the families and communities (Stalker & Phyne, 2014).

In August 2016, the unemployment rate on PEI climbed to 12.1%, which marked the first time the province's unemployment rate rose above 12% in 2 years (Department of Health and Wellness, 2014). The Canadian rate was 6.9% (Statistics Canada, 2016a). In 2015, the youth unemployment rate was 15.7%, (female 10%, male 21.2%) (CBC News PEI, 2016d). Rural areas historically have higher unemployment rates (Statistics Canada, 2007). Higher levels of poverty have been associated with increased numbers of sexual partners and less use of birth control and condoms (Davis, 2009).

Increased unemployment, rising rate of STIs (Department of Health and Wellness, 2014), and high-risk behaviours (Stalker & Phyne, 2014) have a negative impact on the sexual health of Islanders. Traveling to western provinces for work has also been identified as a risk factor to acquire an STI (Department of Health and Welless, 2014).

Personal health practices. Personal health practices are actions taken or decisions made by youth to prevent disease, promote self-care, reduce stress, develop resilience, solve problems, and make choices that enhance health (Pelicand, Fournier, Le Rhun, & Aujoulat, 2013). People who practice healthy lifestyles and self-care management have improved sexual health (Hensel, Nance, & Fortenberry, 2016).

Positive health practices. People on PEI, when compared with the rest of Canada, are less likely to engage in positive personal health practices such as being physically active, eating more than five servings of fruit and vegetables a day, and avoiding heavy drinking of alcohol (Department of Health and Wellness, 2016). Accessibility, affordability, income, education, and employment all influence personal health practices (Department of Health and Wellness, 2016).

In order for people to practice self-care, relevant services must be ready and accessible (Medical Foundation for Aids and Sexual Health, 2005).

Condom use. Despite evidence that supports risk reduction of STIs through the proper application and consistent use of condoms, nearly 75% of youth (ages 15 to 24 years) on PEI decline to use condoms (Rotermann, 2005). In the Trojan/Sex Information and Education Council of Canada (SIECCAN) Sexual Health Study, conducted by Leger Marketing, 1500 university students across Canada (ages 18 to 24 years) were surveyed to gain insight into sexual health-related experiences, sexual knowledge and behaviours, and gaps in sexual health education. Of the 1500 students surveyed, 51% reported using a condom the last time they had sex (CTV News, 2013; Trojan & SIECCAN, 2013). In a national cross-sectional survey designed to characterize contraceptive choices of Canadian women and adherence to their contraceptive regimes, 71% of PEI women who had sex in the last 6 months had not used any form of contraception (Black et al., 2009). This study suggests Canadian university students ages 18 to 24 years underestimate their risk to contract an STI (SIECCAN, 2015).

Influence of alcohol and drugs. Drug and alcohol consumption is associated with physical and mental health problems, as well as significant increases in rates of STIs. A survey completed in the United Kingdom, of 77 women who had an addiction to drugs, found 27% had a history of an STI, 37% had a history of an abnormal pap smear, and 54% had been forced to have sex against their will (Edelman, Patel, Glasper, & Bogen-Johnston, 2014). A cross-sectional study of 671 STI clinic patients in Baltimore Maryland, examined the link between alcohol use and sexual behaviour. The participants who binge drank (five or more alcoholic drinks on one occasion) had 5 times the rate of gonorrhea than those who abstained from alcohol. They also had increased rates of risky sexual behaviour (Hutton, McCaul, Santoro, & Erbelding, 2008).

Alcohol consumption is related to decreased inhibition which leads to an increased number of sexual partners and an earlier age of first sexual contact (Crawford et al., 2014). In PEI, 42% of people aged 12 to 19 years and 39% of people aged 20 to 34 years drink more than 5 drinks of alcohol at least 12 times in the last 12 months (Department of Health and Wellness, 2016).

Health services. Appropriate health services offered at the right time, the right place, by the right provider, at the community level promote the health and well-being of its members (Allan, Funk, Reid, & Cloutier-Fisher, 2011). A lack of access and a change in the guideline for annual physical exams have impacted sexual health services on PEI.

Access. Traditionally, people on PEI seek health care through a family doctor (Health PEI, 2016b). There are about 8,100 people on the Island patient registry, waiting to be assigned a primary care provider (CBC News PEI, 2016a). A shortage of family health care providers is a barrier to access adequate health care (Pericak, 2011), and puts excess stress on emergency rooms that are functioning over capacity (Yarr, 2016).

Access is also impacted by culture, language, sexual orientation, disabilities, gender identity, and rurality (Leonard et al., 2012). Prince Edward Island has become home to people from many different countries around the world (PEI Newsroom, 2016) including Amish (CBC News PEI, 2016a), Middle Eastern (CBC News PEI, 2016c), and Chinese people (CBC News PEI, 2014). People who identify as LGBTQ, have a disability, or live in rural communities fear discrimination and have concerns about confidentiality, transportation, and funding for facilities (Leonard et al., 2012). Many primary health care providers, especially in rural areas, are not aware of the health, legal, and cultural needs of LGBTQ patients, so many members of this community feel uncomfortable approaching local health care clinics (Whitehead, Shaver, & Stephenson, 2016). Ease of access is important to young people who utilize sexual health clinics;

they prefer to have drop-in appointments and evening clinics (Ingram & Salmon, 2007). A systematic review of 240 articles was completed to identify health care models that support youth access to health and mental health care in countries with health care systems similar to the Canadian model (Anderson & Lowen, 2010). This research supports community-based health care centres with a broad scope, multi-service approach that addresses diversity, age, and barriers to health care for youth. This type of health care centre can be successful in providing high quality, affordable service to more diverse populations of youth (Anderson & Lowen, 2010).

Annual physical exams. Annual physical exams are no longer nationally recommended as best practice for primary care health providers; however medical professionals state that there is still a need for patients to have a well-person visit or annual health review (Goroll, 2015). Annual health visits provide an opportunity for health professionals to form relationships with their patients. These relationships are especially meaningful for teenagers to build trust in their health care providers and feel comfortable to approach them for counseling, information, and treatment (Ingram & Salmon, 2007).

Impact of the Problem

There are indirect and direct costs associated with the lack of comprehensive sexual health services that address the sexual health needs of youth on PEI; the impact may be physical, mental, emotional, or fiscal (WHO, 2010). Youth are a vulnerable population and are at risk of the ramifications related to the gap in sexual health services on PEI, due to the indirect and direct costs.

Indirect costs. Indirect costs relate to the impact that a lack of sexual health care has on the quality of life of individuals and subsequent loss of productivity (Canadian Nurses Association [CNA], 2011). Lack of access to sexual health services may result in an increased

prevalence of STIs, unintended pregnancies, abortions, sexual violence, harmful sexual practices, unhealthy sexual relationships, decreased self-esteem, stigma, and depression (Harvard Health Publications, 2009; WHO, 2010).

Sexual violence. Youth are at increased risk of sexual violence (WHO, 2010). Sexual violence may include rape, coerced sex, child sexual abuse, domestic violence, female genital mutilation, forced prostitution, or psychological abuse. Sexual health education programs that promote healthy sexual relationships and mental health access for youth and communities prevent these practices (Statistics Canada, 2013; WHO, 2010).

Sexually transmitted infections and related sequelae. The rates of STIs, especially chlamydia, syphilis, and hepatitis C have increased on PEI. Frequently women are asymptomatic with chlamydia infection. Untreated chlamydia and gonorrhea can progress to pelvic inflammatory disease, chronic pelvic pain, ectopic pregnancy, and infertility. For men, chronic sexually transmitted infections can cause epididymoorchitis. Gonorrhea can cause disease in the bloodstream and joints. Syphilis has long-term complications; it can progress to latent stages and can affect the central nervous and cardiovascular systems along with the eyes, skin, and other organs (Smylie et al., 2011). Human immunodeficiency virus (HIV) has many long-term sequelae (PHAC, 2013) that lead to loss of productivity and costly fiscal, health, and emotional complications (National Expert Commission, 2016).

Unintended pregnancy and abortion. Unintended pregnancy and abortion have many psychological and emotional effects including anxiety, stress reactions, depression, self-destructive behaviours, substance abuse, and suicide (Curley, 2010) and can lead to decreased productivity and loss of time at work. One of the factors that contribute to the incidence of unintended pregnancy and abortion is the lack of information and access to contraception (WHO,

2010). In undeveloped countries, unsafe sex is the second most important risk factor for disability and death. In developed countries, unsafe sex is the ninth most important (Glasier, Gülmezoglu, Schmid, Moreno, & VanLook, 2006). On PEI, teenage pregnancies account for 5.8% of all pregnancies. In 2011, mothers in Kings County were the youngest group giving birth, with 28% under 25 years of age. Drug use during pregnancy was highest among young mothers (PEI Reproductive Care Program, 2013). In 2017, PEI began to offer surgical abortion services and completed 116 in less than 1 year (CBC News PEI, 2018). They also provide medical abortions and emergency contraception.

Direct costs. Direct costs of a lack of sexual health services for youth include the cost of treating complications, the provision of health care services, medications, and counseling (Rompalo, 2011). Monetary costs of chlamydia and gonorrhea in Canada were 31.5 to 178.4 million dollars a year (Smylie et al., 2011). The United States spends between 10 and 17 billion dollars a year on the costs of STIs (Rompalo, 2011). Every new diagnosis of HIV costs Canadians 1.3 million per person a year (Kingston-Reichers, 2011). The promotion of healthy sexuality and support to people who require treatment for sexual health-related illness can decrease the cost to patients and the health system (CNA, 2011).

Prevention is the desirable approach to reduce the increase of STI; however early detection and treatment can also decrease the repercussions of STIs which include pelvic inflammatory disease, cervical cancer, and ectopic pregnancies (Ontario Provincial Infectious Diseases Advisory Committee, 2009). “For every dollar spent on early detection and treatment of chlamydia and gonorrhea, it is estimated that $12 could be saved in associated health care costs” (Ontario Provincial Infectious Diseases Advisory Committee, 2009, p.14).

Lack of dedicated SHS for youth, increased rates of STIs and unplanned pregnancies, low income, gaps in comprehensive sexual health education, changes in cultural practices, low levels of employment, poor personal health practices, and an inappropriate level of health services create a significant problem for the province. An NP-led sexual health clinic dedicated to youth would be a cost-effective approach to address the lack of access to SHS in this population.

Promising Approaches

An integrated approach to sexual health services that utilizes holistic methods of prevention, treatment, and education that encompass the determinants of health will have the most effective outcomes (PHAC, 2013). The WHO indicates that the most successful sexual health programs have a multisectoral approach including medical, governmental, community, social, and religious sectors. The multisectoral approach improves the effectiveness and efficiency of the system while meeting the primary care principle of accessibility and client-centred care (WHO, 2010).

Comprehensive sexual health framework. The WHO has developed a framework with detailed guidelines outlining a best practice method to develop and operate sexual health clinics. This guide focuses on human rights and provides a rights-based strategy to establish sexual health programs for any community (WHO, 2010). The framework discusses five key domains to promote success of a sexual health program: laws, policies and human rights, education, society and culture, and economics and health systems. These domains support the rights-based approach using best practice to ensure that patients receive the most appropriate sexual health service (WHO, 2010). For example, Malawi, a country in southeast Africa, committed to ensuring universal access to quality sexual and reproductive services to women, young people, and men, as well as a reduction of maternal mortality. The provision of sexual and reproductive

health, based on the WHO framework, has led to a decrease in the maternal mortality ratio from 1,120 per 100,000 live births in 2,000 to 806 per 100,000 live births in 2008 (WHO, 2011).

Mobile sexual health services. There are some new and innovative methods to deliver health care. Mobile health nursing units support a revolution in health care across North America (Fraino, 2015). The mobile health units initially delivered care to underserviced individuals in rural areas and to the homeless (Fraino, 2015). The United States capitalizes on this trend and Canada has joined this new practice. Mobile health units approach health care from a social justice perspective, assessing the needs of communities and filling the gap identified (Fraino, 2015). Ontario utilizes NP mobile health units to deliver health care services in remote communities. This multidisciplinary approach to primary health care, urgent care clinics, diabetes care, sexual health services, and health-promotion is used throughout Ontario (Nor-West Community Health Centres, 2016). Mobile health units have been shown to be effective to improve health outcomes, especially for prenatal care and sexual health (O'Connell, Zhang, Leugen, & Prince, 2010). A mobile van in California that provided pregnancy tests, prenatal and postpartum care, gynecological exams, STI testing, health education, lab work, and referrals to community programs had a lower percentage of low birth weight babies and preterm births, when compared to babies born to women in the same district who accessed traditional healthcare delivery (O'Connell et al., 2010). The multidisciplinary method of providing health services would be an innovative method to deliver sexual health services to all parts of PEI.

Nurse practitioners and sexual health services. Nurse Practitioner-led sexual health clinics exist across Canada. The Windsor-Essex Health Unit in Ontario is a sexual health clinic that employs a public health nurse and an NP (Windsor-Essex Health Unit, 2016). The Simcoe-Muskoka sexual health clinic in Ontario also has a public health nurse and an NP (Simcoe-

Muskoka District Health Unit, 2016). In British Columbia (BC) there are BC Women's Health Centres designed to improve health care for women that are staffed by NPs (Provincial Health Services Authority, 2016). In England, a study was done of nurse-led sexual health programs, called the "no worries" clinics. Quantitative and qualitative methodologies were used to evaluate the program. Questionnaire data were collected from 153 participants and 18 interviews were completed. The study aimed to evaluate patterns of use, effectiveness, and acceptability of the clinics. Participants reported a professional atmosphere, access to staff, and freedom to ask questions in a comfortable and confidential setting, as key reasons they attended the clinics (Ingram & Salmon, 2007). Patients who attend an NP-led clinic in the United States reported a decrease in their number of sexual partners and a 50% decrease in STIs after 3 months (Collins, 2013). The advanced practice nurses in Canada, England, and the United States demonstrate that NPs are qualified to meet the needs of patients and have a positive impact on their care.

The numbers of NPs on PEI have significantly increased over the last 10 years from 5 in 2006 (Day, 2017) to 10 in 2012, and 25 NPs in 2015 (Association of Registered Nurses of PEI [ARNPEI], 2016). The Liberal Party of PEI, during the last election, indicated the number and scope of NPs on the Island would increase under their rule (Liberal Party of PEI, 2015). Opposition parties also supported the increase in the number of NPs in practice (CBC News, 2015b; Progressive Conservative Party, 2016). Nurse Practitioners are responsible for well prenatal visits up to 32 weeks gestation and are integral members of collaborative primary care, mental health, diabetes care, cancer treatment, renal care, and geriatric teams (Health PEI, 2013).

In Canada, NPs are educated as nurses first. The nursing profession has a reputation of trust and respect from the patients they provide care to (Donelan, Buerhaus, DesRoches, Dittus, & Dutwin, 2008) and NP practice rates high in patient satisfaction, quality, safety, and

effectiveness (Stanik-Hutt et al., 2013). Nurse Practitioner education and practice are based on health promotion and disease prevention; NPs are well prepared to promote healthy lifestyle choices and influence positive sexual health behaviours (Maijala, Tossavainien, & Turenen, 2015). A Primary Health Care NP with a focus on sexual health would be able to deliver SHS to the full scope of NP practice; provide sexual health counselling, complete examinations, order tests and treatment, and refer as necessary (Biddle et al., 2014). These characteristics support the value of NP-led sexual health services.

Target Population

The target group for this community health initiative on PEI is youth of all demographics, sexual orientations, and geographic areas, aged 15 to 29 years of age. Participation in the SHS will be voluntary; individuals may seek care elsewhere without fear of repercussion. All individuals, whether they have a primary health care provider or not, may access the SHS.

The NP will work within his/her scope of practice in accordance with the current regulations and legislation. Health concerns that would be unable to be assessed at the sexual health centre with a lone NP as the lead are: sexual assault, high-risk pregnancy, or a life-threatening illness. These conditions require specialty care and require more time than available at a health clinic.

Part II: Project Goals and Objectives

Program goals and objectives provide a framework for the development and final evaluation of the proposed sexual health clinic (McKenzie et al., 2013). A goal is a comprehensive statement that describes the broad direction of a program (McKenzie et al., 2013). The program goal of this proposal for a pilot Nurse Practitioner-led sexual health clinic is to improve access to sexual health services for youth on PEI. An initial pilot in one community

will be conducted and evaluated before roll out to other primary care sites across the province. The pilot will assess the feasibility and work through potential challenges. The following objectives relate to the pilot clinic and identify the level of attainment or progression towards the program goal (McKenzie et al., 2013).

Objectives

1. By the end of the first year of the pilot clinic operation, the incidence of chlamydia and gonorrhea in males and females aged 15 to 29 years in the pilot community and across the province will decrease by 20%.
2. By the end of the first year of the pilot clinic operation, 70% of patients will be satisfied or very satisfied with the services of the sexual health NP (CNA, 2010b).
3. By the end of the first year of the pilot clinic operation, 60% of the clients who access the clinic will see the NP for their sexual health concerns (Stanik-Hutt et al., 2013).

Rationale to Support Objectives

The rates of STIs in Canada and PEI are on the rise (Department of Health and Wellness, 2014) but comprehensive sexual health services for youth on PEI may impact this trend (Schalet et al., 2014). An NP-led program for runaway girls in Minnesota was able to decrease the STI rate of 30% to 5% of the females that participated in their program (Collins, 2013). Similarly, in an STI prevention study, a nurse practitioner-directed, culturally specific, individualized intervention demonstrated a 20% reduction in STIs among African American women (Marion, Finnegan, Campbell, & Szalacha, 2009). In 2004, an American study used secondary data analysis of the National Hospital Ambulatory Medical Care Survey from 1997 to 2000 to examine whether NP care impacted the type and amount of health counseling provided during patient visits to hospital outpatient departments (OPDs). The results indicated individuals who

visited the OPD for non-urgent concerns were counseled on human immunodeficiency virus (HIV) and sexually transmitted illness (STI) prevention 3 times more often than OPDs without an NP. Outpatient visits for acute concerns indicated that patients received HIV/STI counselling and treatment 2.6 times more often in settings with an NP than without (Lin, Gebbie, Fullilove, & Arons, 2004).

New initiatives take time to build relationships, establish processes, and yield a productive practice. Based on the evidence above, it is reasonable to expect rates of gonorrhea and chlamydia could be decreased by 20%. Nurse practitioners have demonstrated their dedication to provide counselling related to sexual health concerns that can ultimately decrease rates of STIs in primary care, clinics, and emergency rooms.

Patient satisfaction is useful as a measurement for health care practice (Weston, Hopwood, Harding, Sizmur, & Ross, 2010). This critical indicator provides feedback on the provider's ability to meet client expectations and provides insight into the patient's perspective. Patient satisfaction with NP care is widely positive. Results of patient satisfaction questionnaires rate NP practice as safe, effective, and high quality (Agosta, 2009; Kelly, Biro, Garvey, & Lee, 2017; Stanik-Hutt et al., 2014). Patient satisfaction has been as high as 83.8% in NP-led clinic environments (Coleman et al., 2017). Strong evidence exists for high patient-satisfaction levels when NPs are used in the ED setting. A Canadian study found 71% of the participants' preferred NP care over physician care, specifically for the attentiveness and comprehensive nature of the services received (Thrasher & Purc-Stephenson, 2008). A cross-sectional survey of 120 adult clients (age ≥18 years old) seen by NPs at two health centres in Kingston, Jamaica was conducted using a modified self-administered Nurse Practitioner Satisfaction Survey questionnaire. Satisfaction scores were very high (81 of a possible 90 points); 83% of

participants were very satisfied and another 17% were satisfied with the services the NP provided (Jones, Hepburn-Brown, Anderson-Johnson, & Lindo, 2015).

The discussion above presents evidence of high patient satisfaction across a number of health settings. The literature supports the intent of objective two to achieve 70% patient satisfaction with the proposed services of the sexual health NP.

Patients choose NP health care due to improved education, communication, feedback, and competence (Agosta, 2009; Kelly et al., 2017). In a national online survey in Australia, 87% of the people that responded said they would see an NP for health-related concerns (Parker, Forrest, McCracken, McRae, & Cox, 2012). An anonymous electronic survey of 1000 employees was completed at a non-profit organization in the state of Washington. They were given the choice to see an NP or a physician; 58% choose to see an NP for their health care needs (Brown, 2007). At an emergency room (ER), in Ireland 114 patients completed a prospective survey after they had been treated by an NP; 99% of the patients said they would see an NP for their health care concerns (Griffin & McDevitt, 2016). These statistics support that a rate of 60% of patients who present to the NP-led sexual health clinic will access NP services.

Part III: Project Design and Implementation

The proposed initiative, an NP-led primary health care clinic designed to provide evidence-based sexual health services and patient-centred care, is a cost-effective approach to meet the sexual health needs of youth on PEI. To optimize program development and implementation, operational strategies must be identified to ensure and improve availability, access, education, quality of care, and gender equity and address the sexual health needs of youth (Fajans, Simmons, & Ghiron, 2006). Current research suggests the use of a rights-based

approach to sexual health services (Berglas, Constantine, & Ozer, 2014). Berglas et al. propose that a rights-based approach in youth sexual reproductive health (SRH) can be defined as the:

> intersection of four elements: an underlying principle that youth have sexual rights; an expansion of programmatic goals beyond reducing unintended pregnancy and STDs; a broadening of curricula content to include such issues as gender norms, sexual orientation, sexual expression and pleasure, violence, and individual rights and responsibilities in relationships; and a participatory teaching strategy that engages youth in critical thinking about their sexuality and sexual choices. (p. 63)

The WHO (2010) outlines five domains critical to the development of a rights-based, comprehensive, multisectoral approach to a sexual health program: laws, policies, and human rights; education; society and culture; economics; and health systems. The involvement of youth in all phases of planning, design, and implementation will ensure that the program is geared to their needs and preferences (Healthy Child Manitoba, 2006).

Clinic Framework

Laws, policies, and human rights. Laws, the rules of society, can provide the framework for the implementation of sexual-health-related policies, programs, and services. They can provide human rights guarantees but they may also create limitations. Either way, laws and regulations help to ensure the highest attainable standard of sexual health. This domain of the WHO (2010) framework identifies a philosophy that acknowledges rights, gender equity, and social justice.

Youth sexual rights. Youth have rights that must be accounted for when considering access to and the content of sexuality education. Youth deserve to express their sexuality, choose when to initiate or participate in sex, decide if or when they want to have children, and to have a

sex life that is enjoyable and free from harm (Berglas et al., 2014). These rights have not yet been fully attended to on PEI. Sexuality education is limited and difficult to access in a youth-friendly environment. The sexual health services of the NP-led clinic will be offered and available to youth on PEI and will ensure a youth friendly environment.

Confidentiality is one of the qualities most important to youth accessing sexual health services (Ingram & Salmon, 2007). Information leaflets and posters that discuss the importance of confidentiality will be displayed in the waiting area, demonstrating the importance of confidentiality at the clinic (Keefe, 2012). Background music can assist with privacy and confidentiality (Ingram & Salmon, 2007) as well as properly insulated walls and doors to support a confidential atmosphere (Keefe, 2012). A number system, or first name only, will be used to call patients from the waiting room, no patient information will be visible to other patients, and all patient data will be secured (Keefe, 2012) per Health PEI policy. One-on-one consultations will take place in individual rooms and participants in group sessions will be reminded of the importance for confidentiality of the youths within the group. All staff members of the sexual health clinic will be asked to sign a confidentiality agreement.

Expansion of goals of sexual health programs. Research indicates that the goal of a youth sexual health program must move beyond the narrow focus of pregnancy and STI prevention to promote well-being, to empower youth to make healthy sexual decisions, and to avoid high-risk behaviours (Berglas et al., 2014). The suggested NP-led Sexual Health Clinic is designed to assist youth to understand a positive view of sexuality, to provide them with information and skills for taking care of their sexual health, and to help them make sound decisions now and as they mature into sexually healthy adults. The clinic will be guided by four primary goals: to provide evidence-based accurate information about human sexuality; to

provide an opportunity for youth to develop and understand their values, attitudes, and insights about sexuality; to help youth develop relationships and interpersonal skills; and to help youth exercise responsibility regarding sexual relationships (Sexuality Information and Education Council of the United States [SIECUS], 2017).

Broadening of curricula. Prevention of disease and pregnancy are traditional topics of sexual health curricula but the cultural and social content of sexual health are often overlooked. Gender equality and norms are integral parts of a rights-based approach to sexual health, as well as human rights, citizenship, social justice, and the clarification of sexual information retrieved from peers, family, school, and media (Berglas et al., 2014). This NP-led initiative will function from a locus of inclusiveness in adolescent sexual health education programming. Sexual health education strategies will be evidence-based and draw from a broad range of disciplines (i.e., social, behavioural, medical, and public health sciences). Harmful issues such as gender inequality and stereotypes will be addressed via an embedded clinic philosophy that is inclusive of a wide range of viewpoints and populations. Clinic operations will avoid heteronormative approaches and aim to strengthen youths' capacity to challenge harmful stereotypes. The clinic's comprehensive approach to sexuality education recognizes the personal, interpersonal, social, economic, and cultural factors that shape adolescents' sexual motivations and behaviours (Schalet et al., 2014).

Youth engagement. On PEI, sexual health education is provided in a classroom setting often in large gender-blended groups. Content is delivered in a lecture format and discussion is limited by a restrictive academic schedule. An interactive, participatory, and youth-centred atmosphere will engage youth and allow them to discuss their thoughts and experiences, to build on their current knowledge, and to promote empowerment to make positive decisions (Berglas et

al., 2014). In the proposed NP-led clinic, youth will be involved in all phases of planning, design, and implementation. Traditional approaches such as youth advisory boards and youth focus groups will be used to provide input into the clinic plan and design. Youth will be invited to participate in programming, including advocacy efforts, governance, and evaluation (Villa-Torres & Svanemyr, 2015). Youth will also be utilized in the role of peer mentors/educators. Youth leaders associated with the Newcomer Association of PEI and the Indigenous community on PEI would be an asset to the planning and implementation committee as members or affiliate members. Youth participation benefits the youth, makes the program more relevant and credible, and strengthens the program's ties to the larger community.

Education. Health professionals can improve sexual health decisions through health promotion strategies related to self-care. Youth who have access to evidence-based information make informed decisions about their bodies, health, and relationships (Medical Foundation for Aids and Sexual Health, 2005). The education component of this program will follow WHO guidelines (WHO, 2010) and be adapted to reflect the input received from the youth involved in the process. Youth are entitled to evidence-based sexual health education. In the NP-led clinic, the sexual health education program will provide a safe, confidential, respectful, youth-oriented focus. Also, each participant will receive written instructions with the diagnosis and treatment, information pamphlets, follow-up instructions, and patient-centred education.

Society and culture. Family, community, and culture can influence if and how people access sexual and reproductive health services. Respect and acknowledgment of culture are necessary (Fajans et al., 2006). Sociocultural factors must be recognized and incorporated into program planning and implementation. Inclusion will promote open, honest communication and encourage 'buy-in' from community members. With population growth of 1.7 % from July 2016

to July 2017 (PEI Statistics Bureau, 2017), PEI is the fastest growing province in the country. The youth on PEI has become more culturally diverse. A recent surge in immigration drives the growth. Also, recruitment strategies at UPEI have successfully targeted international students who now comprise 21% of the student population (UPEI, 2016). Relevant literature, translated into different languages, will be available at the clinic and the use of interpreters will assist staff-patient communication.

Economics. Youth may engage in high-risk behaviours due to financial necessity. To be effective, sexual health programs must be aware of how economic need and health outcomes are linked and address the relationship between sexual behaviour, power dynamics, and financial dependence (WHO, 2010). Financial needs of youth are an important consideration. A person who presents to the NP-led clinic must have a valid PEI health card or third-party insurance; if he/she does not, he/she will be made aware of the cost of services (Health PEI, 2016b). Those without provincial coverage will not be refused service. An economically successful community, with opportunities for youth employment and financial growth, support positive sexual practices. The involvement of local small business associations and ministers of legislative assembly (MLAs) will provide support and guidance to youth and the team members.

Health systems. Services to support sexual health must be accessible, confidential, private, non-discriminating, and offered to all youth. Healthcare providers should be trained to assess youth with sexual health concerns and refer to other professionals as appropriate. Sexual health services can be combined with primary health care, reproductive health services, or as a separate service and the design should support assessment and treatment of sexual health problems and concerns (WHO, 2010). An NP-led clinic will promote a client-centred approach guided by the principles of accessibility and confidentiality consistent with WHO principles.

Physical Space

To ensure the success of the NP-led clinic, attention must be paid to the physical space and service environment. The most cost-efficient and accessible space on PEI to house this clinic is a Health PEI health care centre. There are 12 primary health clinics on PEI, located in Summerside and Charlottetown, as well as rural communities (Health PEI, 2017a). The Alberton Health Centre has the necessary space and equipment for an NP-led sexual health centre pilot project. The utilization of an existing clinic would help reduce cost and the necessary structure, space, and hardware (computers, phones, etc.) would be in place. It may also reduce the stigma of a stand-alone sexual health clinic. PEI is a small province with small towns and cities in comparison with other Canadian provinces. The stigma of a sexual health clinic may be a barrier for youth to access services if they believe confidentiality is a threat (Ingram & Salmon, 2007; Leonard et al., 2012). If there is no space available during regular office hours, evening and weekend clinics could be advantageous. Evening clinics would have less impact on the facility and improve access to youth who attend school or work (Leonard et al., 2012). There will be one exam room per clinician but they may have to share an office at some sites.

Health PEI clinic buildings are wheelchair accessible and located in communities across PEI which would improve access for youth. Security, washrooms, offices, furniture, computers, exam rooms, exam tables, supplies, infection control practices, garbage disposal, sanitation, and cleaning are all in place for these facilities. Electronic health records (EHR) are in the process of being implemented across the province, which improve patient outcomes, support adherence to guidelines, and assist with disease surveillance (Chaudhry et al., 2006). A health centre chosen on PEI for a sexual health clinic may not have EHR, but it would be beneficial.

Sexual Health Services Team

The composition of the sexual health team will be critical to the success of the clinic. For the proposed NP-led clinic the following complement of staff is requested: 1 full-time equivalent (FTE) Primary Health Care NP, 1 FTE registered nurse (RN) 2, 1 FTE medical office assistant, and a physician (for collaboration and to work at the clinic 4-8 hours a week). The roles and responsibilities of each team member are discussed below.

Nurse Practitioner. Nurse Practitioner-led clinics have been shown to improve patient satisfaction, symptom control, data collection, medical outcomes, and reduce hospital admission rates (McLoughney, Khan, & Ahmed, 2007; Stanik-Hutt et al., 2013). The NP will serve as the Clinic Lead, and head the sexual health services team, and oversee the design, plan, workflow, and day-to-day activities of the clinic. The NP will provide comprehensive, quality, cost-efficient patient care that is based on best practice as directed by the PHAC sexual health guidelines (PHAC, 2018). S/he will be responsible for the assessment, diagnosis, treatment, and care of patients, as well as surveillance and reporting of STIs and continuous appraisal and improvement of the clinic. S/he will be registered as an NP with ARNPEI, will be a graduate of an approved Master of Nursing Program – Primary Health Care Nurse Practitioner Stream, and will have a minimum of 2 years of sexual health experience. The NP lead will have an interest in youth and their sexual health issues and possess competencies in confidentiality, integrated health risk assessment, clinical care of adolescents, and prenatal care (WHO, 2015). Successful completion of the Canadian Public Health Association (2017) core competency modules for sexually transmitted blood-borne infections will be required within the first year of practice.

Physician. On PEI, an NP must practice in collaboration with a physician (ARNPEI, 2012b). Collaboration between NPs and physicians enhance professional relationships, reduce

numbers of hospital admissions and length of hospital stays for patients, and decrease health care costs (Bridges, 2013; Stanik et al., 2013). The physician associated with the clinic will be a member in good standing of the College of Physicians and Surgeons of PEI and have an interest in the care and treatment of youth with sexual health concerns. The physician would need to be available for collaboration by phone or email and on-site at the clinic half a day a week for collaboration and to see patients. The total hours expected for collaboration and on-site presence is 4 to 8 hours a week, to be adjusted as needed.

Registered Nurse (Level 2). In keeping with the strength of interprofessional practice, a Registered Nurse (Level 2) with a baccalaureate degree in nursing and trained in sexual health services will also be part of the team. S/he will treat patients based on best-practice guidelines and promote healthy sexual attitudes and relationships and physical, mental, and social health. A Registered Nurse (Level 2) can work autonomously within the professional scope of practice but may need the guidance and support of an NP or physician, depending on the task at hand. Specific attributes of the registered nurse should include: knowledge of adolescent development and health promotion (smoking cessation, healthy diet, exercise, and prenatal care); strong communication skills; knowledge related to youth sexual health issues, best practice treatment, contraception, vaccines, STIs, HIV and hepatitis prevention, tests, and treatment; and the detection and management of acute and chronic disease (WHO, 2015).

Medical office assistant. A full-time medical office assistant dedicated to the youth sexual health centre is a critical member of the team. The medical office assistant is the first face the patients of the clinic see and s/he provides the first opportunity for the patient experience to be a positive one. The medical office assistant must maintain confidence of phone conversations, interactions with patients, and discussions with other staff members (Keefe, 2012). The medical

office assistant will be responsible to register patients for the clinic, update EHR, send referrals, answer phones, relay messages as necessary, and stock exam rooms. If a patient expresses signs of distress, the medical office assistant will provide a private area for that person and make the appropriate caregiver aware. The medical office assistant is responsible for the delivery of laboratory specimens to the appropriate laboratory. S/he will be a member of the International Union of Operating Engineers (IUOE) and have completed the medical office assistant course. Experience interacting and working with youth will be an asset.

Workflow

Workflow is the processes, people, and resources necessary to complete a set of tasks. The efficiency and effectiveness of the workflow impacts the whole organization (Cain & Haque, 2008). Individuals who wish to use the services offered at the clinic may access these through a number of ways. Health professionals may refer patients to the clinic or patients may self-refer. The referrals will be triaged by the medical assistant per a guideline provided by the NP. The medical assistant will direct all questions related to triage to the NP. Patients who present to the clinic may have a primary care NP or physician or may be unaffiliated. The goal is for patients to see an NP, RN, or physician within 1 week of requested services. The NP will devise a set of guidelines that will outline the types of patients each practitioner will have booked with them. There will be time allotted for the NP and RN to have four walk-in appointments a day, booked appointments, and two evening clinics a week. The hours of operation will be Monday and Friday 0800 to 1600, with evening clinics Tuesday, Wednesday, and Thursday 1300 to 2000. It will be closed to patients from 1200 to 1300 and 1700 to 1730. There will be two same-day, high-risk appointments (genital ulcers, pelvic or abdominal pain) each day. Each

health care provider will be responsible for taking histories and obtaining medication lists, allergies, and vital signs.

The medical office assistant serves as the primary access point to the clinic and triages incoming calls/inquiries for sexual health services. If the medical office assistant has a question, he/she addresses the NP with the question. When a patient presents to the clinic, s/he will approach the medical secretary who is responsible for noting in the EMR that the patient is present for the appointment. The patient is called in by the care provider, assessed, and treated as necessary.

If a follow-up appointment is required, it will be arranged at the time of departure. The responsible healthcare provider will give the patient a note with the necessary information for the medical secretary, to book the next appointment. A referral process and appropriate form will be provided for services not available at the clinic (e.g., mental health, public health, addictions, abortion services, and sexual assault investigation). The healthcare practitioner will complete the necessary forms and give them to the medical secretary who will fax or send them to the appropriate service and provider. The RN may not have the authority to refer to some services and will need to review this for signature with the NP or physician. Each clinician is responsible to review the results of the diagnostic tests s/he requests. The clinicians may ask the medical office assistant to call patients to arrange a time to discuss the results with the health care provider. However, critical labs must be addressed by the ordering provider. The clinician is also responsible to report diagnostic results as dictated by the Public Health Act (Legislative Council Office, 2016). The NP, RN, and MD will collaborate as necessary, as well as have a designated time to meet once or twice a week, depending on the need for collaboration.

Project Activities and Timeline

A written outline is provided to reflect the activities and timeline necessary to complete the process of design and implementation of an NP-led sexual health clinic for youth on PEI and a Gantt chart provides a visual representation (see Appendix A).

Completed project proposal. The proposal for this project was begun as part of the requirements for the Masters of Nursing, Nurse Practitioner Program at UPEI and will be completed in April 2018. The project provides the evidence related to a gap in sexual health services for youth on PEI and a plan to support an NP-led primary care sexual health clinic to fill this void.

Health PEI approval. The synthesis project will be presented by the NP to a representative of Health PEI in April 2018. The representative will then discuss the concept of an NP-led sexual health clinic for youth to the senior management team at Health PEI in consultation with the CEO, and the recommendation will be made to the Health PEI board whether or not to approve the project.

Review project plan. The NP will be the project lead and develop this NP-led youth primary care sexual health clinic. The management system for this project begins at Health PEI with the CEO. The next person responsible for the operation of this clinic is the Director of Primary Care and Chronic Disease for PEI. They control the budget and allotment of services for primary care on PEI. The next person responsible is the NP. An NP-led clinic is no different from other medical clinics but it operates with NP leadership and voice. The NP will be in charge of day-to-day operation of the clinic (CNA, 2010b) and will work collaboratively with other team members to ensure the clinic is functional, fiscally responsible, and patient centred.

Job postings, interviews, and human resources. Job descriptions will be developed by Human Resources (HR) of Health PEI for the NP, RN, physician, and medical assistant. Jobs will be posted internally to the Health PEI employment website for 2 weeks. Applications will be reviewed by HR over 1 week; job interviews will take place, and the positions will be filled over a period of 3 weeks. The job interviews will be arranged and conducted by representatives from Health PEI human resources, primary care, and a clinical lead of the district chosen as the first sexual health clinic. Once the NP is chosen, s/he will participate in the interviews for other staff members.

Stakeholders and partnership development. The important stakeholders in this project are the youth of PEI. They will be involved in all parts of the process of the development of this clinic. The NP will meet with students at Westisle High School and Holland College and create an interested group of youth to assist with the development of the pilot clinic. The assistance from Health PEI staff and partners is important to ensure the success of this project. Key relationships include: the Minister of Health, the Director of Primary Care and Chronic Disease, the Chief Public Health Office, information technologists, managers, NPs, physicians, registered nurses, medical secretaries, housekeeping, dietary, mental health and addictions, public health nursing, and the Women's Wellness Centre.

The community stakeholders who will contribute to the success of the program are the PEI Pharmacists Association, high school students and principals, Holland College students and staff, UPEI campus and staff, local recreation directors, Prevent. Educate. Empower. Respect. Support (PEERS), the Newcomer Association, and local community government members (town councillors for recreation, finance, and economic development). These partners ensure community input and that gender and cultural concerns are included in the process.

Budget confirmation with Health PEI. The Health PEI process for budget approval will be followed. Budget justification will identify the appropriate funds to be allotted or allocated to complete this project.

Secure space. The 12 primary care health centres on PEI will be assessed and space allotted for the pilot sexual health clinic. Some of the facilities not able to house the NP-led sexual health clinic during office hours will be assessed for evening clinics. One clinic will be chosen by Health PEI and the NP in a rural area of the province to act as a pilot site for further implementation across the province. The Alberton Health Centre has space available and is in a central location for West Prince. It will be suggested as the first clinic with a roll out to other 11 clinics.

Confirm final design of clinic. The final design and workflow of the clinic will be confirmed by the youth panel, architects for Health PEI, Health PEI administration, the NP, the RN, and the medical office assistant.

Ensure appropriate communication equipment. Primary health care clinics on PEI are equipped with telephones, computers, faxes, and printers. The clinic will have an open line to receive calls and private lines in each office for the NP, RN, and MD. Each provider will have access to the online or phone Health PEI dictation system. The NP, RN, and MD will each have a laptop loaded with the required programs for charting, with access to the provincial radiology, diagnostic, and electrocardiography programs. The NP will be responsible for abnormal results received after hours. A cell phone issued by Health PEI will be necessary to receive these calls.

Policies. The NP, RN, medical assistant, and a representative from Health PEI are responsible for the development of policies and procedures for the NP-led primary care sexual health clinic. The NP and RN will review relevant existing Health PEI policies and assess what

new and additional policies may be needed for the sexual health clinic. Examples of policies that must be developed are the STI and intrauterine device policies.

Publicity. Health PEI will be responsible for the advertisement of the NP-led primary health care sexual health clinic. Public awareness initiatives will be carried out locally and provincially in French and English with Mandarin information available, for 2 months prior to when the clinic opens. Assistance from local businesses, pharmacies, rinks, schools, newspapers (The Guardian, The Journal Pioneer, and the West Prince and Eastern Graphic), medical health centres, and Health PEI websites will improve the distribution of information. Pamphlets will be given to businesses to post and the clinic will have office cards to distribute.

Office equipment and supplies. The primary health clinics on PEI are fully equipped with offices, exam rooms, desks, chairs, and supplies in exam rooms. Before a clinic is chosen as a sexual health clinic space the NP, RN, medical assistant, and a representative from Health PEI will ensure there is enough equipment to cover the increase in staff and patient volume. The Alberton Health Centre has the necessary space and equipment necessary. The NP, RN, medical assistant, and a representative from Health PEI will assess the Alberton Health Centre site and create a list of stationary, office supplies, exam room supplies, and equipment (e.g., speculums, STI swabs and testing supplies, contraceptives, medications, computer programs [e.g., Up to Date], and education materials) necessary. This list will be presented to Health PEI for approval and then ordered by the medical office assistant. The NP, RN, and medical office assistant will stock each office and exam room with the necessary supplies. In the future, the medical assistant will be responsible to stock supplies and check expiration dates each month. The NP and RN will assist with inventory control as necessary.

Implementation of a sexual health clinic. The rural pilot site will operate Monday and Friday 0800-1600, and Tuesday, Wednesday, and Thursday evenings 1300-2000. The NP, RN, and medical assistant will be present during these hours, with the collaborating physician present to see patients and collaborate on Friday from 1300-1600. The clinic will be open to youth aged 15 to 29, with a sexual health concern. If other medical concerns are identified, they may be dealt with at the clinic, or as required, referrals will be made to appropriate health care providers.

First month of operation to evaluate and make adjustments. Patient flow during the first month of operation will be kept purposefully light. Each youth who attends the clinic will complete a questionnaire to provide feedback on the strengths and weaknesses of the clinic and information related to his/her knowledge of sexual health. This time frame will be used to identify areas that need to be changed or adjusted, to promote the patient flow. There will be monthly meetings with the youth panel, a Health PEI representative, the NP, RN, and medical assistant to assess areas that may be improved and make adjustments as necessary in the presentation, assessment, treatment, discharge, and follow-up of patients in relation to the questionnaires.

Full operation. In February 2019, the pilot NP-led primary care sexual health clinic will be fully operational.

Evaluation. An evaluation will be completed after 1 year, which will include youth surveys. A Health PEI representative and the NP will collect and analyze the survey data and present it to the youth panel, Health PEI Director of Primary Care, RN, physician, and medical assistant and make changes as necessary to improve the operation and function of the clinic.

Part IV: Project Evaluation

Evaluation is an important aspect of the development of a new program. The evidence-informed research will contribute to the value and goals of the sexual health clinic, support policy to improve the sexual health of youth on PEI, and promote sexual health as being a segment of overall health (PHAC, 2012). Evaluation of access, effectiveness, patient satisfaction, and patient outcomes are the best characteristics to assess the quality of an NP-led health care program because it takes into account the structure and process of the care provided (Stanik-Hutt et al., 2013). Improved health should be measured as an outcome of a health promotion program, but success can also be evaluated by the impact the program has on knowledge, attitudes, and behaviours (McKenzie et al., 2013). The evaluation process will support the improvement and development of the clinic.

Objective One

By the end of the first year of the pilot clinic operation, the incidence of chlamydia and gonorrhea in males and females aged 15 to 29 years in the pilot community and across the province will decrease by 25% (Collins, 2013). The rates of these STIs will be evaluated by monitoring monthly rates of chlamydia and gonorrhea in males and females aged 15 to 29 years of age. Data will be collected through the Health PEI IT system by tracking the International Classification of Diseases (ICD) codes. These codes are used consistently among health care providers to classify and code all diagnoses, symptoms, and procedures recorded in conjunction with the provision of health care services. At the end of 1 year of operation, the Health PEI data from the year prior to the implementation of the SHC, the Health PEI data of the current year, and the monthly data of the SHC will be gathered. The PHAC uses statistical analysis to maintain records and trends of communicable disease that include chlamydia and gonorrhea for

each province with the assistance of mandatory reporting by health care providers (PHAC, 2014). The Chief Public Health Office of PEI led by Dr. Morrison is a stakeholder and collaborator for this clinic, and will be able to provide up-to-date data related to these infections. A community and provincial decrease in the number of these infections and the observation of a downward trend of STIs month to month will support the positive effects of the NP-led clinic on rates of STIs. This information will be collected and compiled by the NP and a research assistant associated with Health PEI.

Objective Two

By the end of the first year of the pilot clinic operation, 70% of patients will be satisfied or very satisfied with the services of the sexual health NP. Patient-derived outcome measures are important in the development of patient-centred programs, to measure and standardize best-practice (Weston, Hopwood, Harding, Sizmur, & Ross, 2010). Agosta (2009) created the Nurse Practitioner Satisfaction Survey (NPSS) that is a valid and reliable tool to measure NP patient satisfaction in a primary care setting. The NPSS measures convenience, accessibility, competence, knowledge, trust, receptivity, openness, and communication using Likert scales, as well as records patient demographics, health status, opinions, and education they received previously (Agosta, 2009). A previous measure of internal consistency for this questionnaire was 0.98% (Agosta, 2009). The NP will gain permission to adapt this validated tool to measure patient satisfaction with the NP and the NP-led SHC. Throughout the first year of operation, and ongoing as necessary, youth who have been seen by the NP at the SHC will be asked to participate in an on-line quantitative questionnaire. The survey will include an online consent. Each patient who sees the NP will be asked by the NP to stop at the desk of the medical assistant on his/her way out. The medical assistant will have an iPAD with the online survey for the NP

services. The medical assistant will ask the youth if s/he is willing to participate. The iPAD will have a short explanation of the survey and a box, if checked, indicates the consent of the youth. The pre-survey message will say that all responses are anonymous and the youth do not have to fear reprisal because of their response, in youth appropriate language. It will be a consecutive sample. The exclusion criteria are individuals who do not have a level of computer skill to complete the questionnaire. The questionnaires can be completed on an iPAD provided by the NP-led sexual health clinic or on a youth's device. The iPAD has a choice of 25 languages to make it accessible to different cultures. If they choose, the participants can log into a web site built for the study and access the questionnaire online.

Data analysis will be descriptive and inferential (Polit & Beck, 2017). The Software Package for the Social Sciences (SPSS) will be used for the statistical analysis (Polit & Beck, 2017). Data will be shared with Health PEI and used to improve services and the process of the SHC.

Objective Three

By the end of the first year of the pilot clinic operation, 60% of the clients who access the clinic will see the NP for their sexual health concerns. Nurse practitioners are able to provide high quality, comprehensive service (Stanik-Hutt et al., 2013). The information for this objective will be captured monthly by the statistics kept on the appointment software utilized by the clinic. The NP is listed on the Health PEI IT system as a provider and the total patient visits to the clinic will be captured for the three providers at the clinic. The NP and Health PEI research assistant will collect the data and analysis will be completed with the SPSS. The information will be shared with Health PEI and used to improve the SHS for youth on PEI.

Part V: Knowledge to Action Plan

Knowledge to action is also known as knowledge translation. It is a process-driven approach described as "the uptake of knowledge based upon the synthesis, dissemination, exchange and ethically sound application of knowledge to improve health, provide more effective health services and products, and strengthen the health-care system" (Lockwood & Hopp, 2016, p. 319). Knowledge to action supports the use of evidence-based practice to improve the health of individuals. Three important areas to focus on during knowledge translation are the stakeholders, communication, and the challenges involved in the development of an NP-led sexual health clinic (WHO, 2010).

Stakeholders

Engagement of key stakeholders early in a project creates a network to facilitate the dissemination of the outcomes (Sanders, Edwards, & Keegan, 2017). The stakeholders included in this project are the youth of West Prince, community partners, Health PEI executive and staff, the Chief Public Health Office, local health care practitioners, mental health and addictions staff, and the Women's Wellness Centre. AT the end of the first year of operation, and upon completion of the clinic evaluation, they will be made aware of the results of the clinic evaluation and be asked for their input to improve the effectiveness of the SHC.

Communications

Communication is often overlooked but is an important component of a successful project. Communication with the community and stakeholders encourages information sharing, and normalization of the services of a sexual health centre (WHO, 2010). The NP, with the cooperation of the leadership staff of Westisle High School and Holland College West Prince Centre, will have discussions with the students of these facilities about a sexual health clinic and

form a youth advisory board. This group of youth is an important link to ensure the project is built to meet the needs and expectations of the population it will serve. After completion of the first year of operation, the NP will make a presentation to the youth of the pilot community disseminating the evaluation results, highlighting the successes and challenges of the NP-led sexual health clinic.

Communication with other community stakeholders will support acceptance and allow the NP to address negative attitudes that may exist with the community. Open lines of communication and sharing of information while addressing social norms will promote a positive relationship with the community (WHO, 2010). Meetings with the town council, recreation directors, and the parent council group of Westisle High School will assist with information sharing. The NP will be responsible to complete a written report of the evaluation results and will meet with the town council to discuss the outcomes gathered by the evaluation process, summarize parts of program that need to be built upon, and discuss changes that need to be made. A CBC PEI Compass television and Island Morning radio interview will be arranged with the NP and a Health PEI representative to promote the NP-led sexual health clinic in the pilot community and discuss the successes and challenges of the program in the first year of operation.

Discussions with the Health PEI Primary Care leadership team, support services, and the inclusion of all local health care providers will support communication during the development process, encourage the promotion and awareness of the services offered at the clinic, and assist with professional collaboration when the clinic is operational. The NP will meet with this group and review the report of the evaluation. The NP will also submit the development, process and evaluation results to a nursing journal to provide information to other health professionals regarding the first NP-led clinic in PEI.

Part VI: Budget

A budget is an "essential and critical" piece in the development of a health clinic (McKenzie et al., 2013, p. 303). The main expenditures for this NP-led primary care sexual health clinic are the personnel, space, supplies, advertising, and education materials. Please see Appendix B for a detailed list of the costs associated with the implementation of this project.

Human resources are the biggest expenditure for this project. The staff complement required is: 1 FTE NP, 1 FTE RN 2, a medical office assistant, and a collaborating physician available for collaboration and practice at the clinic 4 hours a week. The yearly salaries are based on full-time equivalents (FTE) of a practitioner, which include benefits, except the physician who is entitled to a collaboration fee and payment for 4 hours a week at the clinic with benefits.

The space that will be used for this clinic is existing space owned and operated by Health PEI and will be donated in kind. There will be an increased cost of electricity due to the operation of evening clinics. The existing space has the required hardware (e.g, offices, desks, computers, phones, exam rooms, exam tables, etc.).

Supply costs will be minimal compared to opening a stand-alone clinic. Many of the supplies are used presently at the clinic, but these supply costs will increase. The supplies used will mainly consist of speculums, swabs and specimen containers for STI tests and pathology, lubricant, fixative spray, gloves, and condoms. Condom cost may be able to be subsidized with the assistance of condom manufacturers. Patients will have to pay for intrauterine devices (IUD) but there may be some compassionate coverage from manufacturing companies. These costs are laid out in Appendix B.

Advertising will be done provincially and locally in newspapers, local businesses, pharmacies, rinks, schools, medical health centres, and Health PEI websites. The medium will be online, as well as posters made at Queen's Printer in Charlottetown.

Education materials for patients and materials for patient evaluations, which include written materials. Two iPADs are another required expense.

Some organizations support sexual health clinics and their costs. Information and pamphlets are available from the Society of Obstetricians and Gynecologists of Canada (SOGC) website Sex and U. The Canadian Aids Treatment Information Exchange (CATIE) also has information available. These would be accessed for the clinic. The Halifax Sexual Health Centre (HSHC) has received support from the Plum Foundation, an organization that assists sexual health centres with operational costs (HSHC, 2017).

Part VII: Implications for Practice

Nurse Practitioner practice has evolved on PEI in the last 12 years, from 5 NPs in 2006 (Day, 2017) to 30 registered NPs in 2018 (ARNPEI, 2018). Nurse Practitioner standards of practice have grown with the numbers. Nurse Practitioners can now prescribe most medications and order most diagnostic tests (ARNPEI, 2016). These core competencies are continually being assessed, challenged, and revised to support NP practice nationally by the CNA, and are adopted provincially by ARNPEI.

Professional Role, Responsibility, and Accountability

Professional role, responsibility, and accountability focuses on clinical practice; collaboration; consultation and referral; and research and leadership (ARNPEI, 2012a). The NP in an NP-led clinic works in a collaborative setting to provide safe, effective, and high quality care to a variety of patients that include people of lower socioeconomic status, the disabled, or

those who have comorbid conditions (DiCicco- Bloom & Cunningham, 2015). The NP will be responsible to maintain best practices so s/he will keep up to date with the most recent research and recommendations for SHS (CNA, 2010). The NP, in a leadership role, will be responsible for the daily and future clinic management and operations at this NP-led clinic.

Health Assessment and Diagnosis

Nurse Practitioners counsel, assess, diagnose, and treat vulnerable target populations (CNA, 2009) who may not seek medical assistance due to the stigma related to sexual health (Hayter & Harrison, 2008) or other barriers. Nurse Practitioners demonstrate a proficiency in health assessment, diagnosis, and advocacy for patients in health care settings (Maijala et al., 2015). The NP functions in a collaborative environment to perform a thorough assessment and diagnose patients (CNA, 2010).

Therapeutic Management

A nurse practitioner-led sexual health clinic will assist to fill the gap related to sexual health for youth by providing competent care that is able to address all facets of education, consent, prescribing of medications and treatments necessary, while developing relationships of trust and respect. Nurse Practitioners treat people holistically and include social and emotional concerns of their patients (DiCicco-Bloom & Cunningham, 2015). The NP is responsible to stay aware of best-practice treatments and health management for the patients s/he treats, to promote self-efficacy, and to coordinate patient care (CNA, 2010).

Health Promotion and Prevention of Illness and Injury

Nurse Practitioner-led sexual health clinics have improved access and sexual health services around the world (Ingram & Salmon, 2007). A steady rise of STIs on PEI (Department of Health and Wellness, 2014), a school-based sexual health education program with gaps related

to healthy relationships, gender issues, and multiculturalism demonstrate a void in sexual health care for youth (Leonard et al., 2012). An NP-led sexual health clinic will provide a cost-effective program that focuses on best practice interventions and patient-centred care (Stanik-Hutt et al., 2013) to assist the youth of PEI. The NP will watch for trends in population health, support health promotion, and participate in evaluation of services (CNA, 2010). The NP will be involved in health education at the clinic, at schools, and in the community to promote healthy sexuality.

The national NP core competencies are utilized by NPs in different patient care settings and they provide a framework for an NP-led sexual health clinic (ARNPEI, 2012a). Nurse Practitioner competencies guide advanced practice nurses to expand their role with safe, competent, and ethical practice (CNA, 2010a). Professional role, responsibility, and accountability; health assessment and diagnosis; therapeutic management; and health promotion and prevention of illness and injury are the competencies to support NP practice developed by the nurse governing bodies of the CNA and ARNPEI (ARNPEI, 2012a).

Conclusion

Sexual health is an important aspect of a person's overall health status. The youth of PEI are at risk of unsafe sexual practices (Leonard et al., 2012) due to a lack of access to a SHS that is inclusive and culturally sensitive to youth (Schalet et al., 2014) and guidance and treatment from a health professional who approaches youth sexual health with a rights-based approach. A rights-based approach to sexual health services provides a comprehensive approach to support the human right youth have related to sexual health services (Berglas, et al., 2014) and its importance is emphasized in this program plan.

A needs assessment was completed for PEI that discusses the lack of sexual health services for youth on PEI and the risks to youth due to this gap. The contributing factors, promising approaches, and the target population that relate to the sexual health services deficit were identified. Promising approaches are considered with the focus placed on a collaborative Primary Care NP-led initiative as an evidence-based alternative (Stanik-Hutt et al., 2013).

A Primary Health Care Nurse Practitioner-led sexual health clinic would approach sexual health from a human rights and social justice perspective utilizing a primary health care philosophy that supports self-care and community involvement (Munro et al., 2000). Nurse Practitioner-led clinics have been shown to improve patient satisfaction, symptom control, data collection, medical outcomes, and reduce hospital admission rates (McLoughney et al., 2007). The design of this NP-led primary care sexual health clinic has considered the determinants of health that have contributed to less than optimal outcomes for youth sexual health on PEI (e.g., income, education, culture, employment, personal health practices, and health services). The proposed model provides an innovative, efficient, and cost-effective method of health care delivery to fill the sexual health care gap present on PEI.

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Appendix A

Timeline

Activities	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.
Synthesis project fully completed	■											
Obtain final approval from Health PEI for initiative		■										
Review project plan			■									
Job posting, interviews and obtain human resources			■									
Stakeholders and partnership development				■								
Confirm budget with Health PEI					■							
Secure space					■							
Confirm final design of clinic						■						
Ensure appropriate communications and office equipment							■					
Policies							■					
Publicity								■				
Stationary, office supplies, supplies for exam rooms									■			

Implementation of sexual health clinic												
First month of operation												
Evaluate and make adjustments												
Full operation												
Final evaluation												

Appendix B

Budget

Expense	Total for First Year
NP salary plus benefits (1950hrs) Step 4	52.15/hr = 101,692.50
RN 2 salary plus benefits (1950hrs)	32.99/hr = 64,330.50
Medial Office Assistant (1950hrs)	22.21/hr = 43,309.50
Physician collaboration fee (10,000) plus 4 hours a week in clinic for 48 weeks	76.15/hr plus collaboration fee = 24,620.80
Supplies or equipment Speculums: small and medium box of 24- 53.00 (2.21 ea.) Large box of 19- 61.15 (3.22 ea.) Sterile Culture Swabs- Pack of 50/ 12.28 (.25 each) Gonorrhea and Chlamydia Swabs- Female 2.54 each/ Male 3.05 each Herpes/ Viral Swab- Pack of 50 for 79.00 (1.58 each) Urine Pregnancy tests- Box of 40- 26.00 (.65 ea.) Sterile Urine Containers- Case of 400/ 72.30 (.18 each) Lubricant- 3.5g Box of 100/ 5.30 (.05 each) Fixative Spray- 5.12 each Gloves- small, medium and large Case of 1000/ 109.17 (.11 each) Condoms	 2600.00 1170.00 4000.00 300.00 72.30 104.00 5.30 30.00 110.00 500.00 500.00
Advertisement	2000.00
Patient education and evaluation materials (includes 2 iPADs)	3500.00

Increased electricity costs	1000.00
Total	249,844.90

Note. Salaries include benefits obtained from S. Arsenault Human Resources, February 15, 2018. Prices are contract prices for Health PEI, per conversation with K. Barbour, materials and manager community buyer, February 07, 2018.