



## Human Immunodeficiency Virus Pre-exposure Prophylaxis Screening and Linkage-to-Care at an Urban Treatment Center



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# **Presentation Objectives**

- > Define pre-exposure prophylaxis (PrEP) and indications for prescription
- > Describe first attempted intervention, results and implications
- Review a screening tool developed to identify those at high risk for HIV acquisition in the Substance Use Disorder (SUD) population
- Summarize a protocol for identifying eligible individuals and linking them to PrEP services

The authors report no conflict of interest.





## To produce a model for screening and linking eligible SUD patients to PrEP services with limited change in organizational infrastructure





# **PrEP: An Overview**

- Truvada (emtricitabine/tenofovir disoproxil fumarate) approved by FDA as HIV preexposure prophylaxis in 2012
- Eligibility: (1) HIV negative + (2) High risk for HIV + (3) Adherence likely
- High Risk Groups:
  - Drug use: HIV+ injecting partner; Sharing injection equipment; Recent drug tx
  - Men who have sex with men (MSM)
  - o Sero-discordant couples
  - o Sex workers

- PrEP has been shown to reduce the risk of HIV infection by up to 92%
- SUD community remains largely unreached

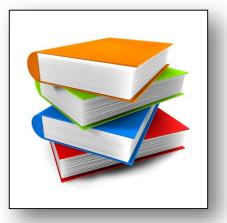
(CDC, 2014; CDC, 2017)





# **Current Literature Findings**

- Research on implementation of a PrEP access program in addiction treatment is completely lacking
- Key focuses of current research on PrEP and SUD:
  - o Awareness of PrEP
  - o Interest in PrEP
  - Acceptability of PrEP to SUD patients
  - Preferences for PrEP programming
  - o Barriers to PrEP uptake
  - o Cost-effectiveness of PrEP expansion in SUD



## Limited research on linking patients in SUD treatment with comprehensive PrEP services

(Bernard et al., 2017; Biello et al., 2017; Coleman et al., 2016; Escudero et al., 2014; Mimiaga et al., 2014; Oldenburg et al., 2016; Page et al., 2015; Shrestha et al., 2017; Shrestha et al., 2017; Spector et al., 2015; Stein et al., 2014)



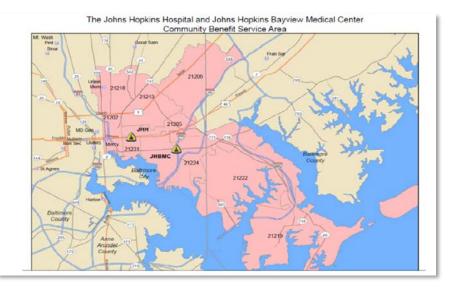
## Program Development: Levels of Intervention

Level 1	<u>Awareness:</u> Visible PrEP Literature PrEP research study posters Staff HIV trainings / PrEP training Patient education during intake				
Level 2	<u>Awareness:</u> Visible Literature Study postings Brief educational during groups? Patient education during intake	<u>Screening:</u> Risk factor screening HIV test	<u>Referral:</u> Prep Navigator (REACH initiative) Bartlett marylandprep		
	<u>Awareness:</u> Visible Literature	<u>Screening:</u> Risk factor screening	Baseline Testing:	PrEP Rx & Follow-ups: Prescribing Truvada +	]
Level 3	Study postings Brief educational during groups? Patient education during intake	HIV test Adherence likelihood	HAV, HBV, HCV, pregnancy, GC/chlamydia and syphilis RPR	Q3 month follow-ups w/ labs	



## Addiction Treatment Center: Baltimore, Maryland





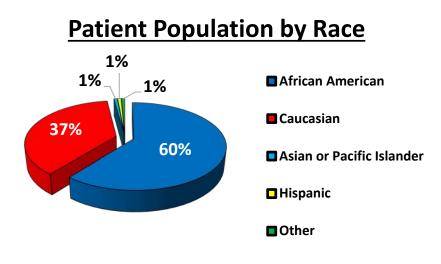


## **Treatment Center Statistics**

- **377** Individuals served per year
- **174** New admissions per year
- 147 New admissions from inpatient hospital units (87%)

Population by sex: Male: 71% / Female: 29%







# **BCA Needs Assessment**

## **HIV Testing:**

4% never tested for HIV 38% not tested in the last 6 months 7% unsure when last tested was

## **HIV Status:**

7% HIV positive85% HIV negative7% HIV status unknown

## In the last 6 months:

44% reported injection drug use13% reported sharing equipment and 53% were unsure64% in a previous medication based drug treatment program

## **Overall, 39% eligible for PrEP and could be referred to PrEP services**





# **Staff Education Intervention**



#### BEFORE Presentation

#### Attendee Information:

Role: a) Case Manager/Therapist b) Nursing c) Provider/Prescriber d) Other BCA Staff e) Non-Staff

Age: a) 19-39 b) 40 - 59 c) 60 - 79 d) 80 - 99 e) 100-119

Gender: a) Male b) Female c) Transgender d) Other

Education Level: a) High school/GED b) Associate/Bachelors c) Masters d) MD/PhD/DNP

#### Survey Questions:

- 1) One of the following statements is correct. Please select the correct answer:
- a. PrEP is a 2 pill per day medication regimen
- b. PrEP is a 1 pill, once per day medication regimen
- c. The medication used for PrEP typically causes sudden, severe side effects
- d. The medication used for PrEP prevents HIV 100% of the time

#### 2) It would be appropriate to refer which of the following patients for a PrEP consultation?

- a. A 34 year-old, HIV-positive, female who was recently incarcerated
- b. A 63 year-old, HIV-negative male who sometimes shares heroine needles
- c. A 19 year-old male who was diagnosed with HIV infection 2 years ago
- d. A 25 year-old female has no known risk factors for HIV-infection

#### 3) Which of the following statements is TRUE?

- a. It is not necessary to take PrEP medication daily
- b. Prep medication is great for people who do not often take their medications
- c. <u>PFP</u> medication should be taken daily, as prescribed, to be most effective d. The patient can avoid HIV infection by carrying PFP with them at all times
- The patient can avoid HIV infection by carrying PrEP with them at all times

#### 4) Which of the following patients would you NOT refer for a PrEP consultation:

- a. Female, alcohol-dependent, recent HIV-negative test, not sexually active
- b. Male, middle-aged, never tested for HIV, occasionally has sex with men
- c. Transgender, HIV-negative, only has sex with her HIV-positive male partner
- d. Female, occasionally engages in sex work, insists she uses condoms
- 5) Which of the following statements is TRUE (in the context of BCA)?
- a. Patients can get PrEP medication for free if they are considered at high-risk
- b. Once PrEP is prescribed, no follow-up is necessary with the prescriber
- c. A referral for PrEP generally requires the patient to have health insurance
- d. Health insurance does not cover PrEP medication, so insurance is irrelevant

6) I would feel comfortable educating a patient about PrEP; a) Yes b) No c) Unsure

7) PrEP is relevant to my current work with Substance Use Disorder patients: a) Yes b) No c) Unsure

8) I am confident that I could identify patients who may be eligible for PrEP: a) Yes b) No c) Unsure





## LUNCH & LEARN

ITALIANO STYLE -LUNCH PROVIDED!

## PrEP 101: HIV Pre-Exposure

### Prophylaxis (PrEP)

"A ground-breaking HIV PREVENTION METHOD in a PILL"



### MONDAY, OCTOBER 2 12 - 1 PM



## Survey Implications & Practice Recommendations

- Simplified Approach -> The medical suite
- Patient privacy considerations
- Need for speed -> Screening to linkage
  - Standardized screening tool -> HIVARS
- Protocol to guide clinicians swiftly through the process





CENTERS FOR DISEASE CONTROL AND PREVENTION

# **HIV Risk Screening Tool**

#### Substance Use Disorder / Pre-Exposure Prophylaxis (PrEP) - Screening Tool:

Script: (To be read before completing the screening)

"The following questions can be very personal. I want you to know, we ask these questions to everyone and it is so that we can provide you with the best possible care. The information you share remains private and confidential and will not be shared with others without your consent in accordance with HIPAA. I also want you to know if at any time you are uncomfortable, you may refuse to answer a question. Do I have your permission to continue?"

1. Have you ever been tested to see if you have HIV? Yes / No

If Yes: (a) How long ago was your last HIV test?

(b) Was the result HIV-positive or HIV-negative? HIV-positive / HIV-negative

If HIV-positive: confirm provider managing HIV care. <u>SCREENING COMPLETE</u>
If HIV-negative: go on to question 2.

If No: Register patient for next HIV testing session. Go on to question 2.

2. Have you injected drugs that were not prescribed to you within the past 6 months? Yes / No

If Yes: (a) In the past 6 months, have you shared any needles, syringes, or other drug preparation equipment that had already been used by another person? Yes. / No

(b) In the past 6 months, have you been in a methadone or other medication-based drug treatment program? <u>Yes</u> / No

If No: Go on to question 3.

3. Have you been sexually active in the last 6 months? Yes / No

If No: SCREENING COMPLETE

#### If the client is:

(a) Male: Do you have sex with men, women, or both?

> If MSM: (1) Have you had sex without a condom in the past 6 months? Yes / No

(2) Have you had sex in exchange for money or drugs? Yes / No

If MSW only: (1) Have you had sex with someone who is HIV+ in past 6 months without using a condom? Yes / No

(b) Female: Do you have sex with men, women, or both?

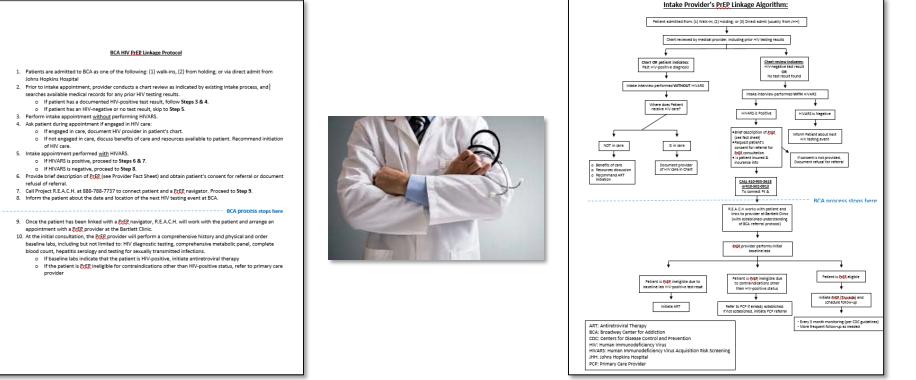
Have you had sex in exchange for money or drugs in the past 6 months? Yes / No

**JHUSON 2018** 





# OHNS HOPKINS SCHOOL of NURSING PREP Protocol & Algorithm



#### **JHUSON 2018**





## Implementation

## **Evaluation**

## Validation





# References

- Bernard, C. L., Owens, D. K., Goldhaber-Fiebert, J. D., & Brandeau, M. L. (2017). Estimation of the cost-effectiveness of HIV prevention portfolios for people who inject drugs in the United States: A model-based analysis. *PLOS Medicine*,14(5), 1-19. doi:https://doi.org/10.1371/journal.pmed.1002312
- Biello, K. B., Oldenbug, C. E., Mitty, J.A., Closson, E. F., Mayer, K. H., Safren, S. A., & Mimiaga, M. J. (2017). The "safe sex" conundrum: Anticipated stigma from sexual partners as a barrier to PrEP use among substance using MSM engaging in transactional sex. *AIDS Behavior*, 21, 300-306. doi: 10.1007/s10461-016-1466-y
- Centers for Disease Control and Prevention (2014). Pre-exposure Prophylaxis for the Prevention of HIV Infection in the United States 2014 A Clinical Practice Guideline. (2014). Centers for Disease Control and Prevention (CDC), 1-67. Retrieved October 21, 2017, from https://www.cdc.gov/hiv/pdf/ prepguidelines 2014.pdf.
- Centers for Disease Control and Prevention (2017). Pre-exposure prophylaxis (PrEP). Retrieved from https://www.cdc.gov/hiv/risk/prep/index.html
- Coleman, R. L. & McLean, S. (2016). Commentary: The value of PrEP for people who inject drugs. Journal of the International AIDS Society, 19(6). doi: 10.7448/IAS.19.7.21112
- Escudero, D. J., Lurie, M. N., Kerr, T., Howe, C. J., Marshall, B. D. L. (2014). HIV pre-exposure prophylaxis for people who inject drugs: A review of current results and an agenda for future research. Journal of the International AIDS Society, 17. doi: 10.7448/IAS.17.1
- HIV and Substance Use in the United States. (2016). Centers for Disease Control and Prevention (CDC). Retrieved July 12, 2016, from https://www.cdc.gov/hiv/risk/substanceuse.html.
- Martin, M., Vanichseni, S., N Suntharasamai, P., Sangkum, U., Mock, P., Leethochawalit, M., . . . Choopanya, K. (2015). The impact of adherence to preexposure prophylaxis on the risk of HIV infection among people who inject drug. *AIDS*, 29(7), 819-824. doi:10.1097/QAD.0000000000613
- Mimiaga, M. J., Closson, E. F., Kothary, V., & Mitty, J. A. (2014). Sexual partnerships and considerations for HIV antiretroviral pre-exposure prophylaxis utilization among high-risk substance using men who have sex with men. *Archives of Sexual Behavior*, 43, 99-106. doi: 10.1007/s10508-013-0208-8
- National HIV/AIDS Strategy for the United States: Updated TO 2020. (2015). White House Office of National AIDS Policy. Retrieved August 8, 2017, from https://files.hiv.gov/s3fs-public/nhas-update.pdf.
- Oldenburg, C., Mitty, Biello, Closson, Safren, Mayer, K., & Mimiaga, M. (2016). Differences in Attitudes About HIV Pre-Exposure Prophylaxis Use Among Stimulant Versus Alcohol Using Men Who Have Sex with Men. AIDS Behav., 20(7), 1451-1460. doi:10.1007/s10461-015-1226-4
- Page, K., Tsui, J., Maher, L., Choopanya, K., Vanichseni, S., Mock, P., . . . Martin, M. (2015). Biomedical HIV prevention including pre-exposure prophylaxis and opiate agonist therapy for women who inject drugs: State of research and future directions. J Acquir Immune Defic Syndr.,69(0), 1st ser., 169-175. doi:10.1097/QAI.00000000000641
- Shrestha, R., Altice, F. L., Huedo-Medina, T. B., Karki, P., & Copenhaver, M. (2017). Willingness to use pre-exposure prophylaxis (PrEP): An empirical test of the information-motivation-behavioral skills (IMB) model among high-risk drug users in treatment. AIDS Behavior, 21, 1299-1208. doi: 10.1007/s10461-016-1650-0
- Shrestha, R., Karki, P., Altice, F., Huedo-Medina, T., Meyer, J., Madden, L., & Copenhaver, M. (2017). Correlates of willingness to initiate pre-exposure prophylaxis and anticipation of practicing safer drugand sex-related behaviors among high-risk drug users on methadone treatment. Drug Alcohol Depend,1(173), 107-116. doi:10.1016/j.drugalcdep.2016.12.023
- Spector, A. Y., Remien, R. H., & Tross, S. (2015). PrEP in substance abuse treatment: a qualitative study of treatment provider perspectives. Substance Abuse Treatment, Prevention, and Policy, 10(1), 1-10. Retrieved October 10, 2017, from http://www.substanceabusepolicy.com/content/10/1/1
- Stein, M., Thurmond, P., & Bailey, G. (2014). Willingness to use HIV pre-exposure prophylaxis among opiate users. AIDS Behav. 2014 September; 18(9): 1694–1700. doi:.,18(9), 1694-1700. doi::0.1007/s10461-014-0778-z



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