

Implementation of Mental Health and Substance Misuse Screenings into Routine PrEP Therapy Encounters

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Key Points

- PrEP is a well-tolerated once daily antiretroviral used to prevent new HIV infections in currently HIV negative high risk individuals
- There is high prevalence of mental health and substance misuse in men who have sex with men (MSM) populations, with the United States Preventative Service Task Force (USPSTF) recommending screening for these conditions
- The PHQ-4 and TICS questionnaire are time-effective and easily implementable screening tools to be incorporated into every other routine PrEP therapy encounter (Every 6 months)

What is PrEP?

- Pre-Exposure Prophylaxis (PrEP) therapy is a once daily antiretroviral taken by high risk, Human Immunodeficiency Virus (HIV) negative individuals as a preventative measure
- Commonly prescribed by primary care provider
- Grade A Recommendation from United States Preventative Service Task Force's (USPSTF)
- Found to be over 90% effective when taken appropriately- as number of missed doses increases, efficacy decreases
- Requires blood work and STD testing every 3 months
- Concurrent condom use encouraged, PrEP does not protect against other sexually transmitted diseases
- Medication and required laboratory testing is free through all insurances

Table 1. Summary of PrEP Therapy Initiation & Maintenance

	Sexually-Active Adults Persons	Persons Who Inject Drugs
Identifying substantial risk of acquiring HIV infection	Anal or vaginal sex in past 6 months & any of the following: <ul style="list-style-type: none"> • HIV-positive sexual partner (or HIV status is unknown) • Bacterial STI in past 6 months • History of inconsistent or no condom use with sexual partner(s) 	HIV-positive injecting partner OR Sharing injection equipment
Clinically eligibility	ALL OF THE FOLLOWING CONDITIONS ARE MET: <ul style="list-style-type: none"> • Documented negative HIV Ag/Ab test result within 1 week before initially prescribing PrEP • No signs/symptoms of acute HIV infection • Estimated creatinine clearance ≥ 30 ml/min • No contraindicated medications 	
Initiation & Follow-up care	Initiation: <ul style="list-style-type: none"> • HIV Ag/Ab test and HIV-I RNA assay, medication adherence and behavioral risk reduction support • Bacterial STI screening, Hepatitis B serology, Hepatitis C Ab Assay, Basic Metabolic Panel Follow-up visits at least every 3 months to provide the following: <ul style="list-style-type: none"> • HIV Ag/Ab test and HIV-I RNA assay, medication adherence and behavioral risk reduction support • Bacterial STI screening for MSM and transgender women who have sex with men Follow-up visits every 6 months to provide the following: <ul style="list-style-type: none"> • Assess renal function for patients aged ≥ 50 years or who have an eCrCl < 90 ml/min at PrEP initiation Follow-up visits every 12 months to provide the following: <ul style="list-style-type: none"> • Assess renal function for all patients • Hepatitis C Ab Assay • For patients on F/TAF, assess weight, triglyceride and cholesterol levels 	

Note: * Table adapted from CDC

Mental Health Screening

Recommendation:

- USPFTS Grade B recommendation for mental health screening in primary care

4-Item Patient Health Questionnaire (PHQ-4) (See Table 2.)

- Combination of 2-Item Patient Health Questionnaire (PHQ-2), which screens for depression and 2-Item General Anxiety Disorder Scale (GAD-2), which screens for anxiety
- PHQ-2: Sensitivity of 83%, Specificity of 92%
- GAD-2: Sensitivity of 86%, Specificity of 89%

Positive Screening: Total score of ≥ 6 points across all 4 questions, or ≥ 3 on either the GAD-2 or PHQ-2 alone and would indicate further clinical investigation.

Substance Misuse Screening

Recommendation:

- USPFTS Grade B recommendation for substance misuse screening in primary care

Two Item Conjoint Screening (TICS) (See Table 3.)

- Screens for both alcohol and substance misuse
- Sensitivity of 80%, Specificity of 78%
- TICS questionnaire studied in high risk populations and those living with HIV

Positive Screen: response of "yes" to either question should prompt further clinical investigation

Table 2. PHQ-4 Questionnaire. Screening for Anxiety & Depression

		PHQ-4			
Over the past two weeks:		Not at all (0 points)	Several days (1 point)	More than half of the days (2 points)	Daily (3 points)
GAD-2	1. How often have you been bothered by feeling nervous, anxious or on edge?	+0	+1	+2	+3
	2. How often have you been bothered by not being able to stop or control worrying?	+0	+1	+2	+3
PHQ-2	3. How often have you been bothered by little interest or pleasure in doing things?	+0	+1	+2	+3
	4. How often have you been bothered by feeling down, depressed, or hopeless?	+0	+1	+2	+3
Total Score: _____ =		_____	+ _____	+ _____	+ _____

Table 3. TICS Questionnaire. Screening for Substance Misuse

TICS Questionnaire		
Question:	Response:	
1. In the last year, have you ever drunk or used drugs more than you meant to?	Yes	No
2. Have you felt you wanted or needed to cut down on your drinking or drug use in the last year?	Yes	No

Screening During PrEP Encounters

Why Screen?

- Depression is the leading cause of disability worldwide
- Substance misuse is the leading cause of preventable morbidity, mortality, and disability in the United States
- Unmanaged, these conditions lead to increased economic burden and utilization of healthcare system
- Early detection and intervention is crucial to their management

Why Screen during PrEP Encounters?

- Utilizing PrEP encounters is a unique and novel way to target this population who otherwise may not be connected to healthcare
- MSM populations have 17% higher incidence of mental health conditions and substance misuse than heterosexual populations
- These conditions are associated with decreased medication adherence, highlighting importance of screening while on PrEP therapy

Implementation:

- At every other encounter (twice per year/ every six months)
- Easily integrated into many electronic medical record (EMR) systems
- Can be self-administered or provider-administered during intake or during encounter
- Both PHQ-4 and TICS questionnaires can be administered in under 2 minutes total

Positive Screenings:

- Next steps require clinical judgement and reasoning
- Perform further screening tools or refer to specialist
- Screenings do NOT establish a diagnosis

Conclusion

- PrEP encounters are a unique and novel opportunity to screen for conditions that disproportionately impact MSM populations
- Both screening tools are easily implemented into routine PrEP encounters
- PHQ-4 and TICS Questionnaires should be implemented every 6 months (every other routine PrEP encounter)
- Positive screenings should be managed with clinical judgement
- Next steps require clinical judgement, reasoning and further work-up

References:

- Centers for Disease Control and Prevention. (2021). Preexposure Prophylaxis for the Prevention of HIV Infection in the United States – 2021 Update Clinical Practice Guideline. <https://www.cdc.gov/hiv/pdf/risk/prep/cdc-hiv-prep-guidelines-2021.pdf>. Published 2021. Accessed December 21, 2021.
- Mulvaney-Day N, Marshall T, Downey Piscopo K, et al. Screening for Behavioral Health Conditions in Primary Care Settings: A Systematic Review of the Literature. *Journal of General Internal Medicine*. 2017;33(3):335–346. doi:10.1007/s11606-017-4181-0.
- Recommendation: Prevention of Human Immunodeficiency Virus (HIV) Infection: Preexposure Prophylaxis | United States Preventive Services Taskforce. <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/prevention-of-human-immunodeficiency-virus-hiv-infection-pre-exposure-prophylaxis>
- Other references upon request.