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## Increasing the Prescribing of Pre-Exposure Prophylaxis (PrEP) With a Pre-Exposure Prophylaxis Screening Tool

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**Increasing the Prescribing of Pre-Exposure Prophylaxis  
(PrEP) With a Pre-Exposure Prophylaxis Screening Tool**

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This Manuscript Partially Fulfills the Requirements for the  
Doctor of Nursing Practice Program and is Approved by:


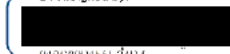

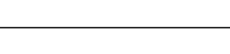
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**University of St. Augustine for Health Sciences  
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### Abstract

**Practice Problem:** Human Immunodeficiency Virus (HIV) is one of the leading pandemics in the world. In 2019, 38 million people were living with HIV around the world. Of those, roughly 87% were aware of their HIV status.

**PICOT:** In patients with high risk for HIV, how does implementing a pre-exposure (PrEP) screening tool compared to randomly screening for pre-exposure prophylaxis (PrEP) affect the prescribing of pre-exposure prophylaxis (PrEP) within eight weeks?

**Evidence:** In 2015, the World Health Organization (WHO) recommended PrEP for the prevention of HIV in high-risk individuals. The patients include men who have sex with men, sex workers, individuals with multiple sex partners, and intravenous drug users. In 2021, only about 25% of individuals with high-risk for HIV are utilizing PrEP.

**Intervention:** There are two interventions in this research: PrEP screening tool and prescription of PrEP.

**Outcome:** An increase in the number of those screened for the use of PrEP increased dramatically from previous screening. Although the percentage goal of those prescribed PrEP was not met, there was an increase in those prescribed PrEP compared to previous prescribing methods.

**Conclusion:** In conclusion, the use of a PrEP screening tool in general practice can increase the use of PrEP in high-risk populations. The best way to stop the HIV pandemic is to utilize the best prevention available, which is PrEP. Using a PrEP screening tool in clinics not knowledgeable on PrEP will increase the prescribing of PrEP.

## **Increasing the Prescribing of Pre-Exposure Prophylaxis (PrEP) With a Pre-Exposure Prophylaxis Screening Tool**

Human immunodeficiency virus (HIV) is a virus that has been classified as a global pandemic for many decades. Millions of people across the world have been affected by HIV, with millions dying from complications from the disease. Increasing the use of pre-exposure prophylaxis (PrEP) is a way to decrease the spread of HIV. Initiatives to combat this pandemic have been supported and discovered by world leaders and organizations, such as the use of PrEP to prevent HIV. PrEP is a medication that has been around for years; however no clear focus has been implemented to increase its usage on high-risk patients. Patients who are high risk for HIV are men who have sex with men, sex workers, individuals with multiple sex partners, and intravenous drug users. Nearly 14% of HIV positive patients were unaware of their HIV status (HIV.gov, 2020). Prevention, along with adequate screening, is imperative in decreasing that percentage. Implementing a PrEP screening tool will standardize screening to increase prescription of PrEP to high-risk patients.

### **Significance of the Practice Problem**

Human immunodeficiency virus (HIV) is a virus that attacks the body's immune system and, if left untreated, can lead to acquired immunodeficiency syndrome (AIDS). HIV started, possibly as early as the 1800s, when the virus was spread from chimpanzees to humans then spread across Africa and eventually across the world where it was initially seen in the United States in the 1970s (Centers for Disease Control and Prevention, 2021). HIV is transmitted by sexual contact, intravenous drug use, from mother to baby (during pregnancy, birth, and breastfeeding), and by contact with blood/body fluids. In 2019, 38 million people globally were living with HIV, with 1.7 million people becoming newly infected in the same year. Since the

start of the pandemic, 32.7 million people have died from AIDS, with 690,000 people dying from AIDS in 2019. Roughly 87% of people currently living with HIV knew about their HIV status (UNAIDS, 2020). According to the CDC (2021), the lifetime cost of treating one patient was roughly \$485,000. There were 10,000 fewer new cases of HIV in 2008-2017, which prevented an additional 100,000 cases of HIV because there were fewer undetected HIV patients to spread the infection. This saved roughly \$4.6 million in healthcare costs (CDC, 2021). Not only is there a financial burden on the healthcare system and society, but there are also negative impacts on the whole family. According to Ji et al. (2007), children of HIV patients often have psychosocial stress, absent or ill parent(s), financial deprivation, stigma of the illness, and discrimination. Relationships between couples can deteriorate when illness affects a person's ability to work and causes financial constraint which can result in anger, guilt, and resentment (Ji et al., 2007).

According to the Kaiser Family Foundation (KFF; 2022), pre-exposure prophylaxis (PrEP) has been shown to be effective in the prevention of HIV, with 99% effectiveness in preventing the spread of HIV during sex and 74% effectiveness in preventing HIV during IV drug use. PrEP is a daily medication, or more recently a monthly injectable, that is taken to prevent patients from contracting HIV. In 2015, PrEP was recommended for HIV prevention by the World Health Organization (WHO). A year later, PrEP research and development was declared to be accelerated by the United Nations (KFF, 2022). Along with condoms, PrEP is key prevention strategy to prevent HIV in high-risk patients, however only 25% of high-risk patients are using the medication. The current initiative is to have 50% of patients with high-risk for HIV use the medication by 2030 (CDC, 2021). Implementing a screening tool for PrEP will increase those screened as well as those prescribed PrEP, beginning the prevention of HIV.

### **PICOT Question**

Decreasing the spread of HIV is a worldwide goal; however, interventions are needed to increase utilization of preventative medication that have been readily available for years. In patients with high risk for HIV, how does implementing a pre-exposure prophylaxis (PrEP) screening tool compared to randomly screening for pre-exposure prophylaxis (PrEP) affect the prescribing of pre-exposure prophylaxis (PrEP) within eight weeks? The population of patients that were included in this evidence-based practice change project were adult patients (18 and older) who are high risk for HIV. Patients with high risk for HIV are men who have sex with men, sex workers, intravenous drug users, and patients with multiple sex partners. Race and gender are not significant for this population. Although it is recommended by the CDC that all patients from the age of 13-64 receive HIV screening at least once in their lifetime, this practice change focused on patients over the age of 18 (CDC, 2021). According to Minority HIV/AIDS Fund (MHAF; 2021), adults aged 24-45 had the highest percentage of HIV positive patients, but 45% of those were unaware of their status (MHAF, 2021).

The intervention was implementation of a pre-exposure prophylaxis (PrEP) screening tool. Pre-exposure prophylaxis is a medication taken daily to prevent HIV if a person should have exposure to HIV. If taken appropriately, this medication is 99% effective in reducing the contraction of HIV in sexual encounters and 74% effective in intravenous drug use encounters (CDC, 2021). A PrEP screening tool was a questionnaire that was given to patients identified as high risk for HIV to fill out while waiting for the provider. If the questionnaire was positive, the provider screened for the use of PrEP. PrEP screening tools have been formulated and utilized to determine PrEP eligibility. The comparison was randomly screening for PrEP. The previous screening was randomly checked if patients were interested in PrEP or prescribed PrEP

to patients who specifically asked for it. Most of these patients were men who have sex with men and no other population of patient.

The outcome was concluded through data that was collected before and after intervention implementation. The statistical testing used was the independent samples *t*-test, which is a technique used to determine the difference between two independent groups (Grove & Ciper, 2020). The time frame of this practice change was eight weeks, which was a reasonable time frame to see change.

### **Evidence-Based Practice Framework & Change Theory**

The Johns Hopkins Nursing Evidence-Based Practice (JHEBP) framework was a three-step guide to assist the nurse with the practice question, evidence, and translation of best practice into patient care (Dang et al., 2022). The initial inquiry was about preventing the spread of HIV by utilizing PrEP, which is a very effective prevention method. Increasing the use of PrEP was the concern. The DNP student determined a proper practice question and found evidence-based research already available to translate into practice. Once practice improvement was deemed successful, the team reflected on the success and determined how to apply it to the entire organization. There are several tools that were associated with this framework to assist in implementing a PrEP screening tool. The JHEBP framework tools helped with writing a proper practice question, communication regarding stakeholders, research, and publication (Dang et al., 2022). As this practice project moved through each process, the JHEBP framework guided the work that was completed.

The change theory that was utilized in this project was Ronald Havelock's model of change. Havelock's change theory consists of six phases: building a relationship, diagnosing the problem, acquiring resources for change, selecting a solution pathway, establishing and



accepting change, and maintenance (Wagner, 2018). The first step, building a relationship, was the step that determined a change that was needed, which was increasing the prescription of PrEP. The second step, diagnosing the problem, was deciding if a change was needed. This has already been determined because PrEP has been extremely successful at decreasing the spread of HIV, but utilization needed to be increased. The third stage, acquiring resources, was the start of developing, or brainstorming, a solution to make changes. The solution was the PrEP screening tool. The fourth stage, pathway solution, was the implementation of the change plan. In this step, the DNP student provided staff education to help move into step five, establishing and accepting change, so there was not resistance to change. Once the screening tool was determined successful, the sixth stage, maintenance, will take place and can be properly implemented throughout the organization (Wagner, 2018).

### **Evidence Search Strategy**

The DNP student found numerous research articles during the initial search. Many of them did not completely support the PICOT question, however several did. Databases utilized include Google Scholars and the University of St. Augustine for Health Sciences (USAHS) library, which included EBSCOhost, PubMed, ProQuest, and CINAHL. Key words in the literature search were PrEP screening tool, Pre-exposure prophylaxis screening tool, PrEP tool to increase PrEP prescribing, increasing PrEP usage, increasing PrEP prescribing, strategies for prescribing PrEP, PrEP criteria for prescribing. Filters included peer review articles between the years of 2015-2022. Inclusion criteria included articles that addressed the PICOT question. This included PrEP screening, PrEP prescribing, full text, and peer-reviewed. Age, sex, ethnicity, and sexual orientation were not eliminated from inclusion. Exclusion criteria included non-English

speaking literature, did not contain components of the PICOT question, and were over 10 years old.

### **Evidence Search Results**

Pre-exposure prophylaxis (PrEP) for the prevention of HIV is a major topic in research and healthcare over the last ten years. However, there is not a lot of research on screening nor ways to increase the prescription of PrEP. As stated above, Google Scholar and the USAHS library were the preferred search tools. In the USAHS library, the professional research inquiries were under EBSCOhost, PubMed, ProQuest, and CINAHL. A general search of citations rendered over ten thousand results; however, this was prior to implementation of the restrictions of peer reviewed research and a publication time frame of 2010-2021. Once those guidelines were implemented, the number was still over eight thousand results, however only twenty-nine were relevant to PrEP use. Once the DNP student evaluated the articles and compared them to the PICOT question only twelve were relevant. See Figure 1 for a PRISM diagram of the search process.

The twelve research articles selected were all evaluated by the DNP student based on the Johns Hopkins EBP Model. The JHEBP Model has five evidence levels based on the type of evidence and three levels based on quality. Ten of the articles were not literature reviews and were all graded based on these levels. The articles that contained experimental, prospective cohort studies, and intervention cohort studies were ranked level I and grade high on the JHEBP Model. Level I is the highest level on the hierarchy of evidence guide. High quality grade is the highest ranking on the JHEBP Model research evidence appraisal tool. According to Dang et al. (2022), the high-quality grade is associated with research containing sufficient sample size, thorough evidence, and consistent and definitive conclusions. The articles that were survey,

interview, and quasi-experimental were ranked level II on the hierarchy of evidence guide. The quasi-experimental articles were high quality grade; however, the articles that contained surveys and interviews were considered good quality grade. According to Dang et al. (2022), the good quality grade is research containing more reasonably consistent conclusions and results when compared to high quality. None of the articles selected ranked levels III-V nor were they low quality. See Appendix A. There were two systematic reviews that were determined to be relevant. One was a quality high, while the other was quality good. The higher quality article was directly correlated with the PICOT question compared to the good quality article. See Appendix B for Summary of Systematic Reviews (SR).

### **Themes with Practice Recommendations**

#### **PrEP Screening Tool**

PrEP use is known to decrease the spread of HIV; however, many are not utilizing this great tool. Females often lack this resource compared to men. It is estimated that roughly 5 out of 100,000 HIV positive patients in the United States were women. Of the 225,500 females who qualify for PrEP, only 14,700 were prescribed PrEP (Martinez & Waryold, 2022). Yumori et al. (2021) found that men (17%) were more often screened for PrEP use compared to women (1.1%) and women were mostly educated about birth control and condoms. Utilizing a simple PrEP screening questionnaire can be more functional than long questionnaire PrEP assessments, especially in youth and younger adults. Labossier et al (2021) found that narrowing a questionnaire down to relevant questionnaires from a 23-question screening tool can be utilized to properly assess for PrEP use. These questions mostly pertained to sexual history but also added intravenous drug use behavior as well (Labossier et al., 2021).

Assessing for the use of PrEP can be embarrassing for the patient. Offering different assessment platforms can be beneficial to increasing the use of PrEP. John et al. (2020) found that 30% of the population surveyed felt more comfortable assessing the use of PrEP electronically compared to the 19% in-person comfort levels, and 50% were comfortable in either platform. Patient perception of risk factors can also affect their willingness to use PrEP. Wilton et al. (2016) found that 64% of their studied population were high risk for HIV and candidates for PrEP. However, only 16% were considered optimal candidates because they rated high HIV risk, viewed themselves as moderate-high HIV risk, and agreed to take PrEP. Offering different platforms to PrEP screening can help increase the use of a PrEP tool, thus increasing prescribing of PrEP.

### **High Risk Sexual Behavior**

Individuals with risky sexual behavior are the top population associated with the spread of HIV. Female sex workers and individuals with multiple sex partners are among those with risky sexual behaviors. The HIV status of partners is usually unknown. These women are also abused sexually. Increase PrEP use among this population can help decrease the spread of HIV, however it needs to be beneficial to them as their lifestyle is often very mobile (Becquet et al., 2021). The authors of the study found that access to mobile and physical clinics was important in PrEP utilization in this population. Mobile clinics would be in the form of mobile medical units as well as standstill or physical clinics. Increasing PrEP screening in other high risk sexual patient populations, other than men who have sex with men, will increase the uptake of PrEP in high-risk populations.

### **Intravenous Drug Abuse**

Intravenous (IV) drug abuse is associated with many transmittable diseases, including HIV and Hepatitis C. Although IV drug abuse is a risk factor for HIV, it is often also associated with high-risk sexual behavior. According to Johnson et al. (2022), prior to 2020, the use of PrEP was not assessed in IV drug users or patients receiving medications for opioid abuse (MOUD). Picard et al. (2020) found that there was not a tool that specifically and accurately assesses IV drug users for the use of PrEP. Utilization of the CDC screening tool only determined 39% were eligible for PrEP, whereas 71% were eligible with the assessing for risk of contracting HIV (ARCH-IDU) tool. Combining both tools did determine that 89% of IV drug users were eligible for PrEP (Picard et al., 2020). Johnson et al. (2022) also found that 59% of patients assessed for PrEP were eligible with both tools, compared to 18% just based on sexual behaviors and 9% based on IV drug use. Goldstein et al. (2020) also found that at least 38% of adults who received treatment for substance abuse disorder (SUD) were at high risk for HIV and were good candidates for PrEP use. PrEP screening should be implemented in SUD/MOUD treatment facilities and clinics to increase the use of PrEP in high-risk IV drug abusers.

HIV PrEP use has been shown to be beneficial in the prevention of HIV for patients at high risk. Although men who have sex with men are the highest risk for HIV and are more often screened for the use of PrEP, other patients are also at risk and need to be screened frequently. Offering screening options can be beneficial to those who do not feel comfortable answering questions in person. Bringing screening to patients via mobile units can also help reach transient patients who are not able to go to physical clinics. Lastly, collaborating with other healthcare clinics, such as SUD treatment centers, can also help increase screening for IV drug users during treatment. There are numerous ways to increase HIV PrEP screening and can decrease the spread of HIV.

## **Setting, Stakeholders, and Systems Change**

### **Setting**

This evidence-based practice implementation project took place at a Kansas City Federally Qualified Healthcare Center (FQHC). This FQHC facility provides care for roughly 40,000 patients each year from at least five counties in the Kansas City Missouri and Kansas populous. There are a total of nine facilities in the organization. This organization provides numerous specialized care: adult medicine, pediatrics, family medicine, dental, optometry, behavioral health, women's health, and mobile units that are dedicated to the homeless population. Most of the population served are low income, uninsured, undocumented, and/or homeless. This FQHC facility mission statement is improving "the health and wellness of the community by delivery of accessible, quality, comprehensive patient care," (Swope Health, 2022).

This organization currently treats hepatitis C patients; however, there is no treatment for HIV other than testing. Less than ten patients receiving care at this organization are currently receiving pre-exposure prophylaxis (PrEP) treatment, however most of the patient population being cared for qualify for PrEP. This organization provides care based on quality measures. These measures are HIV screening and the provision of care for prevention and treatment. This measure was not currently being met adequately, which led to the establishment of this organizational need. This project implementation took place at one clinic within the organization.

### **Stakeholders**

There are several external and internal stakeholders that were associated with the project. Internal stakeholders included the Chief Quality Officer, Chief Outreach Officer (also preceptor),

medical assistant in outreach clinic, registered nurse in outreach clinic, Chief Medical Officer, senior leadership team, and nurse practitioner in outreach. External stakeholders included patients, local HIV organization supplying HIV screening tools, local government payers and/or insurance agencies. These individuals or organizations worked directly or indirectly to help initiate this project.

### **Systems Change**

This evidence-based implementation project was a meso system change. The meso system was a connection between different micro systems that helped with the continuum of care (Likosky, 2014). The micro systems in this project were the patients at high risk for HIV and prescribed PrEP. The connection, or meso system, that connected the two was the provider screening for PrEP. Uniting these micro systems into one unit (meso system) helped keep patients from contracting HIV as included education on safe practices.

The evidence-based implementation project was the beginning of changing HIV practice in this facility. After implementing the PrEP screening tool and increasing PrEP prescribing, the organization plans to expand to treatment of HIV+ patients. Utilizing the strengths, weaknesses, opportunities, or threats (SWOT) analysis assisted in formulating a plan for success. This FQHC facility already has several strengths and opportunities associated with the project, such as the patient population it serves and the strategic locations of all clinics. Weaknesses associated with this project and organization were the implementation process itself and limited amount of knowledge within the organization. Threats included the numerous competitive organizations in the area. See appendix D for SWOT analysis.

## **Implementation Plan with Timeline and Budget**

### **Project Objectives**

Specific, measurable, attainable, realistic, and timed (SMART) objectives were essential in the implementation process of this project. There are several objectives that were implemented to keep outcomes achievable. Presentation of the project was given to the senior leadership of the organization (See Appendix E for PowerPoint Presentation for Organization). Prior to implementation, the providers and medical assistants in the selected clinic were given an in-service by the project manager with the utilization of a power point and a copy of the PrEP screening tool (See Appendix F for PowerPoint Presentation for Clinic). These individuals were then given a questionnaire to determine their understanding of the content (See Appendix H Post-training Questionnaire). The DNP student checked in with the selected clinic every week to determine the screening tool was being utilized frequently and if there were any staff questions and/or concerns needing addressed. Screening for PrEP did not only identify patients that would benefit from PrEP, but it also educated patients on the importance of HIV prevention and start the conversation on the risks of HIV and benefits of PrEP. Now that the eight-week implementation phase is completed, the screening tool can be utilized to all high-risk patients and can be implemented throughout the organization.

The PrEP screening tool (See Appendix G for the tool) was built based on the Columbia University global health initiative to assist providers in screening for the use of PrEP. The screening tool was initiated in 2019 as a clinical trial called *PC4PrEP: Integrating PrEP into Primary Care*. This clinical trial was developed and piloted in primary care located in Federally Qualified Health Centers (FQHC). This tool was developed to be easily utilized in the United States and other countries (Bauman, 2020). The organization developed a program, ICAP PrEP Package, to assist organization all over the world to implement PrEP. The program is a training curriculum, screening tool, and PrEP prescribing tool. The organization describes the package as



a foundation that can be adapted to any facility. The package contains numerous guides for participants, facilitators, and trainers. The PrEP package has numerous guides that include step by step processes for training every individual involved in implementing a PrEP screening tool, including the trainer themselves. The package is offered in numerous languages including English, Russian, Spanish, French, and Portuguese. The introduction manual gives permission for the package to be utilized by any organization (ICAP, 2022).

The objectives of the project included the following. Understanding of the PrEP screening tool that took place prior to implementation by educating providers and medical assistants during an in-service regarding education and implementation. The goal of the project was to see the PrEP screening tool was given to at least 70% of patients' high risk for HIV and to see an increase of at least 15% of PrEP prescribing. According to the tool, if a patient answers yes to any of the risk questions and they are currently negative for HIV or have not had an exposure in the last two weeks they are eligible for PrEP. Ultimately, the decision to prescribe PrEP was between the provider and the patient. The PrEP screening tool was beneficial to the clinic by the end of the eight-week implementation phase by showing an increase in screening, education, and PrEP prescribing, therefore it will be adopted by the organization for all clinics.

The tool did not contain any identifying information that would compromise HIPAA. Once the PrEP tool was given, the patient was determined to be at risk and was subsequently educated on the use of PrEP. There are four areas that were considered a positive screening: if the patient answered "yes" to any of the at-risk questions, no signs of active HIV, negative HIV lab test, and a glomerular filtration rate (GFR) of over 60. If the patient agreed to starting PrEP, there were a set of labs that were assessed prior to implementing PrEP: a 4<sup>th</sup> generation HIV test and a metabolic panel to assess kidney function (See Appendix J for PrEP Eligibility). The

kidney function assessment is necessary due to the risks of taking either of the two oral PrEP medications that are currently available. The medications were Truvada and Descovy; both have implications to specific kidney functions. Truvada is more readily utilized because it is FDA approved in all patients (Columbia University, 2022). Standard sexually transmitted labs were also drawn. This included syphilis, hepatitis, chlamydia, and gonorrhea (oral, rectal, and genitourinary).

### **Implementation Plan**

The Johns Hopkins evidence-based practice model for practice “evidence, translation (PET) process” guide is a step-by-step guide to develop and implement an EBP project. There are three sections to this process: practice question and project planning, evidence, and translation. Each section has numerous steps. The implementation phase of this project was in the translation section, step six, which is the implement action plan step (Dang et al, 2022). The implementation of this project plan incorporated Havelock’s Model of Change. There are six steps to this model: building a relationship, diagnosing the problem, acquiring resources for change, selecting a solution pathway, establishing and accepting change, and maintenance (Wagner, 2018). Each of these steps will depict a process of the plan from beginning to end and incorporate aspects of the PET process. See timeline in Table 1.

### **Building a Relationship**

Phase one of the change model was building a relationship. In this phase, the project manager determined if there was an area in the organization that needed a change. During this phase, the DNP student worked along with members of the organization to discuss possible areas of improvement. HIV prevention is an area that needed positive change within this organization, specifically with use of PrEP. Working alongside the chief medical/quality officer and the

outreach manager, helped to determine that this area should be utilized as the EBP project. This phase of the process also incorporated steps one and two in the practice question and project planning. Step one was to recruit interprofessional organizational team and step two was to determine leadership responsibility (Dang et al., 2022).

### **Diagnosing the Problem**

Phase two of the change model was diagnosing the problem. The problem was limited PrEP utilization for HIV prevention. PrEP is an evidence-based HIV prevention medication that is very successful, however prescribing is lacking according to numerous research claims. Evidence has shown that screening for HIV risk can help the uptake of PrEP use. During multiple team meetings, and grant meetings, it was concluded that the first step was increasing screening. This was also when the budget plan will be documented (See figure 1). Steps three through seven discussed the problem, identified the question, need for the project, stakeholders, and meetings (Dang et al., 2022).

### **Acquiring Resources for Change**

Phase three of the change model was acquiring resources for change, or the evidence that had already been established. Searching for evidence that matches the PICOT question, as well as determined the best evidence-based results regarding the use of screening tools for PrEP had taken place in the phase. Eliminating research that does not pertain and selecting the best evidence that matched was very imperative to have a successful project. This phase of the model incorporated all the second section of the PET process (Evidence) and steps eight through twelve which was researching and selecting the best evidence (Dang et al., 2022).

### **Selecting a Solution Pathway**

Phase four of the change model was selecting a solution pathway. This was the implementation phase of the project. Prior to implementation, there was staff education regarding the importance of the project and the screening tool that was utilized on high-risk HIV patients. An hour in-service took place in person with a power point presentation. The power point educated, briefly, on HIV and the need for prevention. The PrEP screening tool was introduced and discussed. The ending of the in-service was a question-and-answer session with a survey at the end regarding knowledge and barriers. A week after the in-service was the implementation of the screening tool in the selected clinic. Each week the project manager checked in with the staff regarding the utilization of the tool, if PrEP was being prescribed, and answered any questions/concerns in the clinic. Surveys were initially kept in a lock box that was kept in the providers office and monitored weekly during the check-ins. This phase was part of the PET translation phase and incorporated steps thirteen through sixteen when education and implementation took place (Dang et al., 2022).

### **Establishing and Accept Change**

Phase five of the change model was establishing and accepting change. This was when the results of the implementation were evaluated. This was determined if the screening tool was successful in increasing PrEP prescription. The results were documented using statistical analysis and presented to the organization and stakeholders. If the positive results are accepted by the organization and stakeholders, the implementation of this tool will be utilized in other clinics within the organization. This phase is part of the PET translation phase and incorporates steps seventeen through nineteen (Dang et al., 2022).

### **Maintenance**

The last phase of the change model is maintenance. This is when the screening tool will be implemented throughout the organization and dissemination of the findings take place. This can also be where growth from the original project can start. This also incorporates the last step of the translation phase (Dang et al., 2022).

### **Budget**

The budget utilized in this project was referring to the eight-week period. There was expenses and revenue. Expenses were divided into direct and indirect. Direct expenses consisted of salaries, supplies, services, and labs. Most of the direct expenses were coming from salaries associated with staff and provider. Indirect expenses consisted of overhead such as paper, pens, electricity, etc. that was used for everyday productivity. Revenue consisted of billing that took place with every patient and grants that were obtained. Total expenses were deducted from total revenue and concluded a positive net balance. See Figure 2 for the Budget.

### **Results**

Evaluating the outcome of this project consisted of patients prescribed PrEP for prevention of HIV. The population that was utilized in this project was anyone, over the age of 18, that was considered high risk for HIV and answered the screening tool positively. The inclusion population of patients included men who have sex with men, intravenous drug users, individuals with multiple sexual partners, and/or sex workers. Most patients seen daily were considered high risk for HIV. The exclusion population were those who are not considered high risk for HIV or under the age of 18. The outcome of the PICOT question was achieved by an increase in the prescribing of PrEP throughout the clinic during an eight-week period.

Prior to the implementation of the project, staff and providers in the clinic were educated on the purpose of the project, as well as the general organization. The leaders of the organization

were educated via a PowerPoint presentation regarding the reasoning for the project (see Appendix E). A week prior to the implementation of the project, the clinic staff and providers were also educated via a PowerPoint presentation (see Appendix F). After the presentation and questions were answered, the group was given a questionnaire rating their satisfaction with the presentation and understanding of the project (see Appendix H). Three staff members and one provider were available for the presentation and questionnaire. The questionnaire consisted of eight questions that were to be ranked from 5 (very satisfied) to 1 (very unsatisfied). For the question “How satisfied are you with the training?”, two attendees ranked the presentation 5 and two ranked the presentation 4. For the question “Do you have a better understanding of HIV?”, all attendees ranked the presentation 4. For the question “Do you have a better understanding of the PrEP screening tool?”, three attendees ranked the presentation 5 and one attendee ranked the presentation 4. For the question “Do you feel this tool will hinder your workflow?”, all attendees ranked the presentation 5. For the question “Do you feel you will be complaint with the tool implementation?”, all attendees ranked the presentation 5. For the question “Do you feel comfortable giving the tool to patients?”, two attendees ranked the presentation 5, one ranked the presentation 4, and one ranked the presentation 3. For the question “Do you feel you can identify patients’ high risk for HIV?”, one attendee ranked the presentation 5 and three ranked the presentation 4. For the question “Was this presentation beneficial to you?”, all attendees ranked the presentation 5. Most questions were answered with a 5 (very satisfied) or 4 (mostly satisfied).

Data that was collected throughout the project was the utilization of the PrEP screening tool and an increase in prescribing of PrEP. The PrEP screening tool, or questionnaires, were collected by clinic provider and placed in a locked box. The locked box was stored in the clinic

providers office, which was always locked. The clinic provider placed a note on the questionnaire to inform if PrEP was prescribed. If the patient did not complete the screening tool, that information was not included in the results. Once a week the project manager collected the questionnaires from the locked box and logged the results on an Excel spreadsheet as well as PrEP prescribing. Only two individuals handled the questionnaires, the project manager and clinic provider. No names or identifying information were placed on the questionnaires. No electronic records were utilized in this project.

Data was compared to PrEP screening that was being used prior to the implementation of the PrEP screening tool. The organizations IT department retrieved data electronically to determine how many patients were being screened for PrEP and how many patients were being prescribed PrEP. In the eight weeks pre-implementation there were a total of 13 patients who were screened, and 5 patients were prescribed PrEP. This is roughly 3% of patients seen. During the eight weeks of implementation a total of 305 patients, out of 448, were screened and 13 were prescribed PrEP. This amounts to 68% of patients that were seen qualified for screening. Sixty-eight percent did not meet the 70% objective; however, it did increase the amount screened by 65% which is significant. Although the number of those screened did have a significant increase, those prescribed PrEP did not see a significant increase. Pre-implementation saw 38% of those screened prescribed PrEP, whereas post-implementation saw 2% of those screened prescribed PrEP. The data retrieved from pre- and post-intervention was measured with an unpaired *t*-test because it is comparing two unfamiliar interventions at different times. Intellectus statistics was utilized for the results to assist in determining significance. A two-tailed independent *t*-test was conducted to examine whether the mean of

screened patients was significantly difference from the patients prescribed PrEP pre- and post-intervention.

Shapiro-Wilk tests were conducted to determine whether screened patients could have been produced by a normal distribution for each category of PrEP prescription (Razali & Wah, 2011). The result of the Shapiro-Wilk test for screened patients not prescribed PrEP category was significant based on an alpha value of .05,  $W=0.70$ ,  $p=.002$ . This result suggests that screened patients in the not prescribed PrEP category is unlikely to have been produced by a normal distribution. The result of the Shapiro-Wilk test for screened patient in the prescribed PrEP category was significant based on an alpha value of .05,  $W=0.77$ ,  $p=.031$ . This result suggests that screened patients in the prescribed PrEP category is unlikely to have been produced by a normal distribution. The Shapiro-Wilk test was significant for both the not prescribed and prescribed PrEP categories, indicating the normality assumption is violated.

Levene's test was conducted to assess whether the variance of screened patients was equal between prescribed and not prescribed PrEP. The result of Levene's test was screened was not significant based on an alpha value of .05,  $F(1, 13) = 0.30$ ,  $p= .595$ . These results suggest it is possible that the variance of screened is equal for each category of prescribed or not prescribed PrEP, indicating the assumption of homogeneity of variance was met.

The result of the two-tailed independent samples  $t$ -test was not significant based on an alpha value of .05,  $t(13) = -1.78$ ,  $p=.098$ , indicating the null hypothesis cannot be rejected. This finding suggests the mean of screened patients was not significantly different between prescribed and not prescribed categories. The results are presented in Appendix I. A bar plot of the means is presented in Figure 3.

### **Impact**



Pre-exposure prophylaxis (PrEP) is a daily medication that can be taken to prevent HIV. Prior to the implementation of the project, HIV prevention was not accurately addressed at the implementation facility. Although HIV is very easily prevented, there was not routine screening for HIV risk factors. With the implementation of this project, a screening tool was introduced to easily screen for the need of PrEP in patients' who are high risk for HIV. Prior to the implementation, there were three patients utilizing PrEP. After implementation, 13 out of 305 patients screened were prescribed PrEP. Although this was only a 2% prescription rate, there were many more patients screened for the risk of HIV and educated on the use of PrEP. Education is a key aspect of any change and increasing the education of PrEP could lead to increase usage in the future. The screening tool was not a hinder to clinic flow and was easily filled out by patients for the provider to discuss during the visit.

This evidence-based project implementation was a pilot for this organization. It was implemented in one clinic to determine if it was successful and then subsequently to utilize in all clinics. While the percentage increase of those prescribed PrEP before and after the educational intervention was not significant, the implementation of the tool was successful with increasing education and the understanding the HIV prevention. It was easily utilized by all involved and did not disrupt clinic time. There was no need for additional education. Additional funding may be needed in the future for purposes of PrEP navigators to help ensure patients take their medication properly and come in for appointments. The organization did recently receive funding for the prevention of HIV and screening for PrEP. Going forward, the IT department will monitor the use of the PrEP screening tool for the facility quality department and share the results quarterly. Advertising PrEP and HIV prevention using brochures or posters in the clinic rooms could also increase education on the subject and intrigue patients to ask.

Limitations included a small population size. The use of one clinic, that is not as busy as others, did result in a smaller population of patients screened. The small amount of time for the implementation was also a limitation. Eight weeks was not long to collect a large population size. A lack of patient education on the topic prior to implementation may also be seen as a barrier. Many patients in this organization have not been educated on HIV risks and factors to prevent. Stigma associated with HIV, even HIV prevention, initially prevents many from taking PrEP. Continued education will eventually lead to more prescribing of PrEP.

### **Dissemination Plan**

Dissemination will be conducted in numerous ways. Results will be presented to the implementation facility in two sections. The first presentation will take place for the senior leadership team and stakeholders. This will also include all those involved in the implementation: nurses, medical assistants, and Director of Outreach services. The presentation will be in form of a PowerPoint. The next presentation will include the medical providers. During the monthly provider meeting, the same PowerPoint presentation will be given on the nature of the PrEP screening tool and the results that were obtained during the implementation. Results also plan to be presented at the National Nurse Practitioner Symposium or the American Association of Nurse Practitioner (AANP) National Conference as a poster presentation. The professional journal, *AIDS Education & Prevention: An Interdisciplinary Journal*, focuses on AIDS education and prevention. This journal would be ideal for preventing HIV with the use of a PrEP screening tool. The results will be submitted as a peer-review manuscript.

Sharing results of the project is very important to keep the subject moving forward and advancing. Presenting to a smaller group will include PowerPoint of the purpose of the project and the results found. Those involved in the project will be invited to attend a virtual

presentation. Dissemination plans for a larger group, such as the AANP National Conference, will be presented via poster board presentation. Presenting at a national conference will give opportunities to discuss with professionals in this area of nursing and reach naïve family practice that does not currently prescribe PrEP. *HIV Specialist* is a publication associated with HIV care providers and challenges faced in the prevention and treatment of HIV. This research manuscript will be peer-reviewed and submitted to the *HIV Specialist*. These presentations will be assessed to continuing the fight of prevention HIV.

### **Conclusion**

Human immunodeficiency virus (HIV) is a global pandemic that is very preventable with the use of pre-exposure prophylaxis (PrEP), however it is not being utilized as much as it can be. Implementing a PrEP screening tool to identify patients at high risk for HIV is essential to preventing HIV. Those high risk for HIV include men who have sex with men, sex workers, individuals with multiple sex partners, and intravenous drug users. Federally qualified health centers (FQHC) often care for patients in this risk. A FQHC facility clinic implemented the PrEP screening tool for the increase of PrEP prescribing. Leadership and stakeholders will be presented with the implementation project. Once accepted, clinic personal will be educated on the tool and the importance of implementation. There will be a 70% success rate in utilizing the screening tool and a 15% increase in the prescribing of PrEP within an eight-week period. The PrEP screening tool will show success and be adopted into use across the organization.

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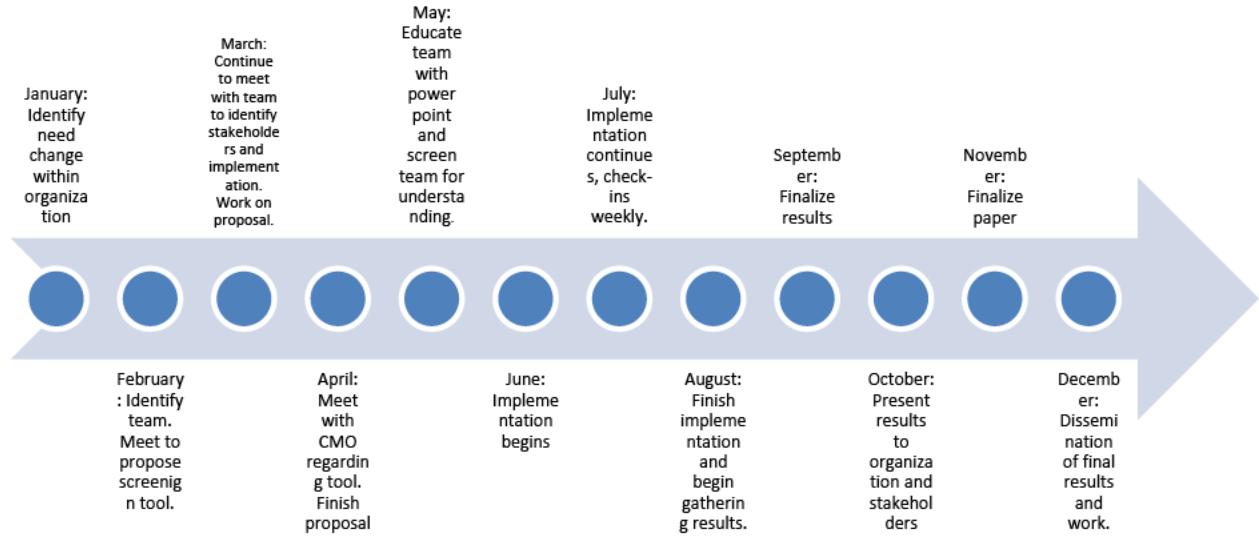
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**Table 1**

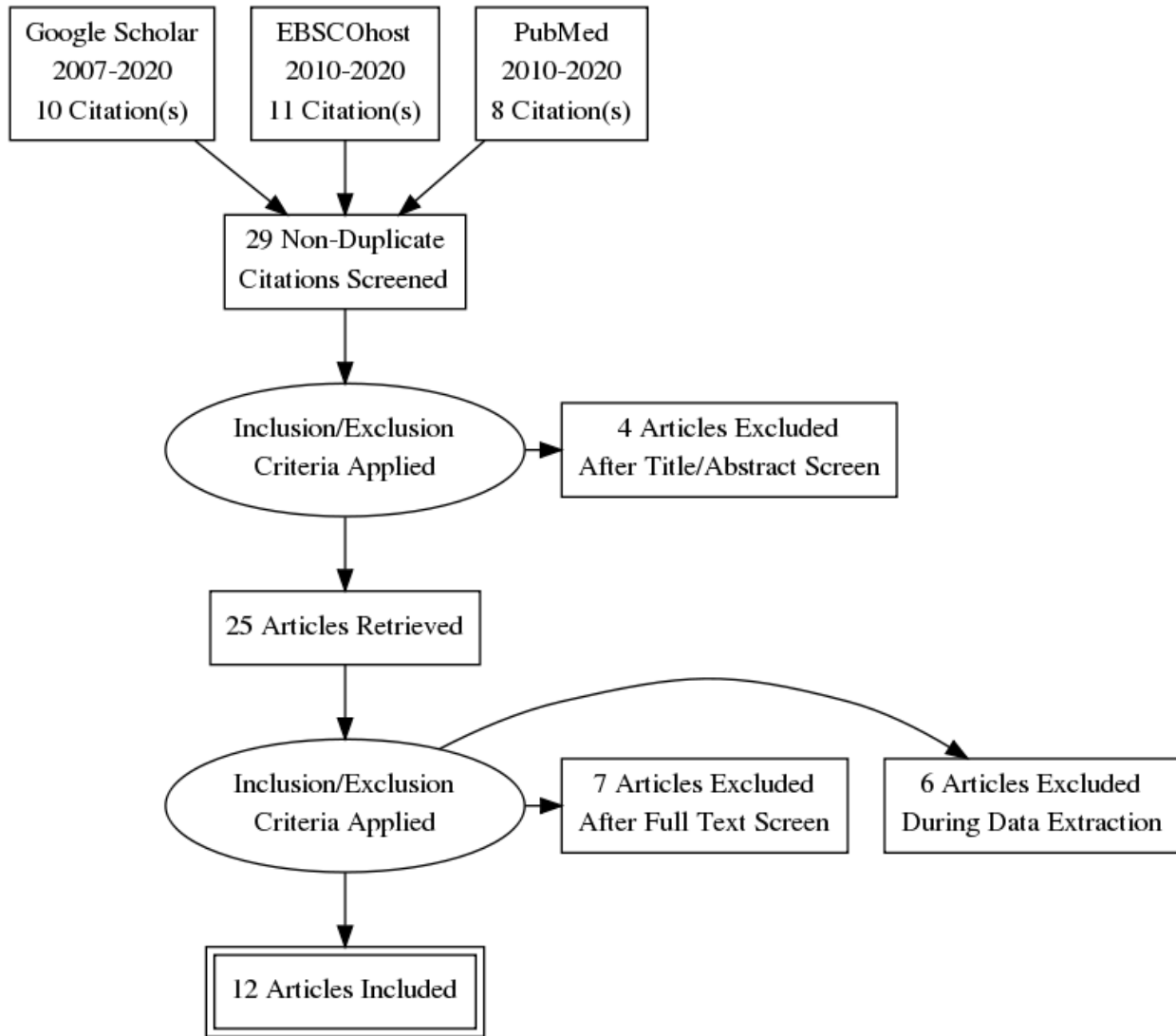
*Project Timeline*





**Figure 1**

*PRISM Diagram*

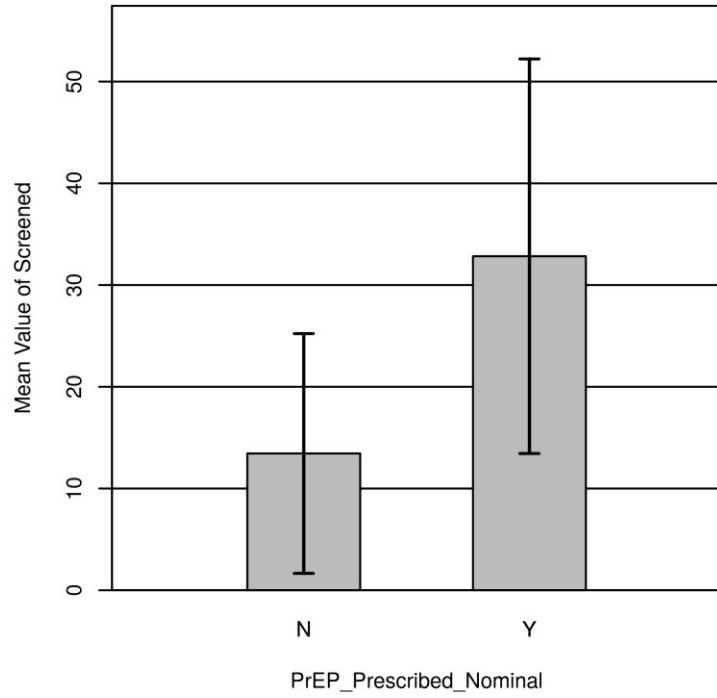


**Figure 2***Budget*

<b>EXPENSES</b>		<b>REVENUE</b>	
Direct		Billing	\$15,384
Salary	\$11,538	Grants (HIV prevention)	23,076
Supplies	4,000		
Services (IT transition)	1,692		
Labs	5,692		
Indirect			
Overhead	1,076		
Total Expenses	\$23,998	Total Revenue	\$38,460
Net Balance			+\$14,462

**Figure 3**

*The mean of screened patients by levels of PrEP prescribed with 95.00% CI Error Bars*



Appendix A

Summary of Primary Research Evidence

Citation	Design, Level, Quality Grade	Sample: Sample size:	Intervention Comparison	Theoretical Foundation	Outcome Definition	Usefulness Results Key Findings
<p>Wilton, J., Kain, T., Fowler, S., Hart, T.A., Grennan, T., Maxwell, J., &amp; Tan, D.H.S. (2016). Use Of an HIV-risk screening tool to identify optimal candidates for PrEP scale-up among Men who have sex with men in Toronto, Canada: disconnect between objective and Subjective HIV risk. <i>Journal of the International AIDS Society</i>, 19(20777). <a href="http://dx.doi.org/10.7448/IAS.19.1.20777">http://dx.doi.org/10.7448/IAS.19.1.20777</a></p>	<p><b>Design Level:</b> II <b>Quality Grade:</b> Good</p>	<p><b>Sample:</b> Nov 2014-April 2015, MSM screened for HIV risk and candidacy of PrEP  <b>Sample size:</b> 420 participants</p>	<p><b>Intervention/Comparison:</b> Intervention consisted of surveying MSM for their HIV risk and if they are candidates for PrEP.</p>	<p><b>Theoretical Foundation:</b> NA</p>	<p><b>Outcome:</b> There was almost a 43% increase in optimal PrEP candidacy with the use of this survey</p>	<p><b>Usefulness/Results</b> It was found that 64% were considered high risk for HIV and 52% were willing to take PrEP. This is significant because this survey is like screening and could help show the positive implications of the PICOT question.</p>
<p>Charest, M., Sharma, M., Chris, A., Schnubb, A., Knox, D.C., &amp; Wilton, J. (2021).</p>	<p><b>Design Level:</b> I <b>Quality Grade:</b></p>	<p><b>Sample:</b> MSM in primary care setting between</p>	<p><b>Intervention/Comparison:</b> Informational cards were given to patients and providers. Providers were</p>	<p><b>Theoretical Foundation:</b> NA</p>	<p><b>Outcome:</b> A total of 23% of participant completed the follow-</p>	<p><b>Usefulness/Results</b> The results of this study did show that education for</p>

<p>Decentralizing PrEP delivery: Implementation and dissemination strategies to increase PrEP uptake among MSM in Toronto, Canada. <i>Public Library of Science</i>, 16(3).  <a href="http://dx.doi.org/10.1371/journal.pone.0248626">http://dx.doi.org/10.1371/journal.pone.0248626</a></p>	<p>High</p>	<p>Sept 2017-Dec 2019  <b>Sample size</b>                  3043 participants</p>	<p>educated on PrEP screening and prescribing. If the patient was interested in PrEP they could give their cards to their PCP to discuss and prescribe. There was another group led by nurses to prescribe PrEP through the same process.</p>		<p>up, therefore chi-squares and t-tests were utilized to determine significance. The nurse led group prescribed PrEP to 244 of the 275 men.</p>	<p>provider and patient to begin the PrEP discussion is very helpful at increasing the prescribing of PrEP.</p>
<p>Saberi, P., Ming, K., Scott, H., Liu, A., &amp; Steward, W. (2020). “You can’t keep a PrEP program without a PrEP Coordinator”: Implementation of a PrEP panel management intervention. <i>PLoS ONE</i>, 15(10).  <a href="https://doi.org/10.1371/journal.pone.0240745">https://doi.org/10.1371/journal.pone.0240745</a></p>	<p><b>Design</b>                  Survey/Interview  <b>Level</b>                  II  <b>Quality Grade</b>                  Good</p>	<p><b>Sample size</b>                  Healthcare providers at 10 clinics from Nov 2019-Feb 2020.  <b>Sample size</b>                  110 Healthcare providers</p>	<p><b>Intervention/Comparison</b>                  Surveys and interviews on the PCPs experience with HIV treatment and PrEP and how they can increase the utilization of PrEP</p>	<p><b>Theoretical Foundation:</b>                  NA</p>	<p><b>Outcome</b>                  It was determined that increased provider and nurse education towards PrEP was managed. From pre- to post-implementation did show that centralized PrEP prescribing could be the cause of low PrEP prescribing.</p>	<p><b>Usefulness/Results</b>                  Although this article did not fall directly into the PICOT question, it did determine that PCP prescribing of PrEP is increased with education and appropriate tools.</p>

<p>Johnson, J., Gormley, M.A., Bentley, S., Baldwin, C., Bubnitz, M., Heavner, S.F., Roth, P., &amp; Litwin, A.H. (2022). HIV preexposure prophylaxis care continuum among individuals receiving medication for opioid use disorder, South Carolina, 2020-2021. <i>Am J Public Health</i>, 112(1).  <a href="https://doi.org/10.2105/AJPH.2021.306566">https://doi.org/10.2105/AJPH.2021.306566</a></p>	<p><b>Design</b> Quasi-experimental <b>Level</b> II <b>Quality Grade</b> High</p>	<p><b>Sample</b> All patients at the Prisma Health Recovery Clinic between June 2, 2020-Feb 2, 2021. <b>Sample size</b> 140 patients</p>	<p><b>Intervention/Comparison</b> The intervention in this research was a 45-question assessment rating the HIV incidence risk for MSM and risk of contracting HIV for injection drug use.</p>	<p><b>Theoretical Foundation:</b> NA</p>	<p><b>Outcome</b> It was determined that 59% met one of three PrEP criteria. Most were high risk due to IV drug use (92%), 18% were due to MSM high risk, and 9% were high risk for both.</p>	<p><b>Usefulness/Results</b> This research does match the PICOT question because it shows that a screening tool does increase eligibility for the use of PrEP.</p>
<p>John, S.A., Petroll, A.E., Walsh, J.L., Quinn, K.G., Patel, V.V., &amp; Grov, C. (2020). Reducing the discussion divide by digital questionnaires in health care settings: Disruptive innovation for HIV testing and PrEP screening. <i>Acquired Immune Deficiency Syndrome</i>, 85(3).</p>	<p><b>Design</b> Survey <b>Level</b> II <b>Quality Grade</b> Good</p>	<p><b>Sample</b> Data was collected from May 2016-March 2017 and included Cisgender, MSM, over 18 years. <b>Sample size</b> Total of 4187 MSM</p>	<p><b>Intervention/Comparison</b> The survey intervention was in five different areas: Sexual health care clinic waiting rooms, online MSM sexual networking and porn sites, MSM geosocial networking apps, Facebook, and field-based gay neighborhoods. Surveys collected data on relationship status, sexual behavior, substance use, HIV status, and PrEP use.</p>	<p><b>Theoretical Foundation:</b> NA</p>	<p><b>Outcome</b> It was concluded that 12% did currently use PrEP, however 70% were HIV-negative or did not know their status and did not use PrEP</p>	<p><b>Usefulness/Results</b> This research did follow the PICOT question because it utilized surveys or screening to determine the need for PrEP.</p>
<p>Picard, J., Jacka, B., Hoj, S., Laverdiere, E., Cox, J., Roy, E., &amp; Bruneau, J. (2020). Real-world</p>	<p><b>Design</b> Prospective cohort study <b>Level</b> I</p>	<p><b>Sample</b> HIV-negative IV drug users over 18</p>	<p><b>Intervention/Comparison</b> Measurement of PrEP eligibility based on CDC guidelines</p>	<p><b>Theoretical Foundation:</b> NA</p>	<p><b>Outcome</b> A total of 263, or 37%, of participants</p>	<p><b>Usefulness/Results</b> Utilizing CDC guidelines will increase those</p>

<p>Eligibility for HIV pre-exposure prophylaxis among people who inject drugs. <i>AIDS and Behavior</i>, 24. <a href="https://doi.org/10.1007/s10461-020-02800-w">https://doi.org/10.1007/s10461-020-02800-w</a></p>	<p><b>Grade</b> High</p>	<p>years were given questionnaires from March 2011-August 2017. <b>Sample size</b> 718 participants</p>	<p>compared to ARCH-IDU risk score.</p>		<p>were eligible for PrEP based on the CDC guidelines.</p>	<p>eligible for PrEP. This research may help benefit the screening tool utilized.</p>
<p>Becquet, V., Nouaman, M., Plazy, M., Agoua, A., Zebago, C., Dao, H., Montoyo, A., Jary, A., Coffie, P.A., Eholie, S., &amp; Larmarange, J. (2021). A community-based healthcare package combining testing and prevention tools, including pre-exposure prophylaxis (PrEP), immediate HIV treatment, management of hepatitis B virus, and sexual and reproductive health (SRH), targeting female sex workers (FSWs) in Cote d'Ivoire: the ANRS 12381 PRINCESSE project. <i>BMC Public Health</i>, 21. <a href="https://doi.org/10.1186/s12889-021-12235-0">https://doi.org/10.1186/s12889-021-12235-0</a></p>	<p><b>Design</b> Intervention cohort study <b>Level</b> I <b>Grade</b> High</p>	<p><b>Sample</b> Located in San Pedro starting on Nov 26, 2019 and will last 30 months. Sample includes female sex workers. <b>Sample size</b> 500 participants</p>	<p><b>Intervention/Comparison</b> Implementation of a community-based sexual and reproductive healthcare package including PrEP.</p>	<p><b>Theoretical Foundation:</b> NA</p>	<p><b>Outcomes</b> Although the increase in PrEP usage in this population is important, it is hard to follow due to the mobility of these individuals.</p>	<p><b>Usefulness/Results</b> This is one of the only research articles available targeting female sex workers, who are high risk for HIV, and offer PrEP.</p>

**Appendix B**

**Summary of Systematic Reviews (SR)**

Citation	Quality Grade	Question	Search Strategy	Inclusion/Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/Implications
Goldstein, N.S., Seymour, E.C., & Carter-Davis, J.B. (2020). A model for increasing access to Preexposure prophylaxis (PrEP) services in the	High	Do substance abuse patients qualify for PrEP?	PrEP tool to increase PrEP prescribing	The article followed the PICOT question because it determined that utilizing a tool was beneficial in initiating PrEP in patients using IV drugs.	It was determined that the use of screening tools found that, at least, 38% of patients with substance abuse were eligible for PrEP.	Utilization of a screening tool did help with immediate eligibility determinants and referral for PrEP services, however no data regarding start of PrEP and follow-up.	I will utilize this article in this paper because it follows the basis of the PICOT question and determined that



Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
substance use population. <i>The Journal for Nurse Practitioners</i> , 16. <a href="https://doi.org/10.1016/j.nurpra.2019.10.026">https://doi.org/10.1016/j.nurpra.2019.10.026</a>							
Pinto, R.M., Berringer, K.R., Melendex, R., & Mmeje,	Good	How to confront PrEP barriers with interventions?	PrEP prescribing tool	<b>Inclusion:</b> Peer-reviewed research regarding PrEP implementation. <b>Exclusion:</b> Papers that were exclusive to attitudes and beliefs regarding HIV prevention.	There was a total of 294 articles but only 47 articles yielded the appropriate information. These articles were analyzed	There were numerous barriers found that affected PrEP implementation. These include patient and provider barriers.	While this research is not directly associated with the PICOT question, it does address barriers to facilitating PrEP screening.

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
O. (2018). Improving PrEP Implementation through multilevel interventions: A synthesis of the literature. <i>AIDS and Behavior</i> , 22. <a href="https://doi.org/10.1007/s1046">https://doi.org/10.1007/s1046</a>					with the grounded theory.		

Citation	Quality Grade	Question	Search Strategy	Inclusion/ Exclusion Criteria	Data Extraction and Analysis	Key Findings	Usefulness/Recommendation/ Implications
<a href="#">1-018-2184-4</a>							

**Appendix C**  
**Project Schedule**

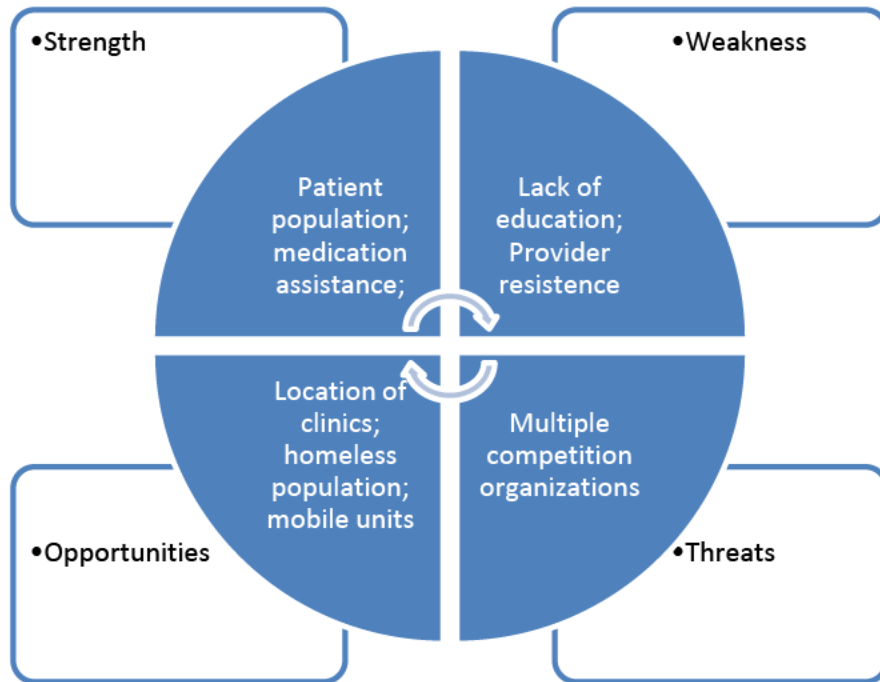
Activity	NUR7801								NUR7802								NUR7803							
	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15
Meet with preceptor	X																							
Prepare project proposal		X																						
Present to Organization Senior Leadership										X														
Educate clinic on project and implementation										X														
Survey clinic for understanding										X														

	NUR7801								NUR7802								NUR7803								
Activity	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	Week 1	Week 3	Week 5	Week 7	Week 9	Week 11	Week 13	Week 15	
Implementation day											X														
Weekly check-in with clinic												X	X	X	X										
Weekly collection of data												X	X	X	X										
End implementation															X										
Record all finalized results																X									
Present results to clinic																			X						
Present results to organization leadership and																				X					



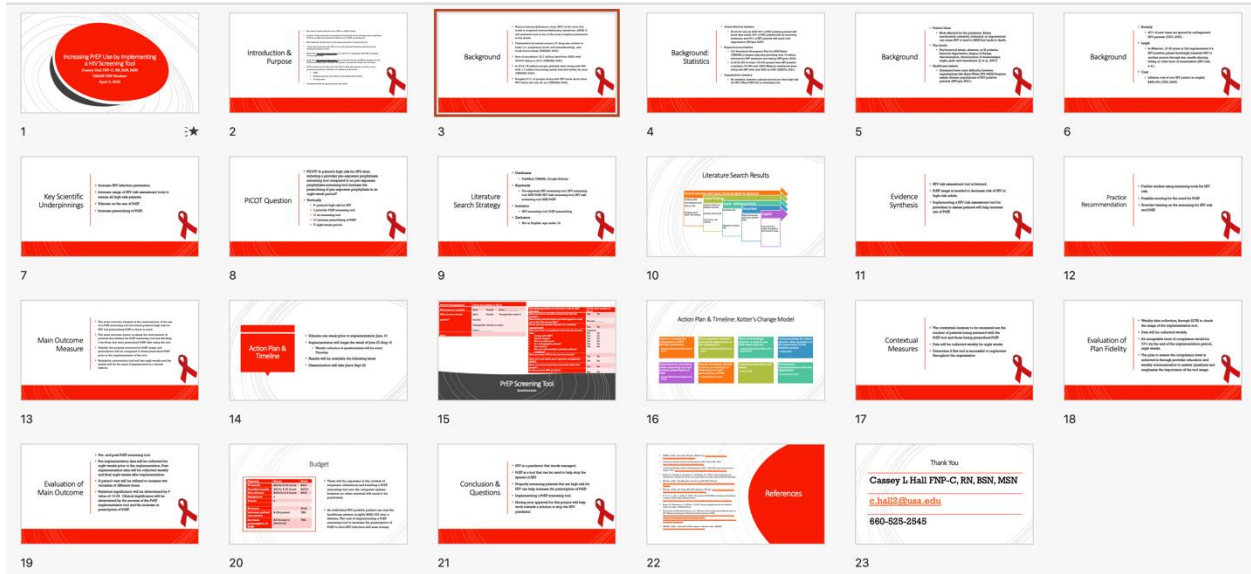
### Appendix D

#### Strength, Weakness, Opportunities, Threat (SWOT) Analysis



# Appendix E

## PowerPoint Presentation for Organization





# Appendix F

## PowerPoint Presentation for Clinic

1. Increasing PrEP Use by Implementing a PrEP Screening Tool  
2. Introduction & Purpose  
3. Background  
4. Background: Statistics  
5. Background  
6. Background  
7. Key Scientific Underpinnings  
8. PrEP Questions  
9. Evidence Synthesis  
10. Main Outcome Measure  
11. PrEP Screening Tool  
12. Action Plan & Timeline  
13. Evaluation of Plan Fidelity  
14. Conclusion & Questions

**Appendix G**

**PrEP Screening Tool**

<b>Patient Demographics</b>	<b>Circle you answer or fill in</b>
<b>What was sex at birth?</b>	Male      Female      Other: _____
<b>What is your current gender?</b>	Male      Female      Transgender (male to female) Transgender (female to male)      Other: _____
<b>Age?</b>	Number: _____
<b>Screening questions to determine risk for HIV infection</b>	<b>Circle your answer or fill in</b>
<b>Have you been sexually active in the last six months?</b>	Yes      No
<b>How many partners have you had vaginal or anal sex in the last six months?</b>	Number _____
<b>In the last six months did you use condoms consistently?</b>	Yes      No
<b>Have you had a sex partner in the last six months who:</b>	Answers:
• Living with HIV?	Yes      No
• Injects drugs?	Yes      No
• Has sex with men?	Yes      No
• Is a transgender person?	Yes      No
• Sex worker?	Yes      No
• Has sex with multiple partners without condoms?	Yes      No
<b>Have you had a STI in the last six months?</b>	Yes      No
<b>Have you ever taken post-exposure prophylaxis (PEP)?</b>	Yes      No
<b>Have you shared injecting materials with other people?</b>	Yes      No
<b>Is your partner HIV positive?</b>	Yes      No

**Appendix H**

**Post-training Questionnaire**

<b>Question</b>	<b>5</b>	<b>4</b>	<b>3</b>	<b>2</b>	<b>1</b>
<b>How satisfied are you with the training?</b>					
<b>Do you have a better understanding of HIV?</b>					
<b>Do you have a better understanding of the PrEP screening tool?</b>					
<b>Do you feel this tool will hinder your workflow?</b>					
<b>Do you feel you will be complaint with the tool implementation?</b>					
<b>Do you feel comfortable giving the tool to patients?</b>					
<b>Do you feel you can identify patients' high risk for HIV?</b>					
<b>Was this presentation beneficial to you?</b>					

5: very satisfied. 4: somewhat satisfied. 3: neutral. 2: somewhat unsatisfied. 1: very unsatisfied

Comments:

**Appendix I****Variable Table**

*Two-Tailed Independent Samples t-Test for screened patients by prescribed PrEP*

Variable	N		Y		<i>t</i>	<i>p</i>	<i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
Screened	13.44	18.04	32.83	24.24	-1.78	.098	0.91

*Note.* N = 15. Degrees of Freedom for the *t*-statistic = 13. *d* represents Cohen's *d*.

**Appendix J****PrEP Eligibility**

<b>Eligible if ALL criteria below are met:</b>	<b>For provider:</b>
<b>HIV-negative</b>	Date tested: Date test received: Result: Type of test:
<b>At risk for HIV</b>	At least one item from risk questions
<b>Has no signs/symptoms of acute HIV</b>	No recent exposures
<b>Has a GFR &gt;60</b>	GFR Result/Date: