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Using the 5 P's to Identify Risk Stratification for PrEP Therapy in the LGBTQIA Community

DNP Scholarly Project Paper

submitted in partial satisfaction of the requirements
for the degree of

DOCTOR OF NURSING PRACTICE

in Nursing Science

by

Nichole Rene Yamashiro

DNP Project Team:
Professor Dave Holmes, Chair
Professor Candace Burton

2022

DEDICATION

To

My 3 Children, Olivia Evangeline, Elliette Roux, Emile Augustine, and my Beloved Wife Andrea

My whole heart, my motivation, my reasons for being;

-The Foundation of Excellence-

Tentative efforts lead to tentative outcomes. Therefore, give yourself fully to your endeavors. Decide to construct your character through excellent actions and determine to pay the price of a worthy goal. The trials you encounter will introduce you to your strengths. Remain steadfast...and one day you will build something that endures: something worthy of your potential

(Epictetus Roman Teacher, Philosopher 55-135 AD)

Mom,

I am all that I am because I see you in myself. I love you endlessly, thank you for always supporting and loving me unconditionally

TABLE OF CONTENTS

LIST OF FIGURES	v
TABLES	vi
ACKNOWLEDGEMENTS	vii
VITA	viii
ABSTRACT OF DNP PROJECT SCHOLARLY PAPER	ix
CHAPTER 1: INTRODUCTION	1
Background Knowledge/Significance	
Problem Statement	
CHAPTER 2: BODY OF EVIDENCE	5
Search Process/Results	
Appraisal of Evidence	
Comprehensive Synthesis of Evidence	
Clinical Practice Guideline Appraisal	
Evidence-Based Recommendation for the Project	
CHAPTER 3: PROJECT FRAMEWORK	18
Logic Model	
EBP Model/Conceptual Framework	
CHAPTER 4: METHODS	22
Project Goals	
Project Description	
✓ Project Type/Design	
✓ Project Setting/Population	
✓ Participants/recruitment	
✓ Stakeholders/Barriers	
✓ Description of Intervention	
✓ Measures/Instruments	
✓ Data Collection Procedure	
Data Analysis	
Ethical Considerations	
Stakeholders/Barriers	
CHAPTER 5: RESULTS AND CONCLUSIONS	30
Results	
Discussion	
Conclusion	

REFERENCES	34
APPENDIX A: Site approval/authorization letter	41
APPENDIX B: Kualiti Approval Email	42
APPENDIX C: PRISMA CHART	43
APPENDIX D: Table of Evidence	44
APPENDIX E: Practice Guideline Appraisal (AGREE TOOL)	45
APPENDIX F: EBP Model or Conceptual Framework	54
APPENDIX G: Logic Model	55
APPENDIX H: Recruitment Material if any	57
APPENDIX I: Data Collection Instruments	58
APPENDIX J: Intervention Material	71
APPENDIX K: Gantt Chart	73

LIST OF FIGURES

Figure 1. Identifying Indications for PrEP	14
Figure 2. Box A1- Risk Behavior Assessment for MSM	15
Figure 3. Box A2-Risk Assessment for Heterosexual Men and Women	15
Figure 4. Box B1- Recommendation indications for PrEP use by MSM	16
Figure 5. Box B2- Recommended Indications for PrEP Use by the Heterosexually Active Men and Women	16
Figure 6. Assessing Risk of Sexual HIV Acquisitions	16
Figure 7. Box A3-Assessing Risk Behavior Assessment for IVDU	17
Figure 8. Community Based Participatory Research Process Model.	23

LIST OF TABLES

Table 1. Glossary of LGBTQIA Terms

6

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VITA

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ABSTRACT OF THE DNP PROJECT FINAL PAPER

Using the 5 P's to Identify Risk Stratification for PrEP Therapy in the LGBTQIA Community
by

Nichole Rene Yamashiro

Doctor of Nursing Practice, Family Nurse Practitioner in Nursing Science

University of California, Irvine, 2022

Professor Dave Holmes, Chair

Background: The Lesbian, Gay, Bisexual, Transgender, Queer/Questioning, Intersex, Asexual/Agender community (LGBTQIA), and in particular, Men who has sex with Men (MSM), continue to be at the hub of the Human Immunodeficiency Virus (HIV). Pre-Exposure Prophylaxis (PrEP) has been FDA approved since 2012 and has been shown to be efficacious by nearly 99% at preventing new HIV infections via sexual transmission route, and 74%-84% in injection drug use transmission route, yet much ambiguity of prescribing continues prevent eligible individuals from therapy (CDC, 2021). The ambiguity coincides with a lack of assessment, comfort level of risk-assessment and barriers to communication amongst non-HIV providers. Thus, interventions to expand education to providers use of PrEP therapy to protect and preserve life strategically is needed.

Objectives: This project aimed at developing an intervention to improve primary care providers knowledge and comfort in screening “at-risk” patients using a systematic, evidence-based approach that can be applied in a comprehensive manner to ensure an all-inclusive approach.

Methodology: An online educational session was implemented at the monthly provider meeting at the University of California Irvine Student Health Center (SHC). There were two phases: the pre-survey and post-survey phase. A paired t-test was performed to measure efficacy.

Results: A percent of change test revealed all positive changes, with an average increase of 15% from pre to post intervention surveys. A one-tailed paired samples t-test yielded a p value of <0.000. While the sample size is too small for generalization, this reflects the trend toward positive knowledge gain.

Conclusion: Increasing provider knowledge in sexual health history taking amongst the LGBTQIA community, using an all-inclusive evidence-based strategy, can improve providers risk-stratification and adoption of PrEP therapy within their current practices.

CHAPTER 1: INTRODUCTION

Sexuality in healthcare is becoming more present, vast in its definition and its practices, and requires more education to meet healthcare needs. Meeting healthcare needs is crucial in preventing and treating disparities, and there is an increasing need for inclusivity of Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual (LGBTQIA) care, yet there is little training, and no healthcare worker mandates for providers to become competent in treating this population of patients, even if this conversation could be lifesaving. Pre-exposure prophylaxis (PrEP) has emerged as a powerful tool for preventing the acquisition of the human immunodeficiency virus (HIV). Previously, the traditional HIV risk and prevention tools have been comprised of condoms, abstaining from sharing of needles/syringes during injection drug use, risks in alteration in behaviors with drug or alcohol use, knowledge, discussion of personal and partner serostatus's and finally abstinence. PrEP's is shown to be 99% efficacious at preventing HIV via sexual transmission route, and 74%-84% in injection drug use transmission route (CDC, 2021).

Unfortunately, the Center for Disease Control and Prevention (CDC) demonstrates that barriers include lack of healthcare providers' awareness, confidence, knowledge of risk factors and sexual behaviors, and the social barriers and stigma that impacts the health and well-being of the LGBTQIA community (CDC, 2021). Ultimately, this new prevention tool contributes to the nations monumental efforts to combat and eradicate HIV barriers from both the patients and providers perspective in hopes of normalizing and increasing the use of PrEP in the LGBTQIA population.

Background/Significance

HIV remains an epidemic, an incurable virus that continues to ravage the LGBTQIA community and in particular men who have sex with men (MSM) in a disproportionate manner. Weakening the immune system by destroying cells that help in fighting disease and infection, HIV leaves its victim more likely to become sick from other microorganisms, and without treatment can progress to acquired immunodeficiency syndrome (AIDS) (CDC, 2021). Although there is currently no effective cure for HIV, with proper medical care HIV can be prevented and controlled to a level where transmission is nearly impossible. HIV is transmitted through anal, oral, vaginal sex, sharing needles or other drug injection equipment, and

transmitted via semen/pre-seminal fluid, rectal or vaginal fluid, blood, and breastmilk (CDC, 2021). There are many factors that increase the risk of acquiring or transmitting HIV. Viral load is the amount of HIV within the blood of a seropositive individual, it is highest during the acute phase of HIV, and continues to be elevated without treatment (CDC, 2021).

According to the CDC, the HIV infection came from a chimpanzee in Central Africa, where the chimpanzee version of the virus called simian immunodeficiency virus (SIV) was passed to humans when these animals were hunted and butchered for their meat, and when humans came in contact with their infected blood (CDC, 2021). However, the CDC summarizes that HIV may have jumped from chimpanzees to humans as far back as the 1800's, and as HIV slowly spread from Africa, the virus was detected in the United States since the mid to late 1970's (CDC, 2021).

In June of 1981, a report described as *Pneumocystis pneumonia* in gay men known to be previously healthy, was reported, and thus this became the official start of what will later be known as the AIDS epidemic. Shortly after this report, the CDC task force is formed to identify Kaposi's sarcoma and opportunistic infection, and a month later 26 homosexual men in New York and California were linked, furthermore it was estimated that 42,000 people living with HIV and 20,000 of new HIV infections. In September of 1982, the CDC uses the term "AIDS" and releases their first case definition, two months later they would discover that blood transfusions were now currently linked via infant infection, and perinatal transmission. In 1984, needle-sharing was identified as a source of transmission as well, and the largest HIV/AIDS research project in Africa, SIDA. Safeguards for the national blood supply began in 1985 and, finally in 1989, the CDC released guidelines for prevention and transmission of HIV to public-safety workers. In 1982, AIDS becomes the number one cause of death for US men ages 25-44 and does not see a decline until 1997. African Americans accounted for 49% of US AIDS-related deaths in 1998, and this same year is when the CDC issues the first national treatment guidelines for the use of antiretroviral therapy in adults and adolescents with HIV. It was not until 2011, that the CDC issues interim guidance to health care providers on the use of PrEP as an HIV prevention strategy among the MSM community. In October 2014, the CDC states that although there is an annual decline of 30% of new HIV diagnosis, it is still finding

gaps in care and treatment among gay men diagnosed with HIV. The following year, HIV infections increased sharply among gay and bisexual Latino men, and that 1 out of 4 gay/bisexual men and 1 out of 5 injection drug users should be counseled about PrEP, yet as of 2018 African Americans and Latinos are still accounting for the smallest percentage of prescriptions despite comprising 2/3 of the people who would benefit from this therapy. In 2020, the current data shows an association between increased PrEP coverage and a decrease in HIV diagnosis rates.

According to the CDC, in 2019 there were 36,801 people who received an HIV diagnosis in the United States (CDC, 2021). Although HIV diagnoses have decreased 9% overall from 2015-2019, the goal is to decrease the number of new HIV diagnosis to 9,588 by 2025 and 3,000 by 2030. Of these new infections, 69 % were among gay and bisexual men, with the highest subpopulation being Black/African American Male-to-Male sexual contact (MSM) between the ages of 25-34 further indicating that in the highest at-risk communities MSM, racial and ethnic disparities continue to exist (CDC, 2021). In 2019 for 100 people with HIV, only 87 individuals knew their HIV status, and only 66 were virally suppressed. The CDC's goal is to increase the estimated percentage of people with HIV who have received their HIV diagnosis to 95% by 2025, in hopes of virally suppressing 95% of these individuals by 2030.

It is classically said that knowledge is power, and PrEP prescribing with tenofovir disoproxil fumarate (TDF) and emtricitabine (FTC) combined with HIV testing, sexually transmitted infection (STI) screening, and risk reduction counseling is an incredibly effective prevention strategy that the CDC is encouraging providers to adopt into their practice. And although in 2012 the FDA approved a once daily fixed dose of FTC/TDF to reduce the risk of HIV in uninfected individuals that are at particularly high risk for HIV infection, the true struggle and challenges of a successful PrEP regimen lies within providers prescription as an HIV prevention strategy (Blumenthal et al., 2015). To achieve successful implementation of PrEP as a preventative strategy, it is thus important to understand health care providers (HCP's) knowledge, interest, attitudes, and comfort about PrEP, as well as their perceived barriers. This information will serve as a framework for formulating tools to implement critical education regarding adoption in PrEP therapy as a strategy to combat the public health crisis.

The significance of understanding the HCP perceptions allows for the identification of a practice gap. This practice gap demonstrates that providers have discomfort in implementation of this therapy primarily because of lack of knowledge. Although changing approaches are simplistic, using evidenced based tools, can simplify and more importantly identify at risk individuals while exploring sexual health history. Knowledge leads to de-stigmatization of experienced barriers between personal beliefs and aids in competency affecting healthcare delivery while simultaneously reducing disparities in the LGBTQIA population. According to the National Prevention Information Network Centers for Disease Control and Prevention (NPIN) there are a total of 6 medical offices within 5 miles of the University of California Irvine (UCI), and 42 medical offices within a 25-mile radius (Find PrEP, n.d.) who prescribe and educated individuals on PrEP. According to the California Healthcare Almanac in 2016 there were 112, 929 Medical Doctors (MD) versus 202 and estimated 123, 941, and 19, 646 Nurse Practitioners (NP) as of 2016 expanding to 24, 256 in 2020 (Supply of Select Providers California, 2021). They go on to say that a total of 6,349 providers exist in Orange County with 1,928 of those providers working in primary care. Therefore, the data that exist indicates a growing number of providers within California and Orange County, yet a simple google search demonstrates to the Queer patient only 48 are equipped to prescribe PrEP. The significance and purpose of this project is to therefore educate existing providers about the importance of sexual health and history taking and PrEP.

Problem Statement

In the practice of medicine across the world, despite the recommendation of the very effective PrEP regimen, prescription rates and healthcare provider education and implementation remain low. In 2019 approximately 34,800 individuals received a new HIV diagnosis in the United States, with MSM accounting for 69% of those diagnoses (HIV.GOV, 2021). With concerted efforts, across the federal government to increase PrEP, subject matter from 12 federal departments and agencies continue to develop HIV/AIDS strategies to address gaps. However, the willingness of providers to identify and screen patients who may be of benefit, and their willingness to engage patients in this therapy remains a central challenge (HIV.GOV, 2021). The need for increased training to improve comfort in screening and prescribing has long been a

need in the success of these modalities, however the need to improve uptake and reduce barriers exist in the primary care providers office, considering PrEP is now a prophylactic tool.

Given the large numbers of patients who meet criteria for PrEP initiation, there is currently not enough practicing specialists to meet the incredible need for providers that are trained to initiate PrEP (Silapaswan et al., 2016). Furthermore, the clinical prevalence in the primary care setting sluggish although PrEP can be used as a preventative intervention in an otherwise healthy patient. From a clinical standpoint, by removing the ambiguity of who “should” prescribe it and its anticipated unintended consequences, optimization of its implementation can be addressed via educational interventions (Silapaswan et al., 2016).

The PICOT question is as follows:

P: Outpatient Providers at UCI SHC

I: The CDC’s 5 P’s in assessing risk stratification for PrEP Therapy

C: Compared to not using any standardized tool

O: Increased the likelihood and comfort level in initiating PrEP therapy

T: Within completion of Educational Learning Module

CHAPTER 2: BODY of EVIDENCE

Review of the Literature

Search Process

The scientific articles used in this review were obtain from various online databased including CINHAL complete, PubMed, Science Direct and Google Scholar. The electronic search included the criteria of original articles published in English between 2005 and 2021, describing the impact of healthcare providers knowledge and comfort’s impact on prescribing PrEP. The search identified 30 articles/abstracts to critically analyze applicability to the DNP practice-related question. The 30 articles are summarized and cited in Appendix A, with the PRISMA flow diagram located in Appendix C.

The findings support the clinical DNP question. At risk populations are entitled to quality healthcare management both preventative and holistically, and our roles as healthcare providers is to ensure our staff receive the necessary education to deliver this care. It is understood that Queer people suffer from numerous biases, discrimination, and subpar healthcare services (Burton et al., 2021). HIV's greatest impact is on the Queer community, and this must be taken into consideration while providing care. Taking a comprehensive sexual health history as a part of routine health care allows for the provider and create a welcoming clinical environment. It is important to establish rapport with all patients by providing informed respectable care by identifying your patients preferred name, pronouns, sexual orientation, and gender identity. Understanding the difference in all these terms is the first place to begin:

Asexual	Describing a person who has little to no interest in sexual intercourse.
Barebacking	Engaging in anal intercourse without a condom.
Bigender	A gender identity identified by feeling that one has two fully functioning gender identities, whether experienced simultaneously or at varying times.
Cisnormativity	The assumption that all persons have a gender identity congruent with their assigned sex.
Cisgender	Having a gender identity that is congruent with one's assigned sex. The roles, behaviors, activities, attributes and opportunities that any society considers appropriate for people based on their identity as male or female. It interacts with but is different from biologically determined sex.
Gender	The roles, behaviors, activities, attributes, and opportunities that any society considers appropriate for people based on their identity as male or female. It interacts with but is different from biologically determined sex.
Gender non-conforming	A person whose behavior or appearance does not conform to prevailing cultural and social expectations about what is appropriate to their presumed gender.

Gender-fluid	A non-binary gender identity that fluctuates along the spectrum of masculine to feminine identity.
Genderqueer	A person who does not subscribe to conventional gender distinctions but identifies with neither, both, or a combination of male and female genders.
Heteronormativity	The idea that binary gender identity (i.e., male or female) and heterosexual orientation are the norm, to the exclusion of all other identities.
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome; a virus that attacks T-cells which are part of the body's immune system defenses.
HPV	Human papillomavirus: the most common sexually transmitted infection (STI), it is a virus that can lead to certain types of cancer and genital warts.
Intersex Non-Binary Genetics	A general term for a variety of conditions in which a person is born with a reproductive or sexual anatomy that does not match the typical definitions of female or male anatomy. Sex chromosome arrangements other than XX (female) and XY (male).
Pansexual	A person who is not limited in their sexual choice regarding biological sex, gender, or gender identity.
Polyamory	The practice of engaging in multiple sexual relationships with the consent of all the people involved.
Queer	An umbrella term for sexual and gender minorities. Formerly a pejorative, now adopted as an empowering identity.
Questioning*	A person who has not defined or is in the process of redefining their sexual orientation or gender identity

Sex	A label assigned to an individual at birth based on genital anatomy and/or chromosomal arrangement. Not necessarily aligned with gender identity.
STI	Sexually transmitted infection; an infection transmissible via sexual contact
Trans*	An umbrella term referring to all communities and individuals with nonconforming gender identities and/or expressions.
Transgender	Having a gender identity that is not congruent with one's assigned sex.

(Burton et al., 2021, (Glossary of Terms section))

Understanding that some patients may not be comfortable speaking about sexual history, sex partners, or sexual practices because of previous abuse, trauma, or provider experiences, can be addressed by providing resources, being understanding and respectful, and offering explanations about importance of assessing these aspects of care while creating positive supportive dialogue.

The CDC created the 5 P's (Partners, Practices, Protection for STI's, History of STI's, and Pregnancy Intention to guide the providers to use inviting, gender-neutral, open-ended discussions about sexual health and practices, to solicit full disclosure and therefore allow the provider to identify and treat at-risk individuals. Using the 5 P's formulated by the CDC, we can provide an evidence based tool that is universal, to open the dialogue for risk stratification to appropriately initiate PrEP therapy, whilst combating discomfort in collecting sexual health history which is imperative to identify at risk individuals and behaviors. Focusing on sexual health goal setting for health and safe sexual experiences along with risk-reduction strategies allows for the provider to provide any therapies or resources comprehensively.

Appraisal of Evidence

Articles that were appraised ranged from peer reviewed, randomized control trials (RCT's) and placebo-controlled groups overwhelmingly solidified the tenet that PrEP has a 99% efficacy in preventing HIV when taken as prescribed. The CDC and World Health Organization (WHO) state that although adoption of patient driven PrEP service ability is present, it does not equate to implementation of PrEP

services. WHO has declared PrEP an essential health service, and adaptations and community-based delivery should simplify and differentiate PrEP services to reach a larger group of people that could benefit from its therapy (*Global Data of Prep Use and Widespread Adoption of Who Prep Recommendations*, n.d.). A systematic review for the U.S Preventative Services Task Force on PrEP demonstrates that in adults at increased risk of HIV infection, oral PrEP therapy was associated with decreased risk of HIV infection compared with a placebo (*Exposure Prophylaxis for the Prevention of HIV Infection: A Systematic Review for the U.S. Preventive Services Task Force*, 2019).

A theme consistently identified by O’Byrne and Holmes (2009) explains that despite numerous theories, models, and philosophies, demonstrating what nurses are and what they do within nursing care is presented as an apolitical process that focuses on a patient, however it is argued that positions in nursing practice are in fact political. In supporting this argument, works describing soft/hard power, pastoral power, stigma, deviance and governmentality had aided in explaining the institutional social contract in conceptualization of politics, and within these concepts, political perspectives reframe nursing practices by means on an individual’s potential or actual deviance; thus, positively identifiable and corrected, leading to an increase in all facets of literature review themes identified: knowledge, comfort, and confidence.

It is understood that knowledge is power as Holmes and O’Byrne adamantly explain, supporting this notion, Blumenthal describes that several qualitative and quantitative studies conducted on healthcare providers knowledge, perception and willingness to adopt PrEP guidelines were informative in demonstrating acceptance of such therapies in groups of providers who were knowledgeable or engaged in HIV prevention such as infectious disease specialist, of HIV clinics in community settings, along with STD and family planning clinic providers. The driving point demonstrated in supporting the theme of the literature review shows that given the changing face of healthcare systems, and the need to reduce expenditures with potential closures of STD and family planning clinics, primary care providers are expected to play an increasingly important role in HIV prevention (Blumenthal et al., 2015). Addressing the ambiguity of “who should”, and “who’s best at” initiating therapy should be removed from the conversation, as primary healthcare providers are expected to initiate preventive modalities. In the real-

world setting, to maximize the public health effectiveness of PrEP, a variety of HCP's should be knowledgeable to achieve rapid, and successful implementation of PrEP, and a huge component of increasing uptake is understanding providers knowledge and interest in providing such therapies. Understanding the interest in monitoring PrEP therapy, and their perceived assessment of potential barriers; in evaluating such attitudes, provisions can determine barriers and motivators to navigate adoptions of tools to enhance sustainability of PrEP therapy (Blumenthal et al., 2015)

Comprehensive Synthesis of Evidence

In reviewing the literature of O'Byrne, he explains that public health efforts to prevent HIV transmission rely heavily on HIV diagnosis and reductions in practices that transmit HIV, however the provisions of HIV medication to HIV negative persons remains low (O'Byrne et al., 2019). O'Byrne consistently demonstrates that although research supports that PrEP when used as prescribed, can prevent HIV transmission upwards of 96% which has led to guidelines that support PrEP for individuals at high risk for HIV acquisition as MSM, use of PrEP in clinical settings continues to be undermined by false impressions of poor efficacy and discomfort in speaking with the MSM community (Orser & O'Byrne, 2018). He explains that access continues to be poorly defined, and that PrEP should be available for any person who requests it. Most new diagnoses of HIV in the United States are among MSM, and although proven time and time again that PrEP mitigates risk of HIV acquisition the secondary component to this tenet is that regular STI testing, prescription refills and sexual behavior must be included in monitoring this, therefore providers need to understand how PrEP includes careful approach of sexual health for these patients. All of which continue to contribute to the themes of lack of provider implementation, and awareness as well as barriers such as biases about safety and efficacy.

In an article collecting qualitative interviews findings found that changes in sexuality while using prep include decreased anxiety surrounding sex, increased feelings of control over personal health, and experiencing less stigma towards sexual partners with HIV. In this study, participants indicated the need for tailored health advice that is based on sexual preferences, sexual health advice and understanding that was free of stereotypical assumptions, and improved access to PrEP providers who openly identified as

LTGBQIA or who practice in an LGBT-friendly healthcare setting, all indications suggested that finding support a call for a gain-frame approach to sexual health in primary care when prescribing PrEP for these at-risk individuals (Devarajan et al., 2019). The importance of delivering a positive experience for a patient requires good communication, open dialogues, and comfort and knowledge about sexual health. A provider creates a space where a patient can safely and openly disclose sexual activities, which consequently allows providers to recommend therapies and testing. Reports of lack of provider-patient communication led to inconsistent oral and rectal swabbing of STI's and lack of tailored sexual health advice which was congruent with their actual sexual practices and preferences (Devarajan et al., 2019). A follow up in this study indicated participants reported positive experiences with PrEP therapy when providers normalized MSM and or sexual behaviors during interactions, when providers prioritized learning about patients' individual sexual practice, it allowed better assessments of personal needs and education (Devarajan et al., 2019)

Social biases among healthcare providers weather actively aware or not, limit PrEP access. Studies surrounding US medical students examined associations between biases (racism and heterosexism) while PrEP clinical decision making. After students were presented with a PrEP seeking MSM patient, students reported anticipated patient behavior to include condom less sex, extra-relational sex, and adherence. Furthermore, heterosexism indirectly affected prescribing intention via all anticipated behaviors, and student expressing greater heterosexism more strongly anticipated increased risk-behavior and adherence problems, thus in turn resulted in lower prescribing intention (Calabrese et al., 2017). After exploring self-reported attitudes towards gay men, regardless of race of MSM patient, medical students were found judge patients as being more sexually deviant/risky therefore less like to adhere to regimen. However, although stereotypes constrained prescribing PrEP therapy amongst its most at-risk population, medical education is a promising point of intervention to promote Prep intake. When educational opportunities allow for a safe space to focus innovations on addressing specific types of social biases are said to be “more effective than general PrEP medical education programs promoting equitable clinical decision making related to PrEP” (Calabrese et al., 2017, Conclusion section). This data envelopes the need for recognition of awareness, biases, comfort and how they can become part of barriers in PrEP uptake in primary care. Systematic

evaluation of PrEP education must include clinical and cultural competence outcomes is needed throughout all stages of medical training and into clinical practice through continuing education. PrEP education should improve providers comfort, understanding, and willingness to prescribe PrEP, and particular to patients whose behavior puts them at substantial risk.

Navigating the “uncomfortable” component of identifying “at-risk” individuals required delving into factors that create these barriers. Sexual health is influenced by a myriad of factors influencing social and cultural norms, health literacy, economic status, sex, gender, identity, and sexual orientation to name a few. Educating providers about the social determinants aids in mitigating the resulting disparities and improving healthcare experiences and outcomes of their patients (Stumbar et al., 2018). The fact of the matter remains, that for PrEP to efficacious in application, collection of a comprehensive sexual practices and well-being play a major role care delivery. An analysis of pre and post surveys of medical students shows that students reported increased comfort regarding various aspects of sexual health history taking, most importantly interacting with patients whose orientations, gender identities, or sexual practices who differed from their own status post 2-hour curriculum dedicated to sex, gender and LGBTQIA health disparities (Stumbar et al., 2018). The didactic was split into two components, first the didactic lecture focusing on learning objectives: introduction to social determinants of sexual health, LGBTA+QIA health disparities, and lastly review of HIV and STI’s. Secondly, a case study format was used for application of topics covered, and a debriefing for generalized questions, concerns, and comments. Conclusively, 99% of students strongly agreed or agreed that the didactic was an effective way to expose them to a diverse patient population, and 93% agreed in doing so, they were able to identify their own biases when addressing issues related to sexual orientation and gender (Stumbar et al., 2018).

In a cross-sectional cohort study of 1,017 primary care visits, the largest study to date, were reviewed where the primary outcome measures included sexual health taking rates and completeness. All components of sexual health were explored in 1.08% of visits, and partial history was obtained by 33.92% of visits, demonstrating the unmet need for a more comprehensive and consistent sexual health history taking amongst provides, especially those working in high-risk settings such as primary care (Palaiodimos

et al., 2020). The explanation of barriers included: embarrassment of sexual language, fear of limited personal knowledge of sexual practices, recognized lack of training or skill related to sexual health history taking, fear of offending the patient, and perception of non-relevance of chief complaint (Palaiodimos et al., 2020). Discussions of reluctance and discomfort discussing sexual activities due to lack of support and sensitivity is a consistent knowledge-related barrier that has emerged from the literature review. This study demonstrates characteristics that impact sexual health history taking as demonstrated by inadequate sexual health history taking in 2017 for the nearly 1.2 million people, of which only 100,00 were prescribed PrEP. Highlighting the need for health literacy and empowerment which can be achieved through educational strategies such as the 5 p's to tailor systems to improve performance (Palaiodimos et al., 2020).

Clinical Practice Guideline Appraisal

The CDC's 5 P's of sexual health history taking was the latest clinical guideline to assess risk stratification and implementation of PrEP therapy by identifying indications that would qualify patients for initiation of therapy. It provides an inclusive sexual orientation and gender identity history components to create a space for well-developed acceptance, rapport, and open-ended questioning to collect a thorough history. The CDC maintains that a sexual history should be taken as part of an annual routine healthcare interaction, and additionally for every symptomatically suggestive encounter for a sexually transmitted infection (CDC, 2022).

The appraisal of guidelines for research and evaluation (AGREE) tool was used to assess the quality of the CDC's 5 P's of sexual health history taking. Using 23 key items that is organized into six separate domains, (1-scope and purpose, 2-stakeholder involvement, 3-rigour and development, 4-clarity of presentation, 5-applicability, and 6- editorial independence). In domain 1, 21/21 points were scored to suggest strong agreement, domain 2 scored identically with 21/21. Domain 3 scored a 53/56 showing high regard. Domain 4 scored 21/21, domain 5 scored 26/28 considering there was no clear facilitatory or barrier identification in applicability, and lastly 26/28 for domain 6. Overall, this tool was highly regarded and ranked appropriately.

Evidence-Based Recommendation for the Project

The WHO and CDC have composed clinical modules consisting of eligibility, screening questions, contraindications, regimens, and usage, suggested clinical procedure schedule, management, and key counseling regarding safety and efficacy. Below is a summation of the CDC Framework provided which will be used to the delivery of this project, focusing solely on the sexual health history aspect. All material in this document presented via CDC is considered public, and may be used and reprinted without permission, however citation is appreciated (CDC, 2013).

CDC: Identifying indications for PrEP

Identifying Indications for PrEP

Taking a sexual history is recommended for all adult and adolescent patients as part of ongoing primary care, but the sexual history is often deferred because of urgent care issues, provider discomfort, or anticipated patient discomfort. This deferral is common among providers of primary care³⁶, STI care³⁷, and HIV care³⁸⁻⁴⁰.

Routinely taking a sexual history is a necessary first step to identify which patients in a clinical practice are having sex with same-sex partners, which are having sex with opposite-sex partners, and what specific sexual behaviors may place them at risk for, or protect them from, HIV acquisition. To identify the sexual health needs of all their patients, clinicians should not limit sexual history assessments to only selected patients (e.g., young, unmarried persons or women seeking contraception), because new HIV infections and STIs are occurring in all adult and adolescent age groups, both sexes, and both married and unmarried persons. The clinician can introduce this topic by stating that taking a brief sexual history is routine practice, go on to explain that the information is necessary to the provision of individually appropriate sexual health care, and close by reaffirming the confidentiality of patient information.

Transgender persons are those whose sex at birth differs from their self-identified gender. Although the effectiveness of PrEP for transgender women has not yet been definitively proven in trials¹⁹, and trials have not been conducted among transgender men, PrEP has been shown to reduce the risk for HIV acquisition during anal sex and penile-vaginal sex. Therefore, its use may be considered in all persons at risk of acquiring HIV sexually.

Assessing Risk of Sexual HIV Acquisition:

BOX A1: RISK BEHAVIOR ASSESSMENT FOR MSM⁴⁴

In the past 6 months:

- Have you had sex with men, women, or both?
- *(if men or both sexes)* How many men have you had sex with?
- How many times did you have receptive anal sex (you were the bottom) with a man who was not wearing a condom?
- How many of your male sex partners were HIV-positive?
- *(if any positive)* With these HIV-positive male partners, how many times did you have insertive anal sex (you were the top) without you wearing a condom?
- Have you used methamphetamines (such as crystal or speed)?

BOX A2: RISK BEHAVIOR ASSESSMENT FOR HETEROSEXUAL MEN AND WOMEN

In the past 6 months:

- Have you had sex with men, women, or both?
- *(if opposite sex or both sexes)* How many men/women have you had sex with?
- How many times did you have vaginal or anal sex when neither you nor your partner wore a condom?
- How many of your sex partners were HIV-positive?
- *(if any positive)* With these HIV-positive partners, how many times did you have vaginal or anal sex without a condom?

BOX B1: RECOMMENDED INDICATIONS FOR PrEP USE BY MSM²

- Adult man
- Without acute or established HIV infection
- Any male sex partners in past 6 months (if also has sex with women, see Box B2)
- Not in a monogamous partnership with a recently tested, HIV-negative man

AND at least one of the following

- Any anal sex without condoms (receptive or insertive) in past 6 months
- A bacterial STI (syphilis, gonorrhea, or chlamydia) diagnosed or reported in past 6 months

BOX B2: RECOMMENDED INDICATIONS FOR PrEP USE BY HETEROSEXUALLY ACTIVE MEN AND WOMEN

- Adult person
- Without acute or established HIV infection
- Any sex with opposite sex partners in past 6 months
- Not in a monogamous partnership with a recently tested HIV-negative partner

AND at least one of the following

- Is a man who has sex with both women and men (behaviorally bisexual) [also evaluate indications for PrEP use by Box B1 criteria]
- Infrequently uses condoms during sex with 1 or more partners of unknown HIV status who are known to be at substantial risk of HIV infection (PWID or bisexual male partner)
- Is in an ongoing sexual relationship with an HIV-positive partner
- A bacterial STI (syphilis, gonorrhea in women or men) diagnosed or reported in past 6 months

ASSESSING RISK OF SEXUAL HIV ACQUISITION

Because offering PrEP is currently indicated for MSM at substantial risk of HIV acquisition, it is important to consider that although 76% of MSM surveyed in 2008 in 21 US cities reported a health care visit during the past year⁴¹, other studies reported that health care providers do not ask about, and patients often do not disclose, same-sex behaviors⁴². Box A1 contains a set of brief questions designed to identify men who are currently having sex with men and to assess a key set of sexual practices that are associated with the risk of HIV acquisition. In studies to develop scored risk indexes predictive of incident HIV infection among MSM^{43,44} (see Clinical Providers' Supplement, Section 6), several critical factors were identified.

Assessing Risk Through Injection Practices:

Box A3 contains a set of brief questions that may help identify persons who are injecting illicit drugs, and to assess a key set of injection practices that are associated with the risk of HIV acquisition as identified in the PrEP trial with PWID⁵ and in epidemiologic studies^{64,67} (for a scored risk index predictive of incident HIV infection among PWID⁶³, see the Clinical Providers' Supplement, Section 7)

BOX A3: RISK BEHAVIOR ASSESSMENT FOR PERSONS WHO INJECT DRUGS⁶⁸

- Have you ever injected drugs that were not prescribed to you by a clinician?
- *(if yes)*, When did you last inject unprescribed drugs?
- In the past 6 months, have you injected by using needles, syringes, or other drug preparation equipment that had already been used by another person?
- In the past 6 months, have you been in a methadone or other medication-based drug treatment program?

Goals of Therapy Surrounding Factors associated with Sexual Health History Taking:

The goal of therapy is to reduce the acquisition of HIV infection considering its morbidity, mortality, and cost to individuals and society. Providers initiating the provision of this therapy should navigate conversations that:

- Provide support for medication adherence to help patients achieve and maintain protective levels of medications within their body habitus
- Provide HIV risk reduction support and prevention services or service referrals to assist patients in minimizing their potential exposure to HIV provide effective contraception to women who are taking prep and who do not wish to become pregnant
- Monitor patients to detect HIV infection, medication toxicities, and levels of risk behavior to make indicated change in strategies to support patients long term health

(Exposure Prophylaxis for the Prevention of HIV Infection: A Systematic Review for the U.S. Preventive Services Task Force, 2019).

CHAPTER 3: PROJECT FRAMEWORK

Evidence-Based Practice Model

Diffusion of innovation created by Everett Rogers in 1962, originating in communication it strives to explain how over time an idea or product diffuses through a specific population or social system. Within this social system, the result of this diffusion causes adoption of a new idea, or behavior; however, the key to this process is that the individual must perceive that the product or behavior is a new or innovative idea. This process is said to take place over time, and some individuals are more prone to adoption of this innovation in comparison to others, and those who adopt early, have different characteristics than those who adopt later;. Understanding these differences aids in characteristics that either help or hinder this process (LaMorte, 2019).

The five stages include:

1. Knowledge: where the individual is exposed to the project innovation but is lacking in information.
2. Persuasion: the individual becomes interested in the new idea and seeks new information.
3. Decision: where the individual applies this innovation to his present and anticipated situation, and from here decides to try it or not.
4. Implementation: the participant will make full use of the innovation
5. Confirmation: the participants decide this is an innovation they will be making full use of.

Using this theory has been shown to make a critical role in socially influencing how individuals adopt what is being taught, purposively targeting recruitment who have key opinions as leaders of the future. In a study for acceptability and the effects of PrEP diffusion therapy in lay workers, the diffusion of innovation design focused on purposefully selecting participants who lacked knowledge but were recognized as champions and prepared them for diffusion of PrEP by providing knowledge and building skills such as self-efficacy using group discussion, teach back and modeling in role play; all increased knowledge, decreased stigma (Wu et al., 2021).

Logic Model

The logic model was constructed based on the literature findings, that were previously discussed in Chapter II. The logic model presented provides a graphic depiction of the resources, activities, and projected outcomes and impact of the QI project. This remains a reflection in the identification, development, implementation and evaluation and dissemination of this project. This logic model is adapted to organize and analyze the connectedness of the relationships between the aforementioned work and its intended effects (Idzik et al., 2021). In this project, the Logic Model is presented using two sections: the first documenting resources and inputs, activities, and outputs, and the second section demonstrates the measurements. Here you will find the short, intermediate, and long-term goals/outcome, a copy of this model can be accessed in Appendix G.

Resources and Inputs

To present in, a hybrid in-person learning environment, multiple resources will be needed. The chief medical director Dr. Albert Chang and Dr Sarah Campbell DNP, FNP-c, were consulted for coordination of learning material, date of presentation, setting, and stakeholder involvement. Furthermore, Sarah Campbell was consulted numerous times guidance and approval of educational intervention. The scheduled time for this class asks that providers are in a quiet, uninterrupted physical environment of choice to promote maximum learning potential and provide optimal atmosphere for learning. Other resources for learning would include paper, pens and any utensils needed for note taking during lecture. Providers will be required to log into their already establish Zoom account via electronic device such as desktop computer, laptop, iPad or phone using internet or WIFI to sustain connection. The platform in which providers will learn and engaged will be via Zoom, and therefore is essential to complete this educational module.

Activities

The activities that are involved are evidenced-based, and remain recommendations by the CDC, they require active participation in a Socratic learning environment. The main participatory approach was identified via CDC recommendations via literature review and will be mirrored in this study via the 5 P's in sexual health history taking. With the Socratic style of lecturing, providers will listen to a 30-minute

power point which is beneficial for audio and visual learners on the HIV epidemic, its application in the Primary Care setting, LGBTQIA related issues, and navigating conversations using the 5 P's. From here, providers will be encouraged to ask questions and apply role playing scenarios. These scenarios in beneficial to kinesthetic learners, and will engage providers to reflect on previous discussions, methods that were/weren't used, clarification of skills, and improve their knowledge by developing confidence and self-efficacy, changing their behaviors accordingly. Providing them confidence, comfort and a systematic approach will aid in the likeliness to adapt presented therapies.

Other activities include a short Q & A session for any concerns or questions, and a pre and post survey to measure if the providers improved comfort and knowledge improved with educational intervention and active application in a controlled environment.

Output

Conducting this engaging lesson, allowed for providers to welcomed into a safe space to increase learning and yield positive effects in adaptation of PrEP therapy. Providers shared they felt comfortable asking questions that may seem biased, offensive, or questions they felt previously embarrassed or apprehensive about. Within the discomfort, they were appeased by a willingness to alleviate the stresses of such interactions, adaptation of culturally competent approaches, and a systematic approach to take the ambiguity out of interviewing patients. Clinicians at UCI SHC will retain the information from educational modules and be able to apply modalities in their future practices as demonstrated by behavior modification and improved health outcomes for at-risk populations.

Short-Term Outcomes

The outcomes presented are separated into 3 sections: short-term, intermediate, and long-term measurements, and it is expected to see a change in knowledge and comfort which can be evidenced in a comparison of pre and post surveys, which are self-reported.

Intermediate Outcomes

Intermediate outcomes are anticipated and expected by providers applying their skills and knowledge that were adapted from the learning modules and applied within their practice.

Long Term Outcomes

The long-term outcome hope is that UCI SHC providers will have the tools and systematic approach to provide PrEP therapy within their personal practices. It is presumed that with the knowledge, comfort, confidence, and skills adopted from these educational teachings, providers will be able to assess and treat at-risk patients who would benefit from this therapy and lower the acquisition of new HIV diagnoses in the. Considering the life-long impact the SHC providers can make within their practice, and the UCI campus health, it is hoped that this evolves into a lifelong practice.

External Influences

The external influences would be demonstration of neglect to adapt PrEP interventions due to doubt, skepticism, or bias about the LGBTQIA community. Social and family support can potentially create barriers for the providers to deny adoption of educational tools, however it is hoped to address these issues in a safe space to navigate questions or concerns.

CHAPTER 4: METHODS

Project Goals

Please refer to Chapter II, for a comprehensive, detail explanation of all outcomes. Please also refer to Appendix G for a visual explanation of guide.

Project Description

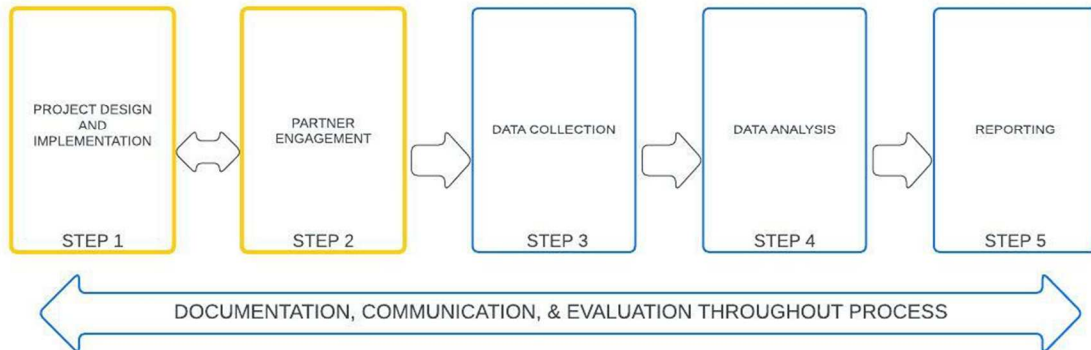
The purpose of this project is increase knowledge and comfort in sexual health history taking to assess risk stratification for PrEP initiation. Additionally in removing the ambiguity of prescribing PrEP and providing an evidence based, all-inclusive systematic tool to navigate conversations surrounding sexual health and well-being, providers will be able to adopt this life-altering therapeutic intervention into their practice. In providing participatory educational program in a safe space via audio, visual, and applicatory discussion; this project will engage UCI SHC providers to acquire new knowledge to cover all identified gaps, instill comfort in navigating evaluating and screening patients who would benefit from this therapy, the confidence to converse and build rapport with patients regarding sexual practices and the benefit of PrEP therapy, and instill the tools to ensure likeliness of future application of such therapy. This will be

accomplished by engaging providers and obtaining feedback on the education received using a community based participatory action research approach (CBPAR). Using the CBPAR model, 5 steps will be accomplished:

1. Project Design and Implementation: CDC's 5 P's of sexual health history taking for the UCI SHC outpatient providers, with a goal of identifying at-risk communities in a culturally appropriate manner.
2. Partner Engagement: Identifying Sarah Campbell to aid in dissemination at the outpatient providers' level.
3. Data Collection: Pre and Post survey that includes self-rated measurements of knowledge, attitudes, beliefs, practice adoption including constructs of knowledge, comfort, confidence, and the likelihood of prescribing PrEP after intervention.
4. Data Analysis: to be completed via statistician using paired t-testing
5. Reporting: Reporting the results to site manager to determine efficacy of educational lecture and evaluate the sustainability in application in future meetings.

It is the goal of providing a comprehensive approach to providing an evidence-based approach that alleviates providers stressors surrounding the discomfort of navigating such conversations within the LGBTQIA community. The provider will have a good understanding of how to consciously, and appropriately provide patient support routinely, and ensure the understanding of positive impact application of this therapy will create for this ongoing epidemic.

COMMUNITY BASED PARTICIPATORY ACTION RESEARCH PROCESS MODEL



Project Type/Design

This project was designed as a quality improvement project in the setting of UC Irvin's SHC at the monthly provider meeting. The DNP student will engage and teach with the objectives of assessing and guiding SHC providers to find comfort and expertise in sexual health history taking by using the CDC's guidelines for screening patients risks of HIV and prescribing PrEP, including the 5 P's, and evaluating the lesson by assessing readiness, comfort, and willingness to implement PrEP in the primary care setting.

This project will create a safe space for SHC providers clinicians to practice and participate in the *knowledge* stage of adoption, and with examples of real-life conversations, the DNP educator attempts to *persuade* the receiving cohort to choose the *decision* to adopt PrEP therapy. This *decision* to adopt and *implement* PrEP was evaluated post instruction, and evaluation of *confirmation* of PrEP adoption and identification of at-risk patients that would benefit is part of this project's sustainability plan.

Project Setting/Population

This event was held via zoom session during a monthly provider meeting at UC Irvin's SHC. Facilitated, and monitored medical director Dr. Albert Chang. This location was selected due to the amount of STI and sexual well-being complaints, and the providers abilities to recognize and manage disparities that fall under health promotion criteria.

A site approval and authorization letter were obtained and signed by site mentor, and attached as Appendix A. The setting offered the unique ability to provide an educational session under supervision where knowledge could be directly applied into practice and ask questions in a safe space.

Participants and Recruitment

The targeted population for this project was UC Irvines SHC outpatient providers. It must be noted that there was no regard to age, race, sex, gender, sexual orientation. It a multitude of diversely educated providers with different degrees, licenses/certifications, and clinical backgrounds/expertise, who were actively working in this clinic. This population was targeted in this project to negate the ambiguity of PrEP prescribing, and to drive home that it is a preventative therapy therefore should be adopted into the primary care setting.

Description of Intervention

This project aims at accomplishing the following:

1. Evaluate the UC Irvines SHC providers pre-intervention baseline knowledge via Qualtrics survey, which allows the provider to remain anonymous by choosing a 4 letter and 4-digit identifier for pre and post survey/ data comparison. The composite of these scores will include ratings of clinical practice knowledge of PrEP, comfort in identifying “at-risk” patients, confidence in identifying at-risk patients from the LGBTQIA community and the likelihood of prescribing PrEP after intervention.
2. Implementation of Zoom Lecture with presented PowerPoint illustrated with clinical practice knowledge, screening using the CDC recommended 5 P’s in sexual Health History Taking, and real-time conversational examples specifically geared towards the LGBTQIA community, followed by clarification and open discussion in safe space. The “safe space” includes participation in discussion to give providers a chance to process, learn, discuss questions or concerns during the exercise. Providers will be invited to answer open-ended questions from primary investigator and site mentor and speak reflectively with their peers in a non-judgmental atmosphere. This is

demonstrated during learning via role-play to re-create positive experiences with patients in the future.

3. Evaluation of UC Irvines SHC providers post-intervention scores, in all aforementioned constructs
4. Evaluated the differences and identify gaps that were covered, and gaps that remain uncovered.

Compile data to address with stakeholders to improve future lecture material to optimize and ease learning.

SMART Goals

The goals provided this project direction, motivation, and a clear central focus of this project to ensure ease of implementation of educational material.

1. Develop and implement a guest lecture titled “Using the 5 P’s to Identify Candidates for PrEP Therapy in the LGBTQIA Population” for Implementation at UC Irvines SHC.
2. Obtain providers baseline and post-intervention scores including the constructs of knowledge, comfort, confidence, and likelihood of prescribing PrEP before and after educational lecture.

Post-Survey scores including constructs of knowledge, comfort, confidence, and likelihood of prescribing PrEP therapy after educational lecture, and will be reviewed and discussed with stakeholders within 30 days of analysis.

Measures/Instruments

An original questionnaire developed based on a thorough review of the literature regarding HCP knowledge of PrEP, was developed specifically for this project, questionnaire included in Appendix I. This survey was composed to included measurements to assess knowledge, attitudes, beliefs, practice adoption, all which are self-rated, and based on a Likert scale.

Data Collection Procedures

Data was collected by means of a baseline knowledge pretest, and a post educational assessment via Qualtrics. The information will be cataloged by individual identifier chosen by the provider, for

comparison and anonymity of DNP author. This data then will be documented into an electronic Excel spreadsheet where it will be categorized into Pre and Post results of same question.

Data Analysis

Analysis explored knowledge, comfort, confidence, and likelihood of prescribing PrEP therapy. The statistical analysis that was used is a paired t-test, which was conducted for pre, and post survey measures. The outcome measures compared before and after educational delivery and determined the efficacy of educational delivery. This was completed using the assistance of a statistician.

Data were analyzed for change from pre to post intervention. Because of the small sample size, it was readily apparent that all participants reported a gain in knowledge. We therefore conducted a one tailed t-test, which showed that the mean increase from pre to post intervention was 15%. Despite the small sample size, we computed a one tailed paired sample t-test, which yielded a p values of <0.000 which demonstrates significant statistical change. However, while the small sample size is too small for generalization, it reflects the overall trend toward a positive knowledge gain

Ethical Considerations

The official University of California, Irvine, Institutional Review Board (IRB) form, Request for - Determination-Non-Human-Subjects was completed and will be submitted. approved and prior to initiating the DNP project. No patient information will need to be accessed to deliver this project.

All information collected as part of evaluating the impact of this project will be aggregated data from the project participants and will not include any potential patient identifiers Participant confidentiality will be assured by coding the participants using individual identification numbers. The list of participants and their identifying numbers will be kept in locked in a place, only accessible to the DNP student. All electronic files containing identifiable information will be password protected to prevent access by unauthorized users and only the DNP student will have access to the password.

Stakeholders/Barriers

Stakeholders/ Barriers

Free online resources provided via the CDC will be utilized to carry out this project. Sarah Campbell DNP, FNP-c will serve as a site mentor during the educational presentation of this DNP project. There were no constraints noted.

Formative Process Evaluation

The proposed DNP project is aimed at implementing the Centers for Disease Control (CDC) recommendation of using the 5 P's of sexual health history taking as an evidenced based tool to assess risk stratification for prescribing pre-exposure prophylaxis (PrEP) therapy in comparison to not using a systematic tool, and how it affects the likelihood and comfort level in providers at the UCI Student Health Center in prescribing PrEP therapy in the LGBTQIA population.

Implementation goal: The intention of this project is to familiarize clinicals with a sexual health history tool that is structured, systematic, all-encompassing and gender neutral, that invites open ended, and constructed conversation when navigating these conversations, in a way that can expansively be used regardless of gender or sexuality, but provides a supportive, non-judgmental environment for providers to conduct these assessments appropriately without the discomfort of potentially “not using/using the wrong language”.

Following our literature review, it was found that barriers to care showed:

1. Low frequency of sexual health history obtained in primary care (Palaiodimos et.al, 2020)
2. Findings demonstrated consistency with previous studies suggesting culturally appropriate language was a major barrier
3. Educational workshops/materials improved providers abilities

By using an integrated approach, providers were taught they can increase access and comprehensive care by facilitating affirmation of awareness, and this could be established by achieving comfort in assessment and communication. Using the evidenced based model of the 5 P's of sexual health history taking created by the CDC, provides a gender-neutral approach to evaluating partners, practices, protection from sexually transmitted infections, past history of sexually transmitted infections, and pregnancy intention. All data collected from this systematic interview allows the providers to evaluate appropriate PrEP therapy initiation. Data will be collected

The project evaluated the following dynamics

Needs Assessment:

- a. Population's characteristics
 - b. What specific services are needed
 - c. Through what mechanisms services provided
2. Program Theory Assessment
- a. LGBTQIA as target population
 - b. Best route of project delivery
 - c. Structure of project
 - d. Resources needed for project achievement
3. Process Evaluation
- a. Objectives were thoroughly met
 - b. Activities were conducted within the target population
 - c. Population approved of services
 - d. Target population achieved
4. Impact/Outcome Evaluation?
- a. Outputs/outcomes/goals of project met
 - b. Beneficial to the Target Population

- c. Problem of the project addressed alleviated
5. Assessment of Efficiency
- a. Evaluation of the program change shown to be significant
 - b. Touched on how this could be impacted by future policy

CHAPTER 5: RESULTS AND CONCLUSIONS

Results

A total of 11 providers at UC Irvines SHC participated in the pre survey prior to the educational tutorial disseminated via zoom. Providers completed the post survey using the same 4-digit identifiers for a final sample size of nine. Providers were asked about their comfort in sexual health history taking. A percent of change was assessed and showed that all changes were positive, and furthermore an average increase of 15 %. Furthermore, a paired sample one-tailed t-test in K1 showed a p value of (p=0.000).

Discussion

This project demonstrated a profound positive change to providers knowledge, and comfort in sexual health history taking using the CDC's 5'Ps to identify risk stratification for PrEP therapy. The education intervention correlates with Stumbar's conclusion, that with educational intervention, participants could identify potential biases related to the aspects of gender identify and orientation, however with an evidence-based tool that is all inclusive, there was a significant improvement in comfort in sexual health history taking and such interactions, with a systematic way to approach the LGBTQIA community in a culturally appropriate and inviting way (Stumbar et, al., 2018). In addressing the barriers such as embarrassment of sexual language, fear of limited personal language, fear of limited personal knowledge of sexual practices, providers were offered neutral, culturally appropriate definitions, language, and examples of conversation starters that addressed language appropriate for the LGBTQIA community when navigating a sexual health history taking to improve outcomes that were identified in a cross-sectional study by Palaiodimos (et. al, 2020).

This intervention continues to highlight the need for appropriate health literacy that was achieved by using the evidence based systematic tool the CDC 5p's of sexual health history taking. It demonstrated that with a educational intervention, we can tailor systems to improve performances that deeply affect the LGBTQIA community. It brought to the forefront the importance in a thorough comprehensive sexual health interview and well-being, and how it impacts a myriad of social factors both from a patient and providers perspective. Although anecdotally, some providers ranked themselves as "extremely confident and well versed" in sexual health history taking, after the intervention, the material pointed out the vastness and ever-expanding spectrum is, and that the marginalized community deserves appropriate measures to ensure a healthy life, therefore the providers responsibility in adapting how to appropriately screen, and treat responses is crucial to the future of their LGBTQIA patients, both physically and mentally.

Limitations

The primary limitation was the very small sample size. Considering the project had significant last minute changes including establishment of a new population, and setting, the UCI SHC although appropriate for intervention, consists of only 15 general medicine providers, 12 of which attended the intervention presentation. Additionally, the intervention was supposed to be recorded for those who could not attend, and the coordinator and controller of the zoom session, did not successfully record the intervention. The PowerPoint was given to the medical director for distribution instead, however key components of the lecture were not dictated verbatim in the material, because of the interactive presentation. Lastly, out of the 11 providers who took the pre-survey, only nine completed both the pre and post survey, further limiting data collection.

Implications (Sustainability)

Long term sustainability of this project has great potential with SB 159 which increases access to PrEP and PEP without a physician prescription by authorizing pharmacists to prescribe this therapy, making California the first state in the nation to authorize and expand such access. It was conversed, that with the UCI SHC future correlation for educational intervention with this project in the pharmacy division looks

promising, but no date has been established thus far. Most promising though, is the simple fact that the 5 P's provides a free implementation of risk assessment, at no cost to the healthcare provider, or its business.

Conclusion

In understanding how healthcare providers evaluate the need for PrEP is to develop a thorough evaluation of how sexual risk is assessed and addressed. To understand this risk a thorough sexual health history is required. Therefore, this project sought to assess providers barrier to achieving a thorough and comprehensive assessment in the LGBTQIA community. Increasing provider knowledge and comfort in sexual health history taking using an all-inclusive evidence-based has profoundly show that the all-inclusive 5 P's tool can absolutely improve providers risk-stratification and adoption of PrEP for their future practices.

The congruence with the American Association of Colleges of Nursing in *The Essentials of Doctoral Education for Advanced Nursing Practice* defines a total of 8 essentials of doctoral education to be used in context in achieving scholarship (AACN;2006). The following is a demonstration of all essentials that were accomplished throughout the entirety of this project. *Essential I: Scientific Underpinnings for Practice* was established through the analyzation of the optimal well-being of the LGBTQIA community in the realm of HIV. Understanding and defining the human behavior that creates at-risk individuals, allowed for assessment of environmental and cultural factors, to positively impact the health status of those ravaged by a preventable disease with an intervention that is 99% efficacious. Furthermore, understanding the social aspects that contribute to a culturally appropriate exploration through risk assessment, creates an environment that inspires wholeness of this community, meeting them exactly where there are through providers' interactions.

Essential II: Organization Systems Leadership for Quality Improvement and Systems Thinking: In assessing and evaluating the shortcomings of PrEP uptake in the LGBTQIA community, a delivery approach that meets the needs of this community was established via the CDC's 5 P's of sexual health history taking. It provides an all-inclusive, gender-neutral, open-ended approach that meets current needs of the LGBTQIA in assessing risk stratification. It provides an accountable, safe way to approach this

population, and advances communications that leads to quality assessment and stratification of PrEP therapy initiation. Furthermore, it allows providers to demonstrate comfort for culturally sensitive strategies that allow for diverse inclusive assessment of practices within UCI SHC healthcare organization.

Essential III: Clinical Scholarship and Analytical Methods for Evidence Based Practice: The project was designed as a Quality Improvement project using existing literature where gaps in knowledge, comfort, and confidence existed amongst the realm of ambiguity of prescribing. The CDC's 5 P's was designed to implement a process, that promotes evidence based methodologies to promote a safer, more meaningful, and inviting environment for uptake, equalizing access to care without needing specialist interventions. *Essential IV: Information Systems/Technology and Patient Care Technology for the Improvement and Transformation of Healthcare:* the DNP student grew fond of the Qualitrics website, and designed an easy to access, use, and evaluate the interventions efficacy without being over-analytical or egregious in survey requirements. The ease of this design allowed for appropriate evaluation of participants in a timely simple manner. *Essential V: Health Care Policy for Advocacy in Health Care: and Essential VI: Interprofessional Collaboration for Improving Patient and Population outcomes:* The entirety of the project surrounded advocacy/social justice, equalization of care in an ethical manner for the LGBTQIA community. *Essential VII: Clinical Prevention and Population Health for Improving the Nation's Health:* Synthesizing concepts to teach providers how to navigate psychosocial dimensions of LGBTQIA health while addressing disease prevention efforts surrounded the 5 P's as a delivery care tool to ensure continuity and inclusion. It created a space where socioeconomic factors were taken into consideration and provided strategies to address care gaps from a provider's perspective to create a systematic disease prevention effort.

Lastly, *Essential VIII: Advance Nursing Practice:* the daunting effort to construct a comprehensive therapeutic intervention that was not only culturally diverse with sensitive approaches and conversations but developing therapeutic relationships within the LGBTQIA community on campus. In the politically complex environment of the nation, where LGBTQIA rights are being stripped, using evidence-based practice tools, the DNP student designed the intervention to be all inclusive.

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[2](https://doi.org/10.1007/s10461-021-03248-2)

Appendix A

Site Approval/authorization Letter



Letter of Cooperation with Outside Organization for UCI DNP Project

Date: 10/20/21

Dear: (name of DNP Student): Nichole R. Yamashiro

This letter confirms that I, as an authorized representative of [redacted] allow the above-named Doctor of Nursing Practice student access to conduct a leadership, policy, quality improvement, or evidence-based practice project activities at the listed site(s) as discussed with the DNP student and outlined below. These activities may commence after the DNP student has consulted with UCI IRB about the proposed project.

- **Project site(s):** (list specific site name and address for all sites within which the organization is providing student access to conduct the project)

University of California Irvine, SON
Address: 802 W Peltason Dr, Irvine, CA 92697

- **Project purpose:** (briefly summarize the project purpose, plan and expected outcomes)

The purpose is to establish comfort, knowledge, and understanding in identifying patients who meet the criteria for PrEP, as well as prescribing and following these patients. Expected outcomes is that using the 5 P's, DNP students will prescribe PrEP from the beginning of their careers.

- **Project activities:** (briefly summarize the activities that will commence at the site, including any baseline data collected, educational interventions, PDSA cycle proposed...)

There will be a meeting with the professor teaching the class in which this can be implemented, and using a google survey, demographic information will be collected from student participants. There will be a pre and post survey after a brief lecture of benefits, and importance of adopting PrEP therapy as a primary care provider, and the comfort of doing so after the teachings.

- **Target population:** (identify the population upon whom the project will focus)

DNP students at UCI School of Nursing

- **Site(s) support:** (briefly describe the support the project site(s) agree to provide to support the project, such as space to conduct project activities, data retrieval from electronic records, facilitation of educational activities....)

The SON professor will provide a zoom link to educate students, and students will be provided a link to the survey prior to lecture to fill out, and apost survey link will be collected from students post

Sue & Bill Gross School of Nursing
268 Berk Hall
Irvine, CA, 92697-3959
(949) 824-3650
www.nursing.uci.edu

Appendix B

Kuali Approval

University of California, Irvine Mail - Confirmation of Activities that DO NOT Constitute Human Subjects Research

1/6/22, 5:03 PM



Nichole Rene Yamashiro <nryamash@uci.edu>

Confirmation of Activities that DO NOT Constitute Human Subjects Research

1 message

Kuali Notifications <no-reply@kuali.co>
To: nryamash@uci.edu

Fri, Dec 17, 2021 at 12:11 PM

Dear Nichole Rene Yamashiro,

The University of California, Irvine (UCI) Human Research Protections (HRP) Program complies with all review requirements defined in 45 CFR Part 46 and 21 CFR 50.3.

Based on the responses provided in Non Human Subjects Research (NHSR): #606 - "Using the the 5 P's as a risk assessment to identify PrEP Acquisition LGBTQIA Population", and per the definitions cited below, the activities do not constitute human subject research or a clinical investigation, as applicable. Therefore, UCI IRB review is not required and will not be provided.

45 CFR 46.102(l) defines research as "a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge; and 45 CFR 46.102(e)(1) defines a human subject as "a living individual about whom an investigator conducting research obtains (i) Obtains information or biospecimens through intervention or interaction with the individual, and uses, studies, or analyzes the information or biospecimens; or (ii) Obtains, uses, studies, analyzes, or generates identifiable private information or identifiable biospecimens."

21 CFR 50.3(c) defines a clinical investigation as "any experiment that involves a test article and one or more human subjects and that either is subject to requirements for prior submission to the Food and Drug Administration under section 505(i) or 520(g) of the act, or is not subject to requirements for prior submission to the Food and Drug Administration under these sections of the act, but the results of which are intended to be submitted later to, or held for inspection by, the Food and Drug Administration as part of an application for a research or marketing permit."

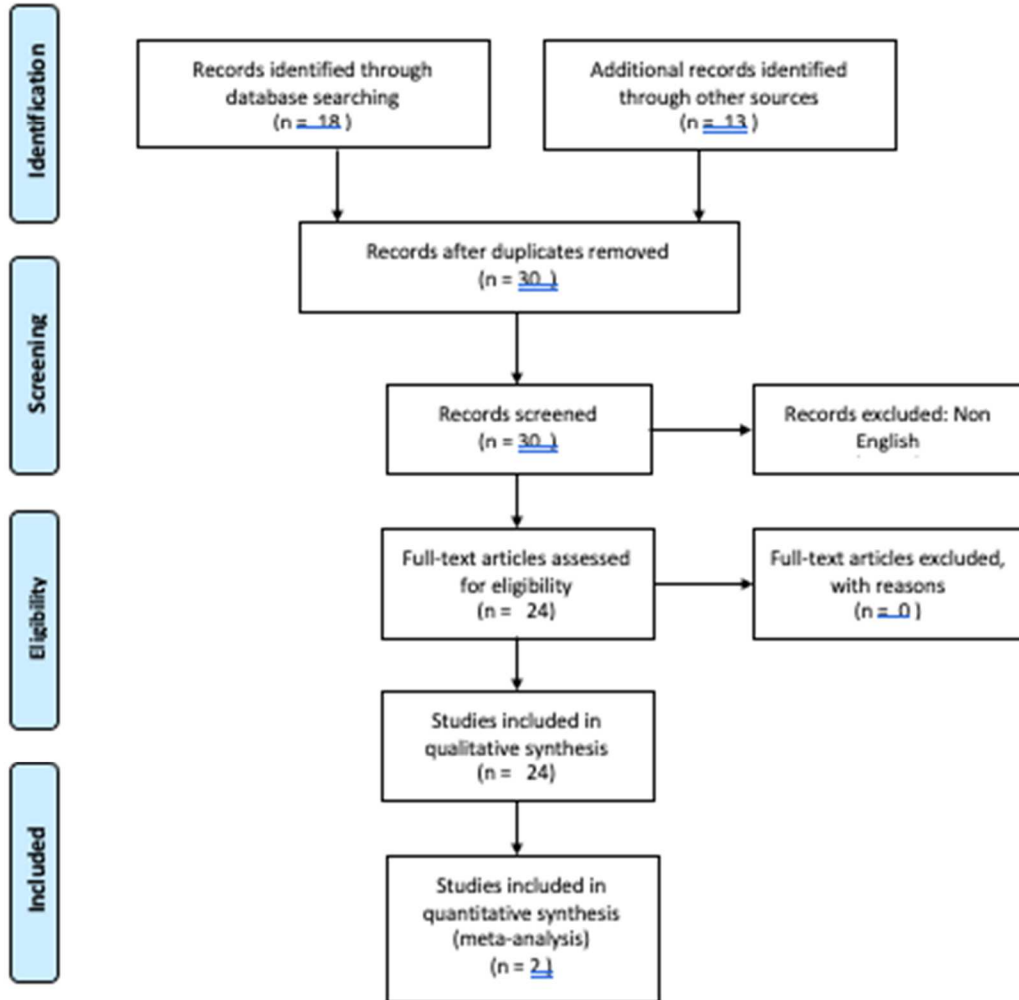
To view the determination for your submission, click here: uci.kuali.co/protocols/protocols/61ba7c3701efed003d7168d4

Please DO NOT REPLY to this email as this mailbox is unmonitored. If your project changes in ways that may affect this determination, please contact the HRP staff for additional guidance: irb@uci.edu.

Appendix C



PRISMA 2009 Flow Diagram



Appendix D

Table of Evidence

1	2	3	4	5	6	7	8	9	10	11	12
SOURCE (AUTHOR, DATE)	TOPIC/MAN IDEA	POPULATION OF STUDY	Independent/Dependent Variable (Primary Outcome)	RESULTS/CONCLUSIONS	LIMITATIONS	CONNECTION TO OTHER STUDIES	RELATION TO PICO Question				
1. SOURCE 1 O'Brien, 2021	The power of dominant discourses and lack of adequate understanding of PEP therapy in clinicians	at-Risk Patients	IV Nursing Curricula Inclusive of LGBTQIA care	In order for nursing care to be safe, ethical, compassionate and competent, it should be inclusive of trans people and gender diversity.	None, thorough pedagogy with direct examples.	Builds on the idea that lack of understanding in nursing care delivery. Evidence is illustrated with personal stories, supports the concept of educational need in nursing regarding PEP in at-risk patients.	Demonstrated lack of knowledge of PEP in at-risk patients.				
2. SOURCE 2 Smith, 2016	Bridging the gap of provider bias and comfort in PEP	MSM, at-risk individuals	IV Nursing education DV: HIV experience	Nursing education must incorporate microaggression into understanding best care practices.	None, thorough pedagogy with direct examples.	Builds on the need for implementation in nursing schools. Expresses the need for cultural competence in primary and mental health settings.	Demonstrates cultural competency skills with nursing educators to desigmatize the barriers.				
3. SOURCE 3 Quin, 2018	Breaking barriers of minority populations with PEP therapy	The LGBTQI but at risk MSM and people of color	IV Education of socioeconomic individuals	recognition socioeconomic standards health needs to be more represented as a medical necessity.	Works as a professor of nursing and as a nurse educator focusing on a wellness in college student health.	Expresses the nursing care goes with provided the recommendation of LGBT specific care into nursing curriculum and clinical practice expertise.	Provides therapeutic ways nurses can improve their relationships with LGBT patients, therefore provides methods and resources that are needed and care that is provided by nurses.				
4. SOURCE 4 O'Brien & Holmes 2020	governmentally, in addition to explaining our institutional social structures, we need to be more vocal in using these concepts, our political perspective reframes nursing practice as a means by which an individual's potential or actual deviance (meaning gender and sexuality) can be identified and then combated.	Nursing perspective in social context	IV Understanding and Education of Proficient Care	Nursing care should demonstrate understanding of the nuances.	Self-reported data and bias	Builds on the LGBTQIA experience of feeling their experiences in healthcare are dismissed and against and experiencing disparity.	Addresses the pertinent topics. Allows for providers/nurses to address topics specific to this population while being sensitive to the unique barriers related to lack of knowledge.				
5. SOURCE 5 Sumbur, 2018	Experimental learning in nursing education by teaching cultural competence and sensitivity caring in vulnerable populations.	Medical students	patients of reproductive age	case-based lecture followed by a patient panel. Panelists discussed their interactions with the medical system and how these related to their sex and gender identity.	limitations a number of trainings.	Students overwhelmingly felt that having more sessions following this format would be useful in the future.	Evaluates the impact simulation on students' affirmative practice when they received experiential learning in nursing education as an effective approach from cultural competence and sensitivity in care.				
6. SOURCE 6 Palacios, 2020	Surveys report low frequencies of sexual history (SH) obtained in primary care. Sexually transmitted infections incidence can be reduced with timely screening. It is important to explore the barriers to obtaining SH and to identify needs for improvement.	patients in primary care	IV education DV: competency	All components of SH were explored in 100% of visits. Partial SH was taken in 85% of visits. Full SH was taken in 85% of visits. SH was more likely to be taken from female patients than from male patients (p < .001), and was less likely to be obtained from older patients (p < .001). There was no significant difference in SH taking between male and female providers (p < .75). The provider title and the level of education were not significant in independent predictors of SH taking (p < .001).	None, thorough pedagogy with direct examples.	Builds on the importance of health history taking in primary care, however it expands on the inclusivity of staff and not just patients.	Provides a positive demonstration of nursing attitudes that included "confidence" in providing health care related to clinical preparates related to the history taking, however it impacts the "norm" attitudes regarding sexual health and PEP.				

Appendix E

Practice Guideline Appraisal (AGREE TOOL)

DOMAIN 1. SCOPE AND PURPOSE

1. The overall objective(s) of the guideline is (are) specifically described.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

2. The health question(s) covered by the guideline is (are) specifically described.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

3. The population (patients, public, etc.) to whom the guideline is meant to apply is specifically described.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

DOMAIN 2. STAKEHOLDER INVOLVEMENT

4. The guideline development group includes individuals from all relevant professional groups.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

5. The views and preferences of the target population (patients, public, etc.) have been sought.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

6. The target users of the guideline are clearly defined.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

DOMAIN 3. RIGOUR OF DEVELOPMENT

7. Systematic methods were used to search for evidence.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

8. The criteria for selecting the evidence are clearly described.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

9. The strengths and limitations of the body of evidence are clearly described.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

10. The methods for formulating the recommendations are clearly described.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

11. The health benefits, side effects, and risks have been considered in formulating the recommendations.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

12. There is an explicit link between the recommendations and the supporting evidence.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

13. The guideline has been externally reviewed by experts prior to its publication.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
-------------------------------	----------	----------	----------	----------	----------	----------------------------

Comments

14. A procedure for updating the guideline is provided.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

DOMAIN 4. CLARITY OF PRESENTATION

15. The recommendations are specific and unambiguous.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

16. The different options for management of the condition or health issue are clearly presented.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

17. Key recommendations are easily identifiable.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

DOMAIN 5. APPLICABILITY

18. The guideline describes facilitators and barriers to its application.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

19. The guideline provides advice and/or tools on how the recommendations can be put into practice.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

20. The potential resource implications of applying the recommendations have been considered.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

21. The guideline presents monitoring and/or auditing criteria.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

DOMAIN 6. EDITORIAL INDEPENDENCE

22. The views of the funding body have not influenced the content of the guideline.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

23. Competing interests of guideline development group members have been recorded and addressed.

1 Strongly Disagree	2	3	4	5	6	7 Strongly Agree
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Comments

OVERALL GUIDELINE ASSESSMENT

For each question, please choose the response which best characterizes the guideline assessed:

1. Rate the overall quality of this guideline.

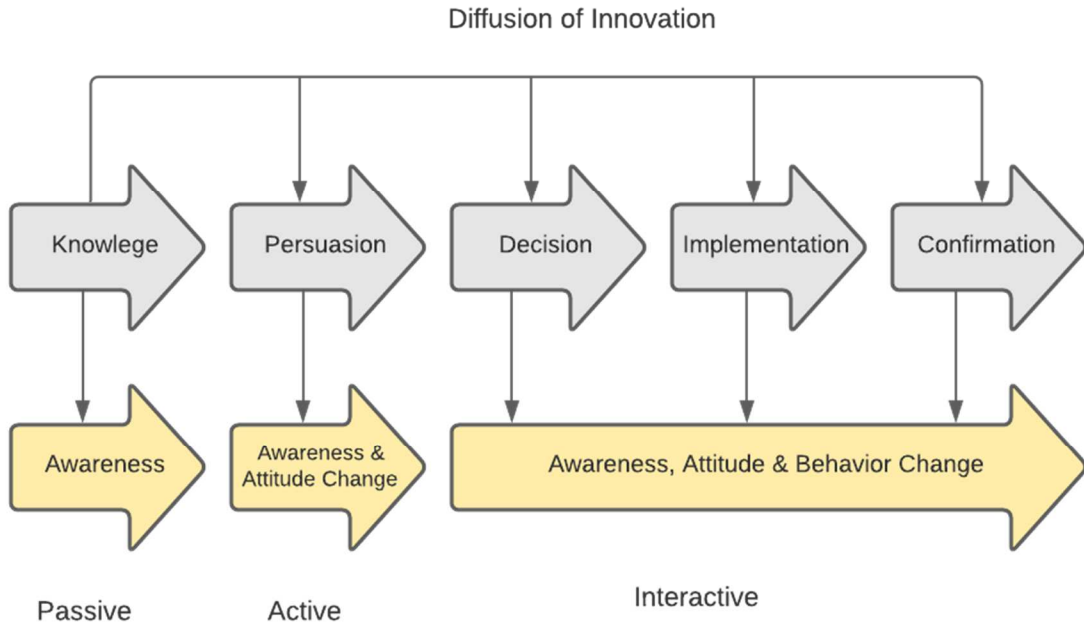
1 Lowest possible quality	2	3	4	5	6	7 Highest possible quality
-------------------------------------	----------	----------	----------	----------	----------	--------------------------------------

2. I would recommend this guideline for use.

Yes	
Yes, with modifications	
No	

NOTES

Appendix F
EBP Model of Conceptual Framework



Appendix G
Logic Model

Target Population	Resources/Inputs	Activities	Output
UCI SHC Providers	SHC Meeting	PowerPoint	Providers will attend class
	Medical Director/ Educators/ Providers	Discussion	Providers will participate in activities
	Zoom Account	Clinical Examples	Providers will adopt information
	Computer/Tablet/Electronic Device for Zoom Access	Interactive examples	Providers will retain Information
	Internet	Pre/Post Presentation Survey	Providers will apply intervention

Short-Term Outcomes	Intermediate Outcomes	Long term Outcomes	External Influences
Changes in comfort	Asking questions in safe space	Identify at-risk patients	Comfort in history taking
Changes in knowledge	Applying skills to Clinical experiences	Navigate sexual history with cultural competence	Personal biases/beliefs
Changes in skills	Developing systematic identification techniques	Use correct terminology, create welcoming environment	

100% attendance for class	Self-reported changes in survey	Prevent HIV acquisition	
100% engagement in presentation	Improvement in comfort and application	Maintain HIV acquisition intervention with appropriate follow-up	

Appendix H
Recruitment Material

**USING THE 5 PS TO IDENTIFY
CANDIDATES FOR PREP
THERAPY IN THE LGBTQIA
POPULATION**

02.16.22

**8am @ UCI
Monthly PCP
Meeting**



Presented By:
Nikki Yamashiro DNP-FNP Student
UCI Sue & Bill Gross School of Nursing

Appendix I

Data Collection Instruments (Qualtrics Pre/Post Survey)

Provider 5 P's & Pre-PrEP Survey

Start of Block: Demographics

Choose first 3 letters of your middle name and last 3 digits of your cell phone number (you will use this same anonymous code for pre and post surveys) :

Page Break

How often do you take a sexual health history?

- Daily (11)
- 4-6 times a week (12)
- 2-3 times a week (13)
- Once a week (14)
- Never (15)

Page Break

How comfortable do you feel taking a detailed sexual health history?

- Extremely uncomfortable (1)
- Somewhat uncomfortable (2)
- Neither comfortable nor uncomfortable (3)
- Somewhat comfortable (4)
- Extremely comfortable (5)

Page Break

Do you take a sexual health history using the same questions for every patient?

- Yes (1)
- No (2)

Page Break

How comprehensive is your sexual health history taking?

- Far below average (1)
- Somewhat below average (2)
- Average (3)
- Somewhat above average (4)
- Far above average (5)

Page Break

Are you familiar with the CDC's 5Ps (Partners/Practices/ Prevention of STI's/ Past history of STI's/ Prevention of Pregnancy) of sexual health history taking?

Yes (1)

No (2)

Page Break

How likely are you to use the 5 Ps in practice?

Extremely unlikely (1)

Somewhat unlikely (2)

Neither likely nor unlikely (3)

Somewhat likely (4)

Extremely likely (5)

Page Break

Have you ever been asked about PrEP by a patient?

Yes (1)

No (2)

Page Break

Have you ever initiated a conversation about PrEP with a patient?

Yes (1)

No (2)

Page Break

How likely are you to prescribe PrEP?

- Extremely unlikely (9)
- Somewhat unlikely (10)
- Neither likely nor unlikely (11)
- Somewhat likely (12)
- Extremely likely (13)

Page Break

Over the past year how many times would you say you prescribed PrEP?

- 0 (1)
- 1-5 (2)
- 5-10 (3)
- >10 (4)

Page Break

How comfortable are you in prescribing PrEP?

- Extremely uncomfortable (19)
 - Somewhat uncomfortable (20)
 - Neither comfortable nor uncomfortable (21)
 - Somewhat comfortable (22)
 - Extremely comfortable (23)
-

Page Break

How effective do you think PrEP is in preventing acquisition of HIV among people who take it as prescribed?

- Not effective at all (1)
- Slightly effective (2)
- Moderately effective (3)
- Extremely effective (4)

Page Break _____

Based on your understanding of PrEP, how safe is PrEP?

- Not at all safe (1)
- Slightly safe (2)
- Moderately safe (3)
- Extremely safe (4)

Page Break _____

For each of the following risk behavior categories, how comfortable are you evaluating eligibility for PrEP?:

Women who have sex with Men

- Not at all comfortable (1)
 - Slightly comfortable (2)
 - Moderately comfortable (3)
 - Extremely comfortable (4)
-

Men who have sex with Men

- Not at all comfortable (1)
 - Slightly comfortable (2)
 - Moderately comfortable (3)
 - Extremely comfortable (4)
-

Page Break

With your current knowledge, how likely are you to initiate PrEP therapy?

- Extremely unlikely (1)
 - Somewhat unlikely (2)
 - Neither likely nor unlikely (3)
 - Somewhat likely (4)
 - Extremely likely (5)
-

Page Break

How COMFORTABLE are you speaking to a patient from the LGBTQIA (Lesbian, Gay, Bisexual, Transgender, Questioning, Intersex, Asexual) community about sexual practices?

- Extremely uncomfortable (1)
- Somewhat uncomfortable (2)
- Neither comfortable nor uncomfortable (3)
- Somewhat comfortable (4)
- Extremely comfortable (5)

Page Break

How COMPETENT are you with LGBTQIA terminology?

- Extremely incompetent (1)
- Somewhat incompetent (2)
- Neither competent nor incompetent (3)
- Somewhat competent (4)
- Extremely competent (5)

End of Block: Demographics

Provider 5 P's & Post-PrEP Survey

Start of Block:

Choose first 3 letters of your middle name and last 3 digits of your cell phone number (you will use this same anonymous code for pre and post surveys) :

Page Break

How comfortable do you feel taking a detailed sexual health history?

- Extremely uncomfortable (1)
- Somewhat uncomfortable (2)
- Neither comfortable nor uncomfortable (3)
- Somewhat comfortable (4)
- Extremely comfortable (5)

Page Break

How comprehensive is your sexual health history taking?

- Not comprehensive (61)
- Slightly comprehensive (62)
- Moderately comprehensive (63)
- Very comprehensive (64)
- Extremely comprehensive (65)

Page Break

How likely are you to use the 5 Ps in practice?

- Extremely unlikely (1)
 - Somewhat unlikely (2)
 - Neither likely nor unlikely (3)
 - Somewhat likely (4)
 - Extremely likely (5)
-

Page Break

How likely are you to prescribe PrEP?

- Extremely unlikely (9)
 - Somewhat unlikely (10)
 - Neither likely nor unlikely (11)
 - Somewhat likely (12)
 - Extremely likely (13)
-

Page Break

How comfortable are you in prescribing PrEP?

- Extremely uncomfortable (19)
 - Somewhat uncomfortable (20)
 - Neither comfortable nor uncomfortable (21)
 - Somewhat comfortable (22)
 - Extremely comfortable (23)
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 - Extremely comfortable (4)
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Men who have sex with Men

- Not at all comfortable (1)
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- Somewhat incompetent (2)
- Neither competent nor incompetent (3)
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- Extremely competent (5)

End of Block:

USING THE 5 PS TO IDENTIFY CANDIDATES FOR PREP THERAPY IN THE LGBTQIA POPULATION

NIKKI YAMASHIRO, DNP-FNP STUDENT
UC IRVINE SUE & BILL GROSS SCHOOL OF NURSING

1

ITINERARY

- https://uci.co1.qualtrics.com/jfe/form/SV_e2MNz7Zg8ePQcG
- Presentation
- Post Presentation Q&A

2

GRATITUDE


- Dr. Sarah Campbell (Mentor/Inspiration)
- Dr. Albert Chang
- Dr. Dave Holmes



3

THE METHOD TO THE MADNESS

- Married since 2013
- Mom of 2 year old twins and a 4 year old
- US Army Veteran/ Combat Medic
- First Generation College Student
- 2008 Research HIV Etiology
- Chair: Dave Holmes PhD RN (UCI SON Associate Professor)
- UCI National Gender Diversity Program Dr. Jeff Yu
- Dr. Sarah Campbell DNP FNP-C, UCI SHC

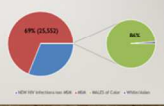


4

BACKGROUND & SIGNIFICANCE

HIV Infections 2019-20, B51


- Lesbian, Gay, Bisexual, Transgender, Queer, Intersex, Asexual (LGBTQIA)
- Vulnerabilities to Sexually Transmitted Infections (STIs), and in particular Human Immunodeficiency Virus.



5

SAFETY/EFFICACY

- PREP**
 - It is a pill that reduces the risk of getting HIV when taken as prescribed.
 - Truvada (T)** 200 mg in combination with emtricitabine (FTC) - brand name Truvada
 - Simvastatin (S)** 200 mg in combination with Truvada
 - Atazanavir (A)** 300 mg (ATA) 25 mg (ATA) - brand name Atazanavir
- SAFETY** HIV negative and have taken PEP for up to 5 years
 - SE AIDS, Hepatitis, ABC Plus, substance use
- EFFICACY** Highly effective when taken as prescribed, reduces HIV acquisition from sex by about 90%




6

CLINICAL PROBLEM

Orange County


- According to the National Prevention Information Network Centers for Disease Control and Prevention (NPIV) there are a total of (PREP Access)
- A total of 10 sites within 5 miles of UCI
- According to the California Healthcare Almanac in 2019
 - Orange County 4,397 providers, 1,528 PEP
 - 75 are listed as providing PEP
 - 0.5%



7

WHY THE BARRIER?

- #1 identified barrier: lack of assessment and comfort level of risk assessment and barriers to communication (provider comfort level)



8

PICO

- For Outpatient Clinicians at UCI SHC (P) how does using the 5 Ps in assessing risk stratification for prescribing PrEP (I) compared to not using the 5 Ps (C) affect the likelihood and comfort level in prescribing PrEP therapy (O)?

9

BARRIERS TO CARE


- Low frequency of sexual history obtained in primary care (Pacheco et al, 2020)
- Findings demonstrated consistency with previous studies indicating language is a barrier in health care
- Educational materials/workshops improved clinician's abilities



10

SEX & GENDER

- Sex and gender core determinants of health:
- Sex - biological differences
 - Anatomy, chromosomes, hormones, genes, etc.
- Gender - social and cultural distinctions
- Phenotypic expression
 - Psychological, social, behavioral
 - Gender expression, gender identity



11


SEXUAL ORIENTATION

Social orientation: how a person identifies their physical and emotional attraction to others

Identity: strength, ego, values, interests, goals, self-identity

Behavior: who you are with, how you act

Attraction: who you are attracted to



12

GENDER IDENTITY AND EXPRESSION

- Gender Identity**
 - A person's internal sense of their gender (do I consider myself male, female, non-binary)
- Gender Expression**
 - How one presents themselves through their behavior, mannerisms, speech patterns, dress, hairstyle, etc.

THIS MAY CHANGE




13

TRANSGENDER

Transgender - Gender identity not congruent with the assigned sex at birth

Alternate terminology: trans vs cis

- Transgender: woman, trans feminine individual, a woman of trans experience (T)
- Transgender: man, trans masculine individual, a man of trans experience (M)
- Non-binary: gender
- AGAB: assigned male at birth
- AFAB: assigned female at birth



14

INTEGRATED APPROACH TO LGBTQIA CARE

Increasing access:

- Yes, we need to be a specialist to provide care to fulfill
- Increasing comprehensive care: LGBT
- Goal of care is to facilitate affirmation of gender and sexual orientation

Address general health concerns:

- STD screening
- HIV care, mgmt of chronic conditions
- Behavioral health
- Care management



15

ESTABLISHING RAPPORT

- Effective** use of listening and mirroring
- Use an individualized and holistic approach:
- Actively engage previous healthcare experiences with an attitude of respect and necessary level of paying field
- Help regulate and pace disclosure and exploration of sexual history
- Approach sensitive experiences slowly and at a time when support can be off



16

WISE WORDS

USE THIS	INSTEAD OF THIS
Gender	Male/female, penis/vagina
External area, external pelvic area, outside	Vulva
Genital opening from pelvic opening	Vaginal opening
Frontal canal, internal canal, inside	Vagina
Internal organs, organs you retain	Uterus, Cervix, Clitoris
Clave	Breast
Blending	Perineal masturbation

17

PREP Clinical Care Model




II. Collaborative Model

Health departments, fund, public, and local collaborative planning and delivery of health protective measures - like PrEP - a public health model for prevention with PrEP includes national, state, and local levels of public health collaborating with and supporting clinical and nonclinical CBOs to ensure that PrEP is available, accessible, and acceptable.

18

A GUIDE TO Taking a Sexual History



Centers for Disease Control and Prevention
National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention

19

STEP 1: CREATING DIALOGUE

- Partners
- Practices
- Protection from STIs
- Past History of STIs
- Pregnancy Intention



WELCOME WE HAVING THIS CONVERSATION

20

PARTNERS

- To assess the risk of getting an STI, it is important to determine the number and gender of your patient's sex partners.
- PREP Relation/Eligibility: Substantial risk of acquiring HIV infection
 - male
 - Male-to-male "Ungrouped" Pen
 - MSM



21

PRACTICES

- Asking about sex practices will guide the assessment of:
 - patient risk
 - risk-reduction strategies
 - determination of necessary testing
 - identification of **exposed sites** from which to collect specimens for **STI** testing
- PREP Relation/Eligibility

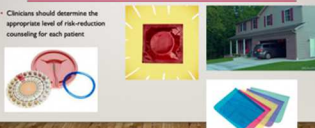


TOP & BOTTOM

22

PROTECTION FROM STIS


- Clinicians should determine the appropriate level of risk-reduction counseling for each patient.



23

PAST HISTORY OF STIS


- A history of prior STIs may place your patient at greater risk now.
- PREP Relation/Eligibility: SEX WITHIN 24 HOURS OF THE FIRST DOSE
 - SEX (0.2-24 HOURS)
 - NO SEX (24-48 HOURS)
 - SEX (48-72 HOURS)



24

PREGNANCY INTENTION

- Based on information from the prior section you may determine that the patient or the patient's partner(s)
 - Could become pregnant
 - Questions should be focused on determining pregnancy intention and what information they need.
- PREP Relation/Eligibility



WRAP UP: "THE 6TH P"

- By the end of the interview session, the patient may have come up with information or questions that they were not ready to discuss earlier.



SAFETY IS KEY. GOOD TIMES!

Questions/Comments



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<https://www.cdc.gov/hiv/clinicians/prevention/pep.html>

Appendix K

Gantt Chart

Gantt chart

Nikki Yamashiro | November 19, 2021

	OCT 2021	NOV 2021	DEC 21-Jan 22	MARCH 2022	APRIL 2022	MAY 2022
<i>Research</i>						
<i>Evaluation of Matrix</i>						
<i>Begin Composition of Educational Lecture</i>						
<i>Recruit Site Manager</i>						
<i>Begin Intervention and Collect Data</i>						
<i>Evaluate and Interpret Results</i>						
<i>Disseminate Findings for DNP Project</i>						

