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HIV Pre-Exposure Prophylaxis (PrEP): Increasing Awareness in Primary Care

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HIV Pre-Exposure Prophylaxis (PrEP)

Increasing Awareness in Primary Care

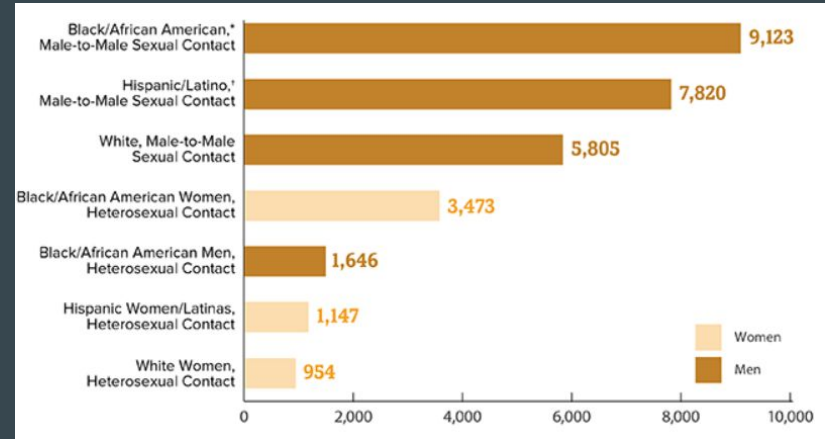


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Milton Family Practice
Milton, VT
May - June, 2022
Preceptor: Gordon Powers

Problem Background and Identification

- Minority groups are disproportionately affected by HIV³
- Taking a sexual history helps identify patients who are at risk and is a recommended part of routine primary care, yet it is often deferred⁵
- Screening for high risk behaviors can help identify patients that may benefit from initiating treatment
- Pre-Exposure Prophylaxis (PrEP) treatment is effective at reducing the chances of HIV transmission¹

New Diagnoses of HIV in 2019 per Subpopulation



GOAL: Increase Awareness of PrEP Amongst Providers and High-Risk Patients in Primary Care

Public Health Cost

- As of 2019 an estimated 1,189,700 people in the US have HIV³
- In 2019 an estimated 36,801 people in the US received a diagnosis of HIV³
- From a patient perspective, the estimated lifetime cost of treatment is \$326,500 for someone who becomes infected with HIV⁶
- The estimated lifetime cost of treatment is \$96,700 for patients who remain uninfected but fall into a high risk category⁶
- According to Vermont Public Health Survey, 6% of Vermonters participate in high risk activities, the same percentage as the national average⁷
- Since 2011 the proportion of adults in Vermont participating in high risk behaviors has increased⁷
- Among Vermont Residents, LGBTQ+ individuals are six times more likely to participate in high risk behaviors⁷

Community Perspectives and Barriers to Care

Gordon Powers, MD

Family Medicine Physician at Milton Family Practice

“In one primary care visit there is so much ground to cover, we have to pick and choose our topics at each appointment.”

“Amongst primary providers there is a lack of awareness of PrEP”

“There is a misconception that it’s hard to prescribe PrEP due to the regular labs that have to be monitored while a patient is receiving treatment”

“So many primary providers have packed schedules, it’s hard to fit in regular 3 month visits for lab monitoring.”

Devika Singh, MD

Infectious Disease Physician at UVM Health HIV/AIDS Clinic

“A major gap in care is the ability to identify patients at risk with adequate sexual history taking.”

“Outside of infectious disease clinics there is not enough knowledge about PrEP.”

“There are a lot of training and logistical complications surrounding the injectable form of PrEP. A lot of clinics aren’t yet equipped to prescribe it.”

Intervention - CDC Handouts for Patients and Providers²

(Page 1 is in English, Page 2 is in Spanish)

December 2021

PrEP 101

Are you HIV-negative but at risk for HIV? PrEP can help keep you free from HIV.

WHAT IS PREP?

- PrEP, or pre-exposure prophylaxis, is medicine that can reduce your chance of getting HIV.
- PrEP can stop HIV from taking hold and spreading throughout your body.
- PrEP is highly effective when taken as prescribed. PrEP is much less effective if not taken as prescribed.
- Only condoms protect against other STDs like syphilis and gonorrhea.



IS PREP RIGHT FOR YOU?

PrEP may benefit you if you are HIV-negative and ANY of the following apply to you.

You have had anal or vaginal sex in the past 6 months and

- have a sexual partner with HIV (especially if the partner has an unknown or detectable viral load),
- have not consistently used a condom, or
- have been diagnosed with an STD in the past 6 months.

You inject drugs and

- have an injection partner with HIV, or
- share needles, syringes, or other equipment to inject drugs (for example, cookers).



You have been prescribed PEP (post-exposure prophylaxis) and

- report continued risk behavior, or
- have used multiple courses of PEP.

If you have a partner with HIV and are considering getting pregnant, talk to your health care provider about PrEP if you're not already taking it.

VISIT YOUR HEALTH CARE PROVIDER

- To find out if PrEP is right for you.
- Routinely, as recommended, if you take PrEP, for repeat HIV tests, prescription refills, and follow-up.

- If you have any symptoms while taking PrEP that become severe or don't go away.
- If you don't have a provider, visit www.preplocator.org to locate one.



HOW CAN YOU GET HELP TO PAY FOR PREP?

- Most insurance programs and state Medicaid plans cover PrEP. You may also receive co-pay assistance to help lower the cost of PrEP.
- The *Ready, Set, PrEP* program makes PrEP available at no cost to those who qualify. Learn more at www.getyourPrEP.com.
- If you don't have insurance, consider enrolling in an insurance marketplace, PrEP assistance program, or your state's Medicaid plan, if you are eligible for it.
- Learn more about paying for PrEP at www.PrePcost.org.



For more information, please visit www.cdc.gov/hiv.

What Are the Key Changes in the Updated PrEP Guideline?

To access the updated PrEP guideline, visit: cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf



Patients Who Should Be Prescribed PrEP

More easily identify patients who would benefit from PrEP. The updated guideline includes flow charts offering a few questions about sexual or drug injection behaviors that might put patients at risk of getting HIV.

HIV Laboratory Tests

Quickly test patients who are starting or taking PrEP. The updated guideline includes two testing algorithms:

- For patients who are starting or restarting PrEP after a long stop, test using an HIV antigen/antibody test (a laboratory-based test is preferred).
- For patients who are taking or have recently taken PrEP (including patients who have taken oral PrEP in the last 3 months) and patients who had a CAB injection in the last 12 months), test using an HIV antigen/antibody test and a qualitative or quantitative HIV-1 RNA test.
 - If a patient has a positive antigen/antibody test and a detectable HIV-1 RNA test (if applicable) confirming the patient has HIV, link that patient to HIV care and treatment.
 - If a patient has a negative antigen/antibody test and an undetectable HIV-1 RNA test (if applicable) confirming the patient does not have HIV, continue prescribing PrEP.



Oral PrEP Options

Prescribe emtricitabine (F)/tenofovir disoproxil fumarate (TDF) (Truvada® or generic equivalent) or consider the additional option of prescribing emtricitabine (F)/tenofovir alafenamide (TAF) (Descovy®) for sexually active men and transgender women. In 2019, the FDA approved F/TAF as PrEP for sexually active men and transgender women. The updated guideline adds F/TAF as a PrEP option for these groups. F/TAF is not recommended for people assigned female sex at birth who could get HIV through receptive vaginal sex.



Ongoing Assessments

- For oral PrEP (F/TDF or F/TAF)
- CDC revised the recommended assessments for patients taking oral PrEP as follows:
- Assess creatinine clearance once every 12 months for patients under age 50 or patients whose estimated creatinine clearance was greater than 90 mL/min when they started oral PrEP.
 - For all other patients, assess creatinine clearance every 6 months.
 - For patients taking F/TAF, measure patients' triglyceride and cholesterol levels and their weight each year.
 - Review the list of medications that may interact with F/TAF or F/TDF.



For injectable PrEP (cabotegravir, or CAB)

- Because the FDA approved CAB for PrEP in 2021, the updated guideline includes a new section that details the ongoing assessments and follow-up schedule for patients taking CAB.
- Regular kidney, triglyceride, or cholesterol assessments are not needed for patients taking CAB, as they are for patients taking oral PrEP.
 - The follow-up schedule for recommended assessments is different for CAB users:
 - HIV testing every 2 months (at each injection visit).
 - Sexually transmitted infection (STI) testing every 4 months (at every other injection visit).

What Are Other Considerations for Providing PrEP?



Same-Day PrEP

Offer same-day PrEP to patients when appropriate. The updated guideline offers steps to safely prescribe PrEP to patients on the same day as their first evaluation. These steps include:

- Conducting baseline assessments and tests.
- Offering information on insurance or co-pay assistance.
- Scheduling follow-up tests and appointments.
- Giving or prescribing oral PrEP or CAB injections.



Tele-PrEP

Provide PrEP by telehealth when available. The guideline includes options for offering PrEP services by telehealth, such as having telephone or web-based visits, using laboratory or home testing, and prescribing a 90-day supply of PrEP medication.



2-1-1 Dosing

Learn about 2-1-1 dosing. The guideline now provides information on how to correctly use off-label 2-1-1 dosing for oral PrEP. This information may benefit gay, bisexual, and other men who have sex with men who choose to use 2-1-1 dosing. This approach is not approved by the FDA and is not recommended by CDC.



Primary Care for PrEP Patients

Address primary care needs during PrEP visits. The updated guideline describes how health care providers can offer primary care services to patients taking PrEP to help prevent and screen for other conditions. These may include STIs, mental health disorders, tobacco/nicotine use, and drug or alcohol use disorders.



Results and Potential Solutions

Devika Singh, MD

“We can learn so much by listening to patients that have HIV, hearing their story and appreciating their perspective on how providers can improve sexual history taking.”

“Move away from talking about sexual risks, and instead use vocabulary surrounding sexual practices.”

Gordon Powers, MD

“Medicine has a lot to learn about providing adequate care for the LGBTQ+ population.”

“Destigmatizing sexual history taking would go a long way towards providing adequate care for at risk populations”

Surveyed Patients from Milton Family Practice

- All patients interviewed were aware of behaviors that are associated with a high risk of HIV transmission
- All patients reported having friends or family that fall into the high risk group
- None of the Patients were aware of PrEP or the concept of HIV prophylaxis
- PrEP 101 handout was distributed to patients at Milton Family Practice to increase awareness among patients

Effectiveness and Limitations

- Interviewed a small sample size of patients about their level of awareness
 - Each patient interviewed was provided an educational handout for their own benefit and to distribute to acquaintances that fall into a high risk category
- Only primary care providers in Milton Family Practice received the educational handout regarding updated guidelines for prescribing PrEP
- Future evaluation of effectiveness would include monitoring for the percentage of adults who participate in high-risk behaviors that are being treated with PrEP, before and after distribution of information in the primary care setting

Future interventions

- Facilitate widespread distribution of CDC 2021 PrEP guidelines to primary care clinics
- Increase patient education by expanding screening of primary provider's panels for patients that fall into the high risk category and ensure that each of them receive the PrEP 101 handout
 - Encourage them to initiate a conversation with their primary provider about PrEP
- Expand the sample size of patients interviewed to determine the percentage of high risk patients who are unaware of PrEP
- Normalize sexual history taking among providers and medical students as a way of identifying patients that are classified as high risk
 - Invite Infectious Disease Physicians and HIV patients to primary care clinics to offer their perspectives

References

1. <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>
2. <https://www.cdc.gov/hiv/risk/prep/index.html>
3. <https://www.cdc.gov/hiv/basics/statistics.html>
4. <https://www.cdc.gov/hiv/images/basics/statistics/infographics/cdc-hiv-statistics-diagnoses-subpopulations-1200x630.png>
5. Wimberly YH, Hogben M, Moore-Ruffin J, et al. Sexual history-taking among primary care physicians. *J Natl Med Assoc.* Dec 2006;98(12):1924-1929.
6. Schackman BR, Fleishman JA, Su AE, et al. The lifetime medical cost savings from preventing HIV in the United States. *Med Care.* 2015;53(4):293-301. doi:10.1097/MLR.0000000000000308
7. https://www.healthvermont.gov/sites/default/files/documents/pdf/HSVR_2018_BRFSSReport.pdf
8. Krakower D, Mayer K H. Patient Evaluation and selection for HIV pre-exposure prophylaxis. In: *UpToDate*, Sax Paul E (Ed), UpToDate, Waltham, MA. (Accessed on June 10, 2022.)

Interview Consent

1. Devika Singh, MD
2. Gordon Powers, MD
3. Michael S. Clark
4. Brett Gennero
5. Sean Ryan