PrEP Training for Providers in Clinical Settings

PEPFAR

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Columbia University
Mailman School of Public Health

Welcome!

- Please sign the registration sheet.
- Please make a name tag for yourself.
- Please take a participant's folder.

These materials were made possible by the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. Centers for Disease Control and Prevention (CDC) under the terms of cooperative agreement number U2GGH000994. Its contents are solely the responsibility of ICAP and do not necessarily represent the views of the U.S. Government.

Pre-Program Assessment

- Please remove the pre-program assessment questionnaire from your participant folder.
- The purpose of this assessment is to determine what you know about implementing PrEP. Your responses will help determine if there is anything in today's program that needs to be adjusted in the future.
  - **The assumption is that you know very little about PrEP, so please don't worry.**
- You have 20 minutes to complete the pre-program assessment questionnaire.
- Please hand in your completed questionnaire when you are finished.

Pre-Program Assessment Debriefing

- *How did you feel about the pre-program assessment questions?*
- *Were the questions easy or difficult?*

Answers to the questions will be provided after you complete the post-test at the end of today's training.

Introductions

- Take 1 minute (and only 1 minute, please!) to:
  - State your name, organization and position.

PrEP-Specific Competencies

After completing today's training program, participants will be able to:

- Identify eligible candidates for PrEP.
- Conduct an individualized risk assessment.
- Educate and counsel PrEP candidates and users.
- Conduct clinical and laboratory assessments during the initial PrEP visit.
- Prescribe PrEP.
- Conduct clinical and laboratory assessments during follow-up PrEP visits.
- Review PrEP monitoring and evaluation (M&E) tools.

Training Overview

1. PrEP Basics

MORNING BREAK

2. PrEP Screening and Eligibility

LUNCH

3. Initial and Follow-up PrEP Visits

AFTERNOON BREAK

4. Monitoring and Managing PrEP Side Effects, Seroconversion, and Stigma

Module 1

1 **PrEP Basics**

MORNING BREAK

2 PrEP Screening and Eligibility

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3 Initial and Follow-up PrEP Visits

AFTERNOON BREAK

4 Monitoring and Managing PrEP Side Effects, Seroconversion, and Stigma

Module 1: Learning Objectives

After completing module 1, participants will be able to:

- Define PrEP.
- Differentiate PrEP from PEP and ART.
- Discuss the need for PrEP.
- Identify people at risk and at substantial risk for HIV infection.
- Identify key populations (KP) for PrEP at the local level.
- Explain the relationship between PrEP effectiveness and adherence.
- Summarize evidence for PrEP.
- Specify the PrEP regimens approved by WHO and within one's own country.
- Discuss concerns regarding implementation of PrEP.
- Explain the risks and benefits of PrEP.

Introduction

- **HIV prevention needs change** during a person's lifetime.
- **Combination prevention** is a mix of biomedical, behavioral, and structural interventions that decrease risk of HIV acquisition.
  - Combining approaches may result in greater impact than using single interventions alone.
- Antiretroviral drugs (ARVs) used as PrEP provide an important ***additional*** **prevention tool.**

Combination Prevention

Structural

- Policies
- Laws
- Regulatory environment
- Culture
- Cash transfers

Behavioral

- Education
- Counselling
- Stigma reduction
- Harm reduction
- Adherence interventions

Biomedical

- HIV testing
- Condoms
- VMMC
- PMTCT
- Treatment of STIs
- ARV
  - Antiretroviral therapy for prevention (ART)
  - Pre-Exposure Prophylaxis (PrEP)
  - Post-Exposure Prophylaxis (PEP)

Question

What is Pre-Exposure Prophylaxis (PrEP)?

Pre-Exposure Prophylaxis (PrEP)

PrEP is the use of ARV drugs by HIV-uninfected persons to prevent the acquisition of HIV before exposure to HIV.

Pre	• Before
Exposure	• Activity that can lead to HIV infection
Prophylaxis	• Prevention

Question

What are some similarities and differences between Pre-Exposure Prophylaxis (PrEP) and Post-Exposure Prophylaxis (PEP)?

Comparing PrEP (*Pre*-Exposure Prophylaxis) and PEP (*Post*-Exposure Prophylaxis)

What's the same?
Both are used by HIV uninfected persons
Both use ARVs to prevent HIV acquisition
Both are available from a clinical provider by prescription
Both are effective when taken correctly and consistently

What's different?
PrEP is started BEFORE potential exposure and PEP is taken AFTER exposure
PEP is taken for 28 days only. PrEP requires ongoing use as long as HIV risk exists

Differences Between ART and PrEP

- **HIV treatment requires adherence to life-long therapy** with consistent, fully-suppressive dosing.
- **PrEP** is needed during ***"periods"*** **of high HIV risk.**
  - **Both ART and PrEP require optimal adherence.**
  - Individuals taking PrEP require ongoing risk assessment and PrEP can be discontinued if they:
    - acquire HIV infection.
    - are no longer at substantial risk for HIV infection.
    - decide to use other effective prevention methods.
- **Motivation for adherence is different:** ART is taken by HIV-infected persons who may have symptoms to remain healthy and prevent onward transmission, while PrEP is taken by HIV uninfected persons who are largely healthy to prevent acquisition of infection.

Why We Need PrEP

- There are already several effective HIV prevention interventions (e.g. condoms, harm reduction for people who inject drugs (PWID)).
  - However, globally there were more than 2 million new HIV infections in 2015.
  - HIV incidence among key and vulnerable populations remains high (e.g. men who have sex with men (MSM), sex workers (SWs), PWIDS, transgender persons, etc.).[1]
- PrEP provides an *additional* prevention intervention to be used **together** with existing interventions (e.g. condoms).
  - PrEP is not meant to replace or be a substitute for existing interventions.

1. UNAIDS, Gap Report 2016.

Local HIV Epidemiology

- Most new infections are happening amongst *<insert populations>*, making these the populations appropriate target for PrEP.
- In *<insert country name>* there are *<insert most recent incidence data>* new infections annually.

Question

Who are Key Populations (KPs) or other populations targeted for PrEP at the local level?

Evidence PrEP Works

- PrEP efficacy was measured in:
  - 11 randomized control trials (RCT) comparing PrEP with placebo.
  - 3 RCTs comparing PrEP with no PrEP (e.g. delayed PrEP or 'no pill').
  - 3 observational studies.

- PrEP was found to be effective in reducing HIV acquisition.
  - PrEP was most effective in studies with high adherence, where HIV infection risk was reduced by 70% (risk ratio 0.30, 95% CI: 0.21–0.45, P<0.001).
  - Quantifiable drug in plasma increased the efficacy estimates to 74% – 92%.

Key HIV PrEP Trials Using Oral Tenofovir (TDF) or Tenofovir-Emtricitabine (TDF-FTC)

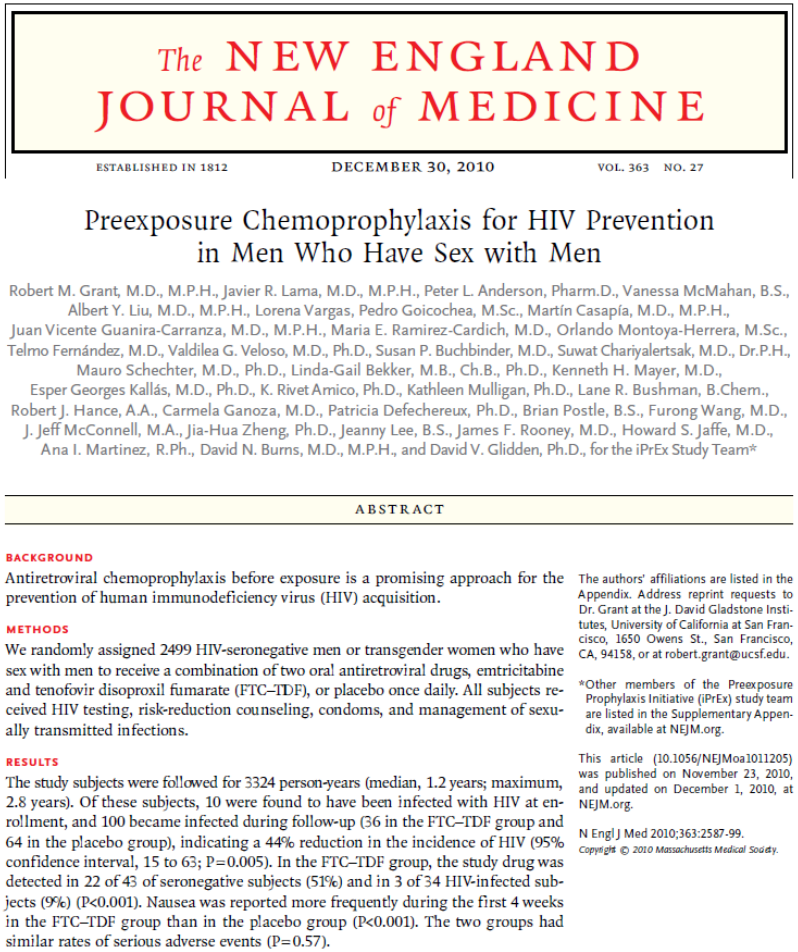
Study	Study Population	Study Randomization	HIV Incidence Impact
IPrEx (Brazil, Ecuador, South Africa, Thailand, US)	2499 MSM and transgender women	Daily oral TDF-FTC or placebo	TDF-FTC: 44% ↓
Partners PrEP Study (Kenya, Uganda)	4147 heterosexual HIV discordant couples	Daily oral TDF, TDF-FTC, or placebo	TDF: 67% ↓ TDF-FTC: 75% ↓
TDF2 Study (Botswana)	1219 heterosexual men and women	Daily oral TDF-FTC or placebo	TDF-FTC: 63% ↓
FEM-PrEP (Kenya, South Africa, Tanzania)	2120 women	Daily oral TDF-FTC or placebo	TDF-FTC: no protection
VOICE (South Africa, Uganda, Zimbabwe)	5029 women	Randomized to daily oral TDF, TDF-FTC, oral placebo, TDF vaginal gel, or gel placebo	TDF: no protection TDF-FTC: no protection TDF gel: no protection
Bangkok TDF Study (Thailand)	2413 injection drug users	Randomized to daily oral TDF or placebo	TDF: 49% ↓
IPERGAY (France, Quebec)	400 MSM	Randomized to "on-demand" TDF-FTC or placebo	TDF-FTC: 86% ↓
PROUD (United Kingdon)	545 MSM and transgender women	Randomized to daily oral TDF-FTC immediately or delayed	Immediate TDF-FTC: 86% ↓

iPrex- Grant RM, et al. *N Engl J Med*. 2010;363:2587-2599; **Partners PrEP** - Baeten JM, et al.N. Engl J M.2012 :367 :399-410;
FEM PrEP -Van Damme L, et al. *N Engl J Med*.2012 :357 :411-422; **TDF 2** - Thigpen MC, et al. *N Engl J Med*.2012 ; 367 :423-434
Bangkok TDF study- Choopanya K, et al. *Lancet*.2013 ;381 :2083-2090

ARVs Used in PrEP Trials

- **Oral daily tablet of TDF/FTC** (300mg tenofovir disoproxil fumarate/200mg emtricitabine)
- **Oral daily tablet of TDF** (300mg tenofovir disoproxil fumarate)
- PrEP using TDF/FTC and TDF alone are both equally safe and effective for heterosexual men and women.
- TDF alone was also found to be effective in PWIDs.
  - There is limited evidence on the use of TDF alone for PrEP in MSM.
- TDF/FTC was approved for PrEP by the Food and Drug Administration (FDA) in 2012.

iPREX study



The NEW ENGLAND JOURNAL of MEDICINE

ESTABLISHED IN 1812 DECEMBER 30, 2010 VOL. 363 NO. 27

Preexposure Chemoprophylaxis for HIV Prevention in Men Who Have Sex with Men

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ABSTRACT

BACKGROUND

Antiretroviral chemoprophylaxis before exposure is a promising approach for the prevention of human immunodeficiency virus (HIV) acquisition.

METHODS

We randomly assigned 2499 HIV-seronegative men or transgender women who have sex with men to receive a combination of two oral antiretroviral drugs, emtricitabine and tenofovir disoproxil fumarate (FTC–TDF), or placebo once daily. All subjects received HIV testing, risk-reduction counseling, condoms, and management of sexually transmitted infections.

RESULTS

The study subjects were followed for 3324 person-years (median, 1.2 years; maximum, 2.8 years). Of these subjects, 10 were found to have been infected with HIV at enrollment, and 100 became infected during follow-up (36 in the FTC–TDF group and 64 in the placebo group), indicating a 44% reduction in the incidence of HIV (95% confidence interval, 15 to 63; P=0.005). In the FTC–TDF group, the study drug was detected in 22 of 43 of seronegative subjects (51%) and in 3 of 34 HIV-infected subjects (9%) (P<0.001). Nausea was reported more frequently during the first 4 weeks in the FTC–TDF group than in the placebo group (P<0.001). The two groups had similar rates of serious adverse events (P=0.57).

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*Other members of the Preexposure Prophylaxis Initiative (iPrEx) study team are listed in the Supplementary Appendix, available at NEJM.org.

This article (10.1056/NEJMoa1011205) was published on November 23, 2010, and updated on December 1, 2010, at NEJM.org.

N Engl J Med 2010;363:2587-99.

- **Study Design**
  - N = 2499 HIV-seronegative men (or transgender women)
  - Sexual orientation: sex with men
  - All received risk reduction counseling, condoms, & STI Rx
- **Regimens**
  - TDF/FTC (*Truvada*): 1 pill PO daily
  - Placebo: 1 pill PO daily
- **Result**
  - 44 % reduction in incident HIV in the TDF/FTC arm

PROUD: Immediate vs. Deferred PrEP in High-Risk MSM in a "Real World" Trial

- Randomized, open-label trial of daily oral TDF/FTC PrEP in MSM in 13 STI clinics in London:
  - Immediate (n = 267) vs. deferred for 12 months (n = 256)
  - Primary endpoint: HIV infection in first 12 months from enrolment
  - Results:
    - **Incident HIV infection:** 3 in immediate arm, 20 in deferred arm
    - Reduction 86%, 90% CI 64-96, p=0.0001
    - Number needed to treat for 1 year to prevent 1 infection: 13 (90% CI: 9-25)

ANRS IPERGAY: On-Demand Oral PrEP in High-Risk MSM

- Randomized double-blind trial
- **Event-driven oral TDF/FTC (n = 199)** vs. **placebo (n = 201)**
  - 2 tablets taken 2-24 hours before sex
  - 1 tablet taken 24 hours after sex
  - 1 tablet taken 48 hours after first event-driven dose
  - **Primary endpoint:** HIV seroconversion
  - **Results:**
    - **86% reduction in risk** seen in PrEP arm (95% CI: 40 -98, $P = 0.002$)
    - Median of 16 pills taken per month in each arm
    - **Number needed to treat for 1 year to prevent 1 infection: 18**

Partners PrEP Demonstration Project

- Open label multi-country study
- Integrated delivery of PrEP and ART in sero-discordant couples
- Sero-discordant couples:
  - Oral daily TDF/FTC given as PrEP to HIV-uninfected partner and continued six months beyond initiation of ART for infected partner
- Interim analysis:
  - **96%** reduction in expected infections (*all* HIV infections)

PrEP can be used as a 'bridge' to fully suppress ART in serodiscordant couples

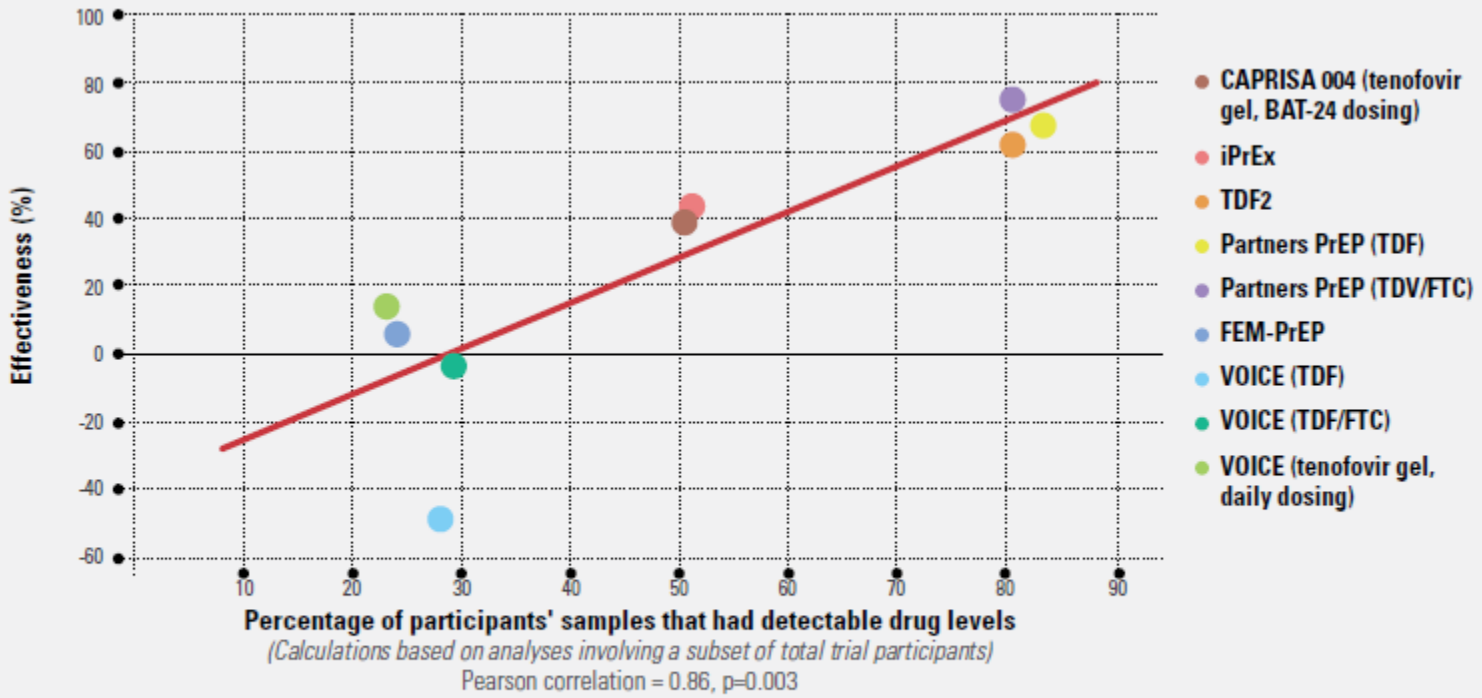
PrEP Efficacy Depends on Adherence

- **PrEP works when taken as prescribed!**

- Trials where PrEP use was more than 70% demonstrated the highest PrEP effectiveness (risk ratio = 0.30, 95% confidence interval: 0.21–0.45, P<0.001) compared with placebo.[1]

- The figure on the next slide summarizes results from the clinical trials to show that the higher the percentage of participant samples that had detectable PrEP drug levels, **the greater the efficacy.**

Effectiveness and Adherence in Trials of Oral and Topical Tenofovir-Based Prevention



Trials of oral and topical tenofovir-based PrEP show that these strategies reduce risk of HIV infection if they are used correctly and consistently. Higher adherence is directly linked to greater levels of protection.

Source: Salim S. Abdool Karim, CAPRISA

Defining Adherence

- **Adherence to drug(s)** means that an individual is taking prescribed medications ***correctly*** **and** ***consistently***, it involves taking the correct drug:
  - in the correct dose,
  - at a consistent frequency (number of times per day), and
  - at a consistent time of day.

- **Adherence with follow–up** means patients attend *all* scheduled clinical visits/procedures, including:
  - Clinic and lab assessments.
  - Drug collection/repeat prescription.

Planned, Ongoing and Completed PrEP Evaluation Studies (June 2015)

KEY Ongoing Planned Completed

For the latest on these studies, visit *www.avac.org/prep/track-research.*

Data from demonstration projects and open-label extension studies are beginning to come in. So far, the findings suggest that people want and will take daily oral PrEP correctly outside of a clinical trial setting. Expanded and faster rollout is key.

To Summarize

PrEP works when taken

CORRECTLY and CONSISTENTLY.

Potential PrEP Agents and Regimens

How are the antiretrovirals used?	• Oral pill(s)
	• Topical gel (microbicide)
	  ○ Rectal
	  ○ Vaginal
	• Injection
	• Intravaginal ring

How often can antiretrovirals for PrEP be used?	• Daily • Intermittently • Coitally (before and after sex)
How many antiretrovirals are used?	• Single • Combination
What antiretrovirals are used/being studied?	• Oral PrEP - (TDF/FTC) or TDF alone • Other ARVs are being studied

For this training, we focus on daily oral PrEP.

ARVs Recommended for Oral PrEP

- The WHO recommends that oral PrEP regimens should contain tenofovir disoproxil fumarate (TDF).
- According to the WHO, the following regimens should be considered for use as PrEP:

Combined tablet of emtricitabine (FTC) 200 mg / tenofovir disoproxil fumarate (TDF) 300 mg PO Daily
Combined tablet of lamivudine (3TC) 300 mg / tenofovir disoproxil fumarate (TDF) 300 mg PO daily
Single-agent tenofovir disoproxil fumarate (TDF) 300 mg PO daily* (*Limited evidence on the use of TDF alone for PrEP for MSM)

In **<insert country name>** the available recommended PrEP regimens include: **<insert available regimen>**

[1] WHO (2016) Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection.

Concerns about PrEP

- Is PrEP safe?

PrEP Side Effects: Reports from RCTs

- In clinical trials, approximately **10%** of participants experienced side-effects.
  - The side-effects were mild and short-term, and did not persist beyond the first month.
- **Side effects may include:**
  - Gastrointestinal (GI) side-effects (nausea/vomiting/abdominal pain).
  - Creatinine elevation (typically reversible).
  - Loss of bone mineral density; recovers after stopping PrEP.

Side-effects Reported from iPREX Open-Label Extension (iPREX OLE): Observational study

- iPREX OLE multi-site PrEP cohort taking daily oral TDF/FTC:
  - 39% of participants reported any PrEP-related (mainly mild) side effects.
  - A **"start-up syndrome" has been reported:**
    - GI symptoms (nausea, flatulence, diarrhea, abdominal pain, vomiting), headaches, skin problems/itching.
- The "start-up syndrome" is transient but can influence adherence:
  - Side-effects among PrEP users peaked around month one and symptoms resolved by month three.
- Adherence counseling should focus on the transient nature of a "start-up syndrome".

Will PrEP users engage in more risky behaviors?

- Will PrEP encourage people to use condoms less often or to have more sexual partners – i.e. "risk compensation"?
  - There was **no** evidence of this in clinical trials.[1]
  - The PROUD study showed that for participants who were at high risk before initiating PrEP, **sexual behavior remained unchanged** whether or not participants received PrEP.[2]

Will PrEP lead to more HIV drug resistance (HIVDR)?

- HIVDR in PrEP users was **rare** in clinical trials!
  - HIVDR occurred mostly in cases where the person had undiagnosed HIV infection at the time of starting PrEP.
- When adherence to PrEP is high and HIV seroconversion does not occur, HIVDR will not occur.
- If adherence is suboptimal and HIV infection occurs while on PrEP, there can be a risk of HIVDR.
- Optimal adherence to PrEP is crucial.
  - Health providers **must** support and monitor adherence and teach PrEP users to recognize signs/symptoms of acute HIV infection.

Does PrEP protect against other STI?

- Only condoms protect against STI and pregnancy.
- PrEP protects against HIV and also against herpes simplex virus type 2 in heterosexual populations.[1]
- PrEP does **NOT** protect against syphilis, gonorrhea, chlamydia, or human papilloma virus (HPV).
- PrEP should be provided within a package of prevention services, including STI screening and management, risk reduction counseling, condoms, contraceptives, etc.

Module 1 Summary

What we know about PrEP:

- PrEP can be used by HIV uninfected persons to **reduce** the risk of HIV acquisition.
- Daily oral PrEP with TDF- containing regimens is currently recommended.
- PrEP should be taken as an ***additional*** prevention intervention.
- PrEP is **effective** if taken correctly and consistently.
- PrEP can be used by at risk populations, including heterosexual men and women, MSM, SWs, PWIDs, and transgender women among others.
- PrEP is **safe** and has minimal side effects.

MORNING BREAK

Module 2

1 PrEP Basics

MORNING BREAK

2 **PrEP Screening and Eligibility**

LUNCH

3 Initial and Follow-up PrEP Visits

AFTERNOON BREAK

4 Monitoring and Managing PrEP Side Effects, Seroconversion, and Stigma

Module 2: Learning Objectives

After completing module 2, participants will be able to:

- List eligibility criteria for PrEP.
- Use the standard medical screening form for PrEP eligibility and substantial risk.
- Discuss the contraindications for PrEP.
- Explain how to exclude acute HIV infection.

WHO Recommendations

Oral PrEP containing TDF should be offered as an additional prevention choice for people at ***substantial risk*** of HIV infection as part of combination HIV prevention approaches.[1]

[1] WHO (2016) Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection.2016

Questions

- *Who should receive PrEP?*
- *What are the eligibility criteria for initiating PrEP?*

Eligibility for PrEP

Eligibility criteria include:

- HIV seronegative
- No suspicion of acute HIV infection
- At substantial risk* of HIV infection
- Creatinine clearance (eGFR) >60ml/min**
- Willingness to use PrEP as prescribed

* Defined later

** eGFR: estimated glomerular filtration rate. Waiting for creatinine result should not delay initiation of PrEP

Exclude HIV infection before starting PrEP

- PrEP is a prevention intervention for people who are HIV uninfected.
- All persons at substantial risk for HIV and who may be eligible for PrEP should be offered HIV testing prior to PrEP initiation
- HIV testing must be done using national guidelines and algorithms.
  - Ideally use rapid HIV tests at point of care.
  - Promptly link clients who test HIV positive to HIV treatment and care services.

National HIV Testing Algorithm

>>Add country-specific text here <<

Question

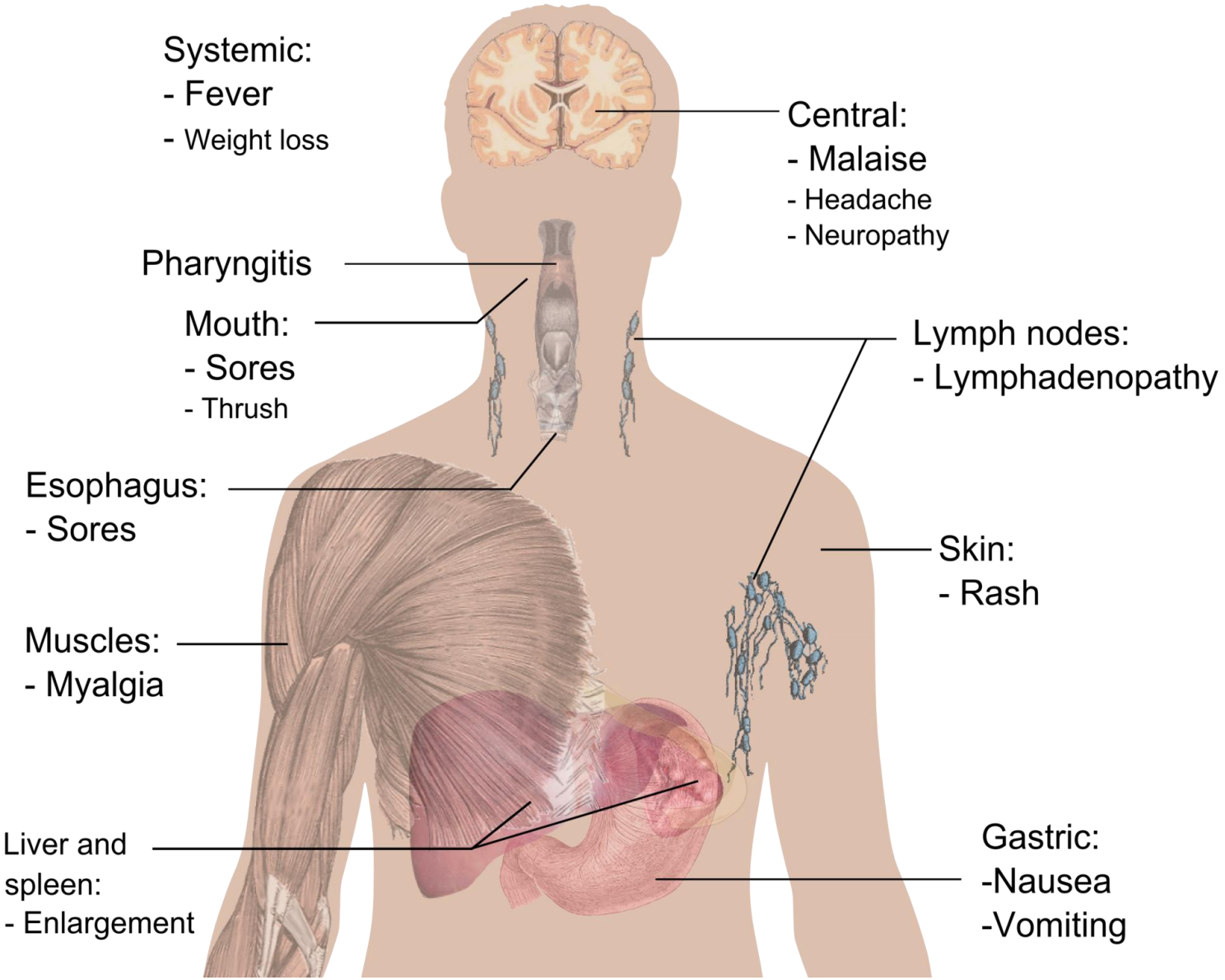
What is acute HIV infection?

Acute HIV Infection

- Acute HIV infection (AHI) is the **early phase of HIV disease** that is characterized by an initial burst of viremia.
- AHI infection develops **within two to four weeks** after someone is infected with HIV.
- Approximately 40% to 90% of patients with AHI will experience **"flu-like" symptoms.**
  - These symptoms are not specific to HIV, they occur in many other viral infections.
  - Remember that some patients with AHI can be asymptomatic.
- The figure on the next slide depicts some of the presenting signs and symptoms of AHI.
- Do **NOT** start PrEP in clients with suspected AHI.

Main symptoms of

Acute HIV infection



Source: Medical gallery of Mikael Häggström 2014

Diagnosis of Acute HIV Infection

- During AHI, antibodies might be absent or be below level of detection.
  - Serological testing using rapid test might be negative.
- AHI can be diagnosed using "direct" viral tests like HIV RNA or HIV antigen testing.
- In the absence of HIV RNA and antigen testing, PrEP should be deferred for four weeks if AHI is suspected.
  - Repeat HIV serological test after four weeks to reassess eligibility.

Substantial risk for HIV infection
(based on history in the past six months)

- **Client who is sexually active in a high HIV prevalence population (either in the general population or key population group) PLUS reports *ANY* of the following in the past six months:**
  - Vaginal or anal intercourse without condoms with more than one partner, OR
  - Sex partner with one or more HIV risk, OR
  - History of an STI (based on lab test, syndromic STI treatment, self-report), OR
  - History of use of post-exposure prophylaxis (PEP)

OR

- **Client who reports history of sharing of injection material/equipment with another person in the past six months.**

OR

- **Client who reports having a sexual partner in the past six months* who is HIV positive *AND* who has not been on effective HIV treatment.**

  **On ART for less than six months, or has inconsistent or unknown adherence*

Screening for Substantial Risk

- Screening questions should be **framed in terms of people's behavior** rather than their sexual identity and should **refer to a defined time period (six months, etc.).**
- It is important for PrEP providers to be **sensitive, inclusive, non-judgmental, and supportive.**
- Be careful **not to develop** a screening process that might discourage PrEP use.

General Screening Questions

Consider PrEP if a client from a high prevalence population or in a high prevalence setting answers yes to any of the following questions:

"In the past six months,":

- "Have you had sex with more than one sexual partner?"
- "Have you had sex without a condom?"
- "Have you had sex with people whose HIV status you do not know?"
- "Are any of your partners at risk of HIV?"
- "Have you had sex with a person who has HIV?"

Serodiscordant Couples

PrEP can protect the HIV uninfected partner in a heterosexual serodiscordant relationship with an HIV-infected partner if:

- The partner with HIV has been taking ART for less than six months.
  - ART takes three to six months to suppress viral load.
  - In studies of serodiscordant couples, PrEP has provided a useful bridge to full viral suppression during this time.
- The uninfected partner is not confident of the partner's adherence to treatment or has other sexual partners besides the HIV-infected partner on treatment.
- There is awareness of gaps in treatment adherence by HIV-infected partner or the couple is not communicating openly about treatment adherence and viral load test results.

For a Person Who Has a Partner with HIV:

The following questions will help to ascertain whether that person would be a good candidate for PrEP:

- "Is your partner taking ART for HIV?"
- "Has your partner been on ART for more than six months?"
- "Do you discuss your partner's adherence to HIV treatment every month?"
- "Do you know your partner's last viral load? What was the result? And when was it done?
- "Do you desire having a child with your partner?"
- "Are you and your partner consistently using condoms?"

Additional Factors to Ask About:

"Are there aspects of your situation that may indicate higher risk for HIV? Have you…":

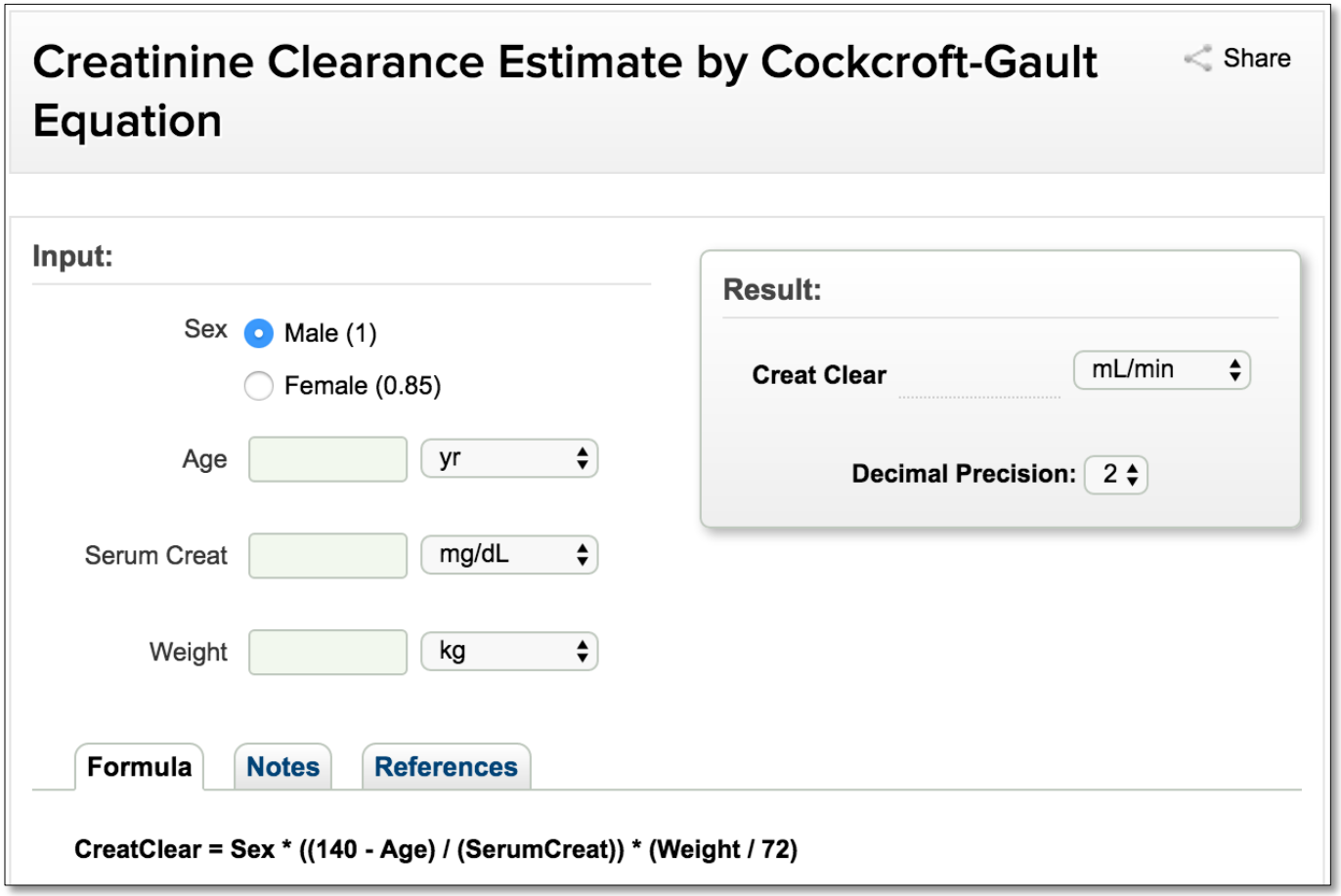
- "Received money, housing, food or gifts in exchange for sex?"
- "Been forced to have sex against your will?"
- "Been physically assaulted, including assault by a sex partner?"
- "Taken PEP to prevent HIV infection?"
- "Had a sexually transmitted infection (STI)?"
- "Injected drugs or hormones using shared equipment?"
- "Used recreational/psychoactive drugs?"
- "Been required to leave your home?"
- "Moved to a new place?"
- "Lost your job?"
- "Had less than 12 years schooling or left school early?"

Creatinine and Estimated Creatinine Clearance

- TDF can be associated with a small decrease in estimated creatinine clearance (eGFR) early during PrEP use and usually this does not progress.
- PrEP is not indicated if eGFR* is < 60ml/min.

*eGFR: estimated glomerular filtration rate using Cockroft-Gault equation:
Estimated CrCl = [140-age (years)] x weight (kg) x f where f=1.23 for men and 1.04 for women Serum creatinine (µmol/L)

Online Cockcroft-Gault Calculator



http://reference.medscape.com/calculator/creatinine-clearance-cockcroft-gault

Question

Is PrEP safe during pregnancy ?

PrEP use During Pregnancy

- TDF appears to be safe in pregnant women, however, evidence comes from studies of HIV infected women on ART.[1]
- Among HIV uninfected pregnant women, evidence of TDF safety comes from studies of hepatitis B (HBV) mono-infected women.[2]
- PrEP benefits for women at high risk of HIV acquisition appear to outweigh any risks observed to date.
- WHO recommends continuing PrEP during pregnancy and breastfeeding for women at substantial risk of HIV.
  - There is however a need for continued surveillance for this population group.

Recap Eligibility Criteria

- HIV seronegative
- No suspicion of acute HIV infection
- Substantial risk of HIV infection
- Creatinine clearance (eGFR) >60ml/min
- Willingness to use PrEP as prescribed

Willingness to Use PrEP as Prescribed

- Clients should not be coerced into using PrEP.
- Clients should be given information and supported to make an informed choice.

Sample of PrEP Screening Form

- Use of a standard form can ensure that screening is done in a consistent manner and is well documented.
- Please refer to the tool Pre-exposure Prophylaxis (PrEP) Screening for Substantial Risk and Eligibility in your participant folder that can be adapted for use to record key elements in the sexual history needed to screen for PrEP eligibility.

Pre-exposure Prophylaxis (PrEP) Screening for Substantial Risk and Eligibility*

**See PrEP M&E Tool Package for full document*

Pre-Exposure Prophylaxis (PrEP) Screening for Substantial Risk and Eligibility

1. Facility Information	
Facility Name	
Date of initial client visit *(dd/mm/yy)* __ __/__ __/__ __	Person Completing Form

2. Client Information		
First Name	Middle Name	Surname
Address	Telephone #	
Unique Client ID number	Client clinic ID number	

3. Client Demographics	
What was your sex at birth?	☐ Male ☐ Female ☐ Other: _____
What is your current gender?	☐ Male ☐ Female ☐ Transgender (male to female) ☐ Transgender (female to male) ☐ Other: _____
What is your age?	_____ *Enter number of years*

4. Screening for Substantial Risk for HIV infection	
Clients are at substantial risk if they belong to any of the three categories below:	**Question prompts for providers:**
1) If they are sexually active in a high HIV prevalence population PLUS report ANY one of the below in the last six months	Have you been sexually active in the last six months?
☐ Report vaginal or anal intercourse without condoms with more than one partner	With how many people did you have vaginal or anal sex in the last six months? Did you use condoms consistently during sex in the last six months?
☐ Have a sex partner with one or more HIV risk	Have you had a sex partner in the last six months who: • Is living with HIV? • Injects drugs? • Has sex with men? • Is a transgender person? • Is a sex worker? • Has sex with multiple partners without condoms?
☐ History of a sexually transmitted infection (STI) (based on self-report, lab test, syndromic STI treatment)	Have you had an STI in the last six months?
☐ History of use of post-exposure prophylaxis (PEP)	Have you taken post-exposure prophylaxis (PEP) following a potential exposure to HIV in the last six months?

Clinical Scenario for Discussion

Joseph is a 22 year-old man who presents to the clinic because he is interested in starting PrEP. He reports using condoms sometimes during sex with his HIV-positive male partner. His partner is healthy and has been on ART for 4 years and his most recent HIV viral load from "a few months ago" was reported as 1200 copies/mL. Their last unprotected intercourse was last week. Joseph is in good health, taking no medications, and his rapid HIV antibody test today is negative.

- Please turn to the person beside you and over the next few minutes discuss the following:
  - *Is Joseph a candidate for PrEP?*
  - *If so, what are the considerations?*
- Refer to the sample PrEP Screening for Substantial Risk and Eligibility tool.

Module 2 Summary

PrEP Eligibility, Screening, Side Effects, and Contraindications

- Providers should ***inform*** and ***counsel*** potential PrEP users and ***conduct an individualized risk assessment.***
- **Eligibility for PrEP includes:**
  - At substantial risk of HIV infection
  - HIV seronegative
  - No suspicion of acute HIV infection
  - No contra-indications to ARVs used in PrEP regimen
  - Willingness to use PrEP as prescribed
- PrEP screening questions should be framed in terms of a person's behavior.
- Side effects in clinical trials were rare and when they occurred they were mild.
- **Contraindications for PrEP include:**
  - Current or suspected HIV infection
  - Renal impairment as defined by estimated creatinine clearance of <60 ml/min

LUNCH

Module 3

1 PrEP Basics

MORNING BREAK

2 PrEP Screening and Eligibility

LUNCH

3 Initial and Follow-up PrEP Visits

AFTERNOON BREAK

4 Monitoring and Managing PrEP Side Effects, Seroconversion, and Stigma

Module 3: Learning Objectives

By the end of Module 3, participants will be able to:

- Specify the procedures for the initial PrEP visit.
- Demonstrate knowledge of national HTS guidelines and local algorithms for HIV testing.
- Describe the rationale and content for brief counseling during the initial/first PrEP visit.
- Practice using the Integrated Next Step Counseling (iNSC) process to counsel clients on sexual health and PrEP adherence.
- Specify the suggested procedures for follow-up PrEP visits.
- Describe the rationale and content for follow-up counseling at each visit.

Initial PrEP Visit: Suggested Procedures

Investigation	Rationale
HIV test (using algorithm in national HTS guidelines)	• Assessment of HIV infection status • Symptom checklist for possible acute HIV infection
Serum creatinine	• To identify pre-existing renal impairment
Hepatitis B surface antigen (HBsAg)	• To identify undiagnosed hepatitis B (HBV) infection • To identify those eligible for vaccination against hepatitis B
RPR	• To diagnose and treat syphilis infection
STI screening	• To diagnose and treat STI • Syndromic or diagnostic STI testing, depending on local guidelines
Pregnancy testing	• To ascertain pregnancy
Brief counseling	• To assess whether the client is at substantial risk for HIV • To assess HIV prevention options and provide condoms and lubricants • To discuss desire for PrEP and willingness to take PrEP • To develop a plan for effective PrEP use, sexual and reproductive health

Initial PrEP Counseling

- Initial counseling should focus on:
  - **Increasing awareness** of PrEP as a choice.
  - **Helping the client to decide** whether PrEP is right for them.
  - **Preparing individuals** for starting PrEP.
  - **Explaining** of how PrEP works.
  - **Providing basic recommendations.**
  - The importance of **adherence** and **follow-up visits.**
  - **Potential PrEP side effects.**
  - Recognizing symptoms of **acute HIV infection.**
  - Building a **specific plan** for PrEP.
  - Discussing **sexual health and harm reduction measures.**

Initial PrEP counseling (cont.)

- Assess client's understanding that the protection provided by PrEP is not 100%.
- Explain need for repeat clinic visits and repeat blood tests.
- Additional information for women:
  - PrEP does not affect the efficacy of hormonal contraceptives.
  - PrEP does not protect against pregnancy.
  - PrEP can be continued during pregnancy and breastfeeding.

PrEP Counseling

During the counseling session "Assess client understanding that **the protection provided by PrEP is not complete**, and **does not prevent other STIs or unwanted pregnancies**, and therefore **PrEP should be used as part of a package of HIV prevention services** (inclusive of condoms, lubrication, contraception, risk reduction counseling and STI management)."

(Source: From the Southern African Clinician Society Guidelines for Provision of PrEP)

Key Initial Visit Counselling Messaging: PrEP Efficacy

PrEP works when taken!

PrEP reaches maximum effectiveness after seven daily doses.

PrEP does not prevent most sexually transmitted infections other than HIV. Condoms used with every act of sexual intercourse provides some protection against many of these infections.

PrEP does not prevent pregnancy. Use effective contraception unless you want pregnancy.

PrEP is safe.

Key Initial Visit Counselling Messaging: Supporting Adherence

Taking PrEP each day is easiest if you make taking the tablets a daily habit, linked to something else that you do every day without fail.

If you forget to take a tablet, take it as soon as you remember.

PrEP tablets can be taken any time of day, with food or without food.

PrEP is safe and effective even if you are taking hormonal contraceptives, sex hormones or non-prescription drugs.

- Drinking alcohol will not affect the safety or effectiveness of PrEP. But drinking alcohol could make you forget to take the PrEP tablets.

Question

What are some common reasons for poor adherence?

Common Reasons for Poor Adherence to ART

Individual Factors

- Forgetting doses
- Being away from home
- Changes in daily routines
- Depression or other illness
- Limited understanding of treatment benefits
- Lack of interest or desire to take the medicines
- Substance or alcohol use
- Absence of supportive environment
- Fear of stigma and discrimination

Medication Factors

- Adverse events
- Complexity of dosing regimens
- Pill burden
- Dietary restrictions (PrEP will require taking just one tablet daily and there are no dietary restrictions)

Structural Factors

- Distance to health services
- Access to pharmacies
- Long waiting times to receive care and obtain refills
- Burden of direct and indirect costs of care

Understanding Voluntary vs. Involuntary Non-Adherence

Voluntary Non-Adherence	Involuntary Non-Adherence
• Not convinced PrEP is needed • Does not believe PrEP works or is working • Does not like taking pills • Has experienced side-effects • Has experienced stigma while taking PrEP	• Forgot to take pill • Forgot to refill prescription • Has competing priorities (e.g. employment, child care) • Has difficulty with personal organization and scheduling • Affected by depression or other mental illness • Can not afford PrEP (in settings where clients pay for PrEP services)

Adherence: Lessons from ART Programs

- Health providers can **positively influence adherence** by:
  - Facilitating accurate knowledge and understanding of medication benefits and requirements.
  - Preparing for and managing side-effects.
  - Monitoring of adherence.
  - Identifying social support.
  - Encouraging medication optimism.
  - Building self-efficacy for adherence.
  - Developing a routinized daily schedule in which to integrate regular dosing.
  - Maintaining an open line of communication with PrEP users.

Approaches to PrEP Medication Adherence Support

Support Issue:	Provider Options:

Adequate and accurate PrEP knowledge	• Briefly explain or provide materials about:
	  ○ Indications for medication.
	  ○ The anticipated risks and benefits of taking medication.
	  ○ How to take it (one pill per day).
	  ○ What to do if one or more doses are missed.
	• Assess for misinformation.

Preparing for and managing side effects	• Educate about what side effects to expect, for how long, and how to manage them. • Educate about the signs and symptoms of acute HIV infection and how to obtain prompt evaluation and care.

Foster self-efficacy	• Foster discussion of personal perception of HIV risks.
	• Recommend or provide medication-adherence tools:
	  ○ Pill boxes
	  ○ Phone apps, pager, or SMS reminder services

Routinized daily schedule	• Discuss how to integrate daily dose with other daily events and what to do when away from home.

Approaches to PrEP Medication Adherence Support (Cont.)

Support Issue:	Provider Options:
Provider support	• Regularly assess adherence. • Ask for a patient self-report. • Complete the prescription/visit record. • Use new technologies (text reminders). • Offer allied clinical support services (e.g., pharmacist).
Social Support	• Discuss privacy issues for PrEP user. • Offer to meet with partners or family members if they are supportive.
Mental health and substance abuse	• Consider screening for depression or substance-abuse problems. • Provide or refer to indicated mental health or substance-abuse treatment and relapse-prevention services.
Population challenges	• Consider additional medication-adherence support for: o Adolescents. o People with unstable housing. o Transgender women. o Others with specific stressors that may interfere with medication adherence.

Adherence Assessments

- Ask about adherence at each visit:
  - Encourage the PrEP user to self-report in order to understand what they believe about their adherence.
  - Ask about adherence over the last three days (short recall)
  - Avoid judgment to encourage a realistic and honest description.
- Additional methods to monitor adherence:
  - Pharmacy refill history
  - Pill-count
  - Blood level of drugs*
  - Hair sample to test drug-level*

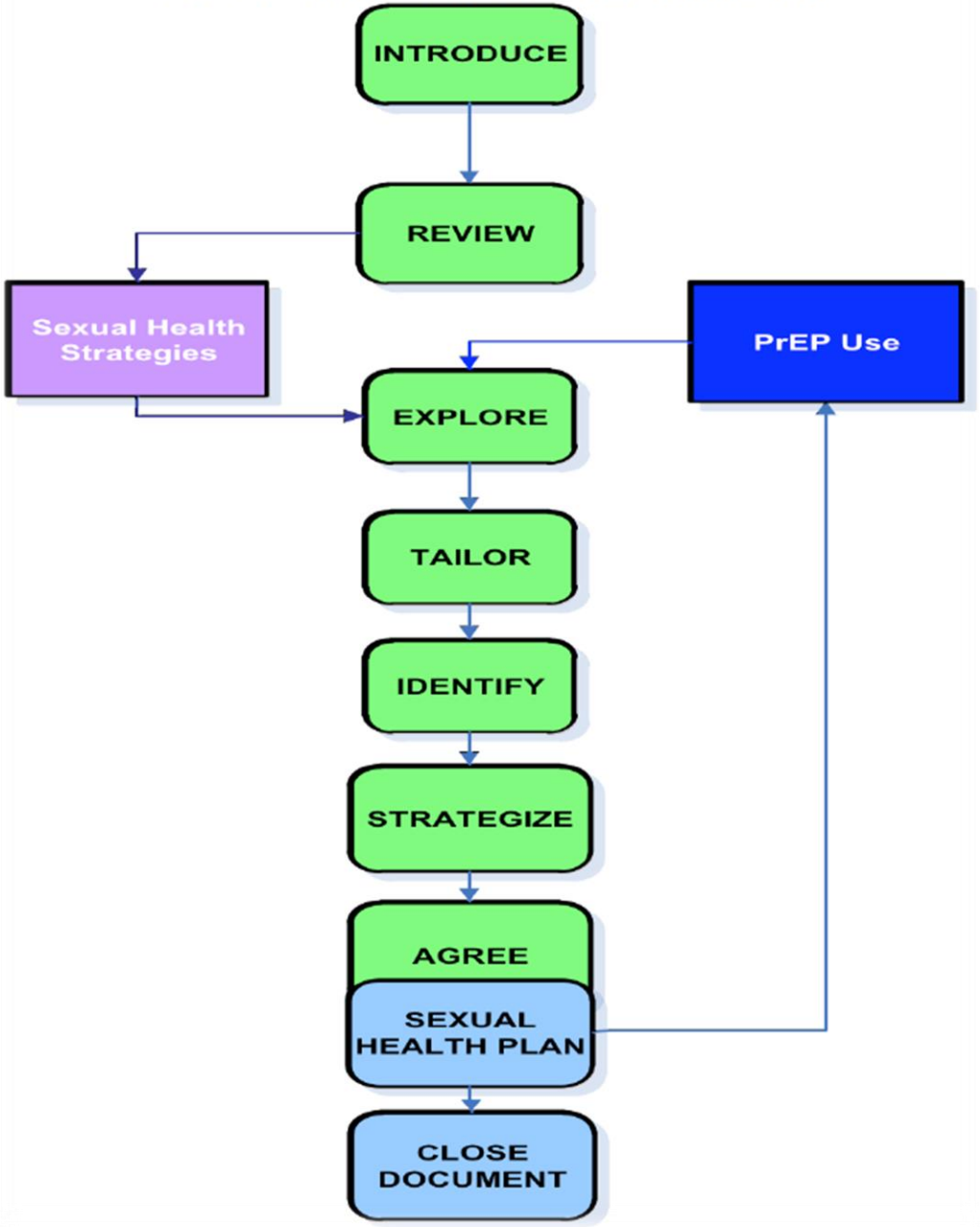
Promoting Adherence

- Several approaches can be used to promote adherence:
  - Motivational interviewing
  - Informed Choice Counselling (ICC)
  - Next Step Counseling (see next slides)
  - And others

Integrated Next Step Counseling (iNSC)

- Integrated next step counseling (**iNSC)** was used in the iPrEx OLE study to counsel individuals on sexual health promotion more generally, **with specific emphasis on PrEP adherence for individuals on PrEP.**
- Implementation of iNSC is positioned with delivery of negative HIV test results and serves as pre/post-test HIV counseling as well as adherence counseling in **one brief, targeted, tailored conversation.**

FIGURE 1: iNSC Process Discussion Flow



iNSC Step	Critical Components	Example Prompts
Introduce the counseling session	• Explain what you're talking about and why • Get permission to proceed	• *I would like to take a few minutes to check in with you about your goals and how to meet them. Is that okay?*
Review client's experiences	• Ask about what the client already knows about PrEP and how they learned it	• *Thank you. Can you tell me a little about what you have heard about PrEP and about your experiences with PrEP?*
Explore context of client-specific facilitators and barriers	• Use open-ended questions to explore factors or situations that help make pill-taking a little easier; and those that make it harder or a little more difficult	• *What seems to make PrEP easy to take or harder to take?*
Tailor the discussion to focus on increasing ease of pill-taking	• This is a pause to allow the provider/counsellor to consider what information gathered in earlier steps is used to tailor the next question	• *Let me think for a moment about what you have said.*
Identify adherence-related needs	• Guide the conversation towards identifying participant perceptions of what would help to best integrate PrEP use into their daily life	• *Given everything going on right now, what would need to happen for it to feel a little easier to work this regimen into your daily life?*
Strategize with the participant on the next step	• Work with participant so that they identify one or a few viable strategies for increasing effective PrEP use.	• *How could that happen?* • *What are some ideas for how you could approach that?*
Agree on which strategy will be tried next	• Ask participant which strategy(ies) they are willing to try or continue using	• *Of the things that we have talked about, which might you be willing to try between now and the next time we meet?*
Close/document	• Provide a summary of the discussion and thank the patient	• *What I'm hearing is that _____ would really make it feel easier to work PrEP into your life and that you'll give it a try between now and the next time we meet. Thank you for talking with me and I look forward to talking again.*

K RA, McMahan V, Goicochea P, et al. Supporting study product use and accuracy in self-report in the iPrEx study: next step counseling and neutral assessment. AIDS and behavior. Jul 2012;16(5):1243-1259

Provider Checklist for Initial PrEP Visit

- ☐ **HIV test (using algorithm in national HIV Testing guidelines)**
  - Assessment of HIV infection status
- ☐ **Exclude acute HIV infection**
  - Ask about last potential exposure to HIV
  - Ask/look for 'flu-like' symptoms
- ☐ **Screen for substantial HIV risk**
- ☐ **Serum creatinine (calculate eGFR)**
  - To identify pre-existing renal impairment
- ☐ **Hepatitis B surface antigen (HBsAg) – if available**
  - To identify undiagnosed Hepatitis B (HBV) infection
  - To identify those eligible for vaccination against Hepatitis B
- ☐ **STI screening**
  - Perform syndromic or etiological STI testing (depending on local guidelines)
  - Rapid Plasma Reagin test (RPR) for syphilis (if available)
- ☐ **Pregnancy test**
  - Ask about last menstrual period (perform pregnancy test if needed)
- ☐ **Conduct risk reduction counselling**
  - Clients will be referred based on specific needs, i.e. social support, harm reduction, gender-based violence programs, etc.
- ☐ **Provide information on PrEP and conduct adherence counseling**
- ☐ **Provide condoms and lubricants**
- ☐ **Provide (or refer to) reproductive health services (as needed)**
- ☐ **Schedule next appointment (provide appointment card)**

Please adapt this checklist to align with national guidelines on PrEP

Key Initial Visit Consideration: Drug Supply

- Providing an **extra month's supply of medication at the first visit** will assure an adequate supply for daily dosing until the next visit.
- This is important in case the follow-up visit is delayed for any reason.

Patients who have some medication supply in reserve tend to show better adherence!

Clinical Scenario for Role Play

Anne is a sex worker and is interested in starting PrEP. She uses condoms during sex with commercial clients but not with her "stable" partner of unknown HIV status. She had a negative HIV test 6 months ago and wants to avoid HIV infection as she would like to have baby in the coming year. She is using injectable hormonal contraceptive as she used to forget to take oral contraceptives on a daily basis.

- *Think about how would you use the iNSC to have a client-centered conversation to focus on PrEP adherence.*
- *Please observe the following role play and use the copy of the previous slide in your participant folder to check off the iNSC steps that are being addressed and specific example prompts that are being used.*

PrEP Follow-up Visits

- Clients on PrEP require regular visits with the health provider.
- Programs should decide on the optimal frequency of visits for monitoring PrEP use.
- It is suggested to have a follow- up visit:
  - one month after initiating PrEP, and
  - thereafter every three months.
- Outside regular monitoring visits, clients should also consult if they have severe adverse events or signs/symptoms of AHI.

Follow-Up PrEP Visits: Suggested Procedures

Intervention	Schedule following PrEP initiation
Confirmation of HIV-negative status	• Every three months (consider also testing at one month if HIV RNA or antigen testing was not performed before starting PrEP)
Address side-effects	• Every visit
Brief adherence counseling	• Every visit
Estimated creatinine clearance	• At least every six months, or more frequently if there is a history of conditions affecting the kidney, such as diabetes or hypertension
• Provide STI screening, condoms, contraception as needed. • Counselling regarding symptoms of acute HIV infection, and to come back as soon as possible for evaluation if these symptoms occur.	

Repeat HIV Testing

- Repeat HIV testing is needed to inform decisions on whether to continue or discontinue PrEP.
- Repeat HIV testing (using national guidelines):
  - One month after starting PrEP.
  - Every three months thereafter.
- Remember the limitation of serological tests during AHI in the window period (time from HIV infection to detection of antibodies), and also that exposure to ARVs can decrease sensitivity of serological tests.
- Stop PrEP if AHI is suspected.

Follow-Up PrEP Counseling

- Follow-up counseling should focus on:
  - Checking in on the **current context** of sexual health.
  - The patient's **desire to remain on and assessment of continued risk** of PrEP.
  - **Facilitators** & **barriers** to PrEP use.
  - Additional **non-PrEP related sexual health protection** strategies (condoms, etc.).
  - **Dosing requirements** for highest protection.
  - What to do **if a dose is missed.**
  - Common **adherence strategies.**
  - Reasons for **ongoing monitoring** while on PrEP.
  - How to recognize symptoms of **acute HIV infection.**
  - **Side-effects** & **side-effects management.**
  - How to **safely discontinue** and **restart** PrEP as appropriate.

Provider Checklist for Follow-up PrEP Visits

- ☐ **Brief counseling (every visit)**
  - Review/ask about signs and symptoms of acute HIV infection
  - Check on current context of sexual health
  - Desires to remain on PrEP
  - Facilitators & barriers to PrEP use
- ☐ **Adherence counseling (every visit)**
  - Monitor adherence (recall, pill count, etc.)
  - Brief adherence counseling
  - Discuss importance of effective use of PrEP
- ☐ **Assessment and management of side-effects (every visit)**
  - Ask about and manage side-effects
- ☐ **Confirmation of HIV-negative status (recommended frequencies)**
  - Repeat HIV test 1 month after starting PrEP (especially if HIV RNA or antigen testing was not performed before starting PrEP)
  - Every 3 months thereafter
- ☐ **Calculation of estimated creatinine clearance (eGFR) (recommended frequencies)**
  - At least every 6 months
  - OR more frequently if there is history of conditions affecting the kidney (e.g., diabetes, hypertension, or any chronic nephropathy)
- ☐ **STI screening**
- ☐ **Risk reduction counselling**
  - Clients will be referred based on specific needs, i.e. social support, harm reduction, gender-based violence programs, etc.
- ☐ **Provision of condoms and lubricants**
- ☐ **Provision of contraception (as needed)**
  - Perform pregnancy test if needed
- ☐ **Provision of follow-up prescription for PrEP**
- ☐ **Scheduling of next appointment (provide appointment card)**

If a client using PrEP tests positive for HIV, stop PrEP and link promptly to treatment and care services. Start suppressive therapy for HIV infection (ART) immediately.

Please adapt this checklist to align with national guidelines on PrEP

PrEP Clinical Pathway

Confirm HIV Negative Status

- Perform rapid HIV test according to national guidelines/algorithms
- Link HIV-positive persons promptly to care and treatment services

Screen for Substantial Risk of HIV

Client who is sexually active in a high HIV prevalence population (either in the general population or key population group) PLUS reports *ANY* of the following in the past 6 months:

- Vaginal or anal intercourse without condoms with more than 1 partner, OR
- Sex partner with one or more HIV risk, OR
- History of an STI (based on lab test, syndromic STI treatment, self-report), OR
- History of use of post-exposure prophylaxis (PEP)

OR

Client who reports history of sharing of injection material/equipment with another person in the past 6 months

OR

Client who reports having a sexual partner in the past 6 months* who is HIV positive *AND* who has not been on effective HIV treatment

**On ART for less than 6 months, or has inconsistent or unknown adherence*

Establish Eligibility

Clients are eligible if they fulfill **ALL** the criteria below:

- HIV Negative;
- Are at substantial risk of HIV;
- Have no signs /symptoms of acute HIV infection;
- Have creatinine clearance (eGFR) >60 ml/min

Start PrEP

- Provide information on PrEP, importance of adherence, potential side effects, follow-up schedule, signs/symptoms of acute HIV infection
- Screen/manage STI
- Do risk- reduction counseling and provide condoms/lubricants
- Do adherence counseling
- Prescribe PrEP
- Give appointment for follow-up visit
- Stress importance of returning to the clinic if client develops **serious** side effects or signs/symptoms of acute HIV infection

PrEP Follow-up Visits

- Plan follow up visits 1 month after starting PrEP and every 3 months thereafter

At follow-up visits:

- Repeat HIV test
- Ask about side-effects
- Support/ monitor adherence
- Do risk reduction counseling and provide condoms
- Screen for STI
- Repeat eGFR after 6 months on PrEP
- Schedule next visit
- Provide reminder card with appointment and contact information

Clinical Scenario for Discussion

Jonathan has been on PrEP (TDF/FTC) for the last nine months. At the follow-up visit he is in good health and his repeat HIV test is negative. Jonathan reports recently starting a monogamous relationship with a man who tested HIV negative last year and feels he might no longer need PrEP.

How would you manage this case?

Module 3 Summary

- Prescribe PrEP as part of a comprehensive HIV prevention strategy.
- Confirm a negative HIV test immediately prior to initiating PrEP.
- Ensure there are no contra-indications to PrEP.
- Ensure clients have correct information about PrEP.
- Develop an adherence support plan with the client and monitor adherence at each visit.
- Conduct risk-reduction counseling at each visit.

AFTERNOON BREAK

Module 4

1 PrEP Basics

MORNING BREAK

2 PrEP Screening and Eligibility

LUNCH

3 Initial and Follow-up PrEP Visits

AFTERNOON BREAK

4 Monitoring and Managing PrEP Side Effects, Seroconversion, and Stigma

Module 4: Learning Objectives

By the end of module 4, participants will be able to:

- Explain how to manage creatinine elevation.
- List additional causes of creatinine elevation.
- Explain how to manage seroconversion.
- Develop strategies to minimize PrEP stigma.
- Give examples of gaps in knowledge about PrEP.
- Think about how M&E tools can be adapted for local use.

Monitoring Creatinine Elevation

- Approximately 1 in every 200 PrEP users may develop an elevation of serum creatinine.
  - Defined as a 50% increase above baseline or an elevation above the normal range.
  - Reminder: Renal impairment is defined as having an estimated creatinine clearance of <60 ml/min.
- Creatinine elevations have usually **reversed** after stopping PrEP.
- It is important to monitor **transient creatinine elevation** and for signs of **chronic or severe renal insufficiency.**

Question

How would you manage increase in creatinine clearance?

Managing Creatinine Elevation

- Discontinue PrEP if creatinine elevation is confirmed on a separate specimen and if estimated creatinine clearance decreases to <60 ml/min.
- After PrEP is stopped, creatinine should be checked for another one to three months and PrEP restarted if eGFR returns to > 60 ml/min.
- Additional causes and management of creatinine elevations should be considered if:
  - Creatinine elevations are more than 3x the baseline.
  - Renal function or creatinine elevations do not return to normal levels within three months after stopping PrEP.
  - Creatinine elevations progress at one month or more after stopping PrEP.
- Common causes of chronic or severe renal insufficiency include: diabetes mellitus, uncontrolled systemic hypertension, hepatitis C infection, liver failure, and pre-eclampsia during pregnancy.

Seroconversion on PrEP

- PrEP works when taken. In clinical trials, the level of protection was strongly correlated with adherence.
- New HIV infections can be prevented with consistent use of PrEP.
- HIV seroconversion after prescribing PrEP can occur if PrEP is not used correctly or consistently, or if HIV infection was undiagnosed at the time of PrEP initiation.
- Part of counseling should include information to help PrEP users recognize signs/symptoms of AHI, which should prompt a clinic visit without delay.

Question

How would you manage seroconversion on PrEP?

Managing Seroconversion

- If a person using PrEP tests positive for HIV, PrEP should be **stopped immediately** and the person referred for prompt initiation of HIV treatment.

- Transitions from PrEP to HIV treatment without a gap avoid the risk of resurgence in viral load, immunological injury, and secondary transmissions.

PrEP "Special Situations"

Situation	Recommendation/Follow-Up
Hormonal Contraception	• PrEP does not affect the efficacy of hormonal contraceptives and hormonal contraceptives do not affect PrEP efficacy.
Pregnancy and breastfeeding	• PrEP may be continued during breastfeeding in women who are at substantial risk for HIV acquisition.
Hepatitis B infection	• Hepatitis B vaccination is appropriate for people at substantial risk for HBV or HIV infection.
Management of Recent HIV Exposure with PEP	• People who have been exposed to HIV in the past 72 hours should be offered post-exposure prophylaxis (PEP). • WHO recommends PEP consisting of TDF/3TC (or FTC), preferably combined with a boosted protease inhibitor, for 28 days (use national guidelines). • PEP should be transitioned to PrEP after 28 days if the HIV test remains negative and there is substantial ongoing risk of HIV acquisition.

Minimizing PrEP Stigma

- Confidentiality is essential in PrEP services.
- People may face stigma if their PrEP use becomes known.
- PrEP use can exacerbate stigma if others mistakenly consider PrEP use to be evidence of irresponsible behavior or mistakenly think that PrEP is HIV treatment.
  - Such stigma will decrease PrEP uptake and adherence among people who would otherwise benefit from it.

Presenting PrEP to your communities as a *responsible choice* that *protects both partners* will increase the impact of PrEP, prevent more HIV infections, and can help reduce stigma.

Question

What strategies can you think of to minimize PrEP stigma?

Current Gaps in Knowledge and Need for Continued Surveillance

- **Current gaps in knowledge related to implementation of PrEP include:**
  - ***Renal safety*** of FTC/TDF PrEP in people with diabetes mellitus and uncontrolled systemic hypertension has not been evaluated.
  - Although 3TC is equivalent to FTC for HIV treatment, ***use of 3TC in combination with TDF for PrEP*** has not been studied.
  - ***Comparison of daily vs. on-demand PrEP regimens*** is still limited.
  - Effectiveness of ***on-demand oral PrEP regimens for women*** has not been evaluated.
  - Although cases of ***clinical HBV rebound*** when stopping FTC/TDF PrEP have not been observed among people with current HBV infection in clinical trials, most trials excluded such individuals.
- **Need for continued surveillance:**
  - The benefits of PrEP in women at substantial risk of HIV acquisition appear to outweigh any risks observed to date, however, there is a need for continued surveillance of maternal, pregnancy and infant outcomes to confirm the safety that studies to date suggest.

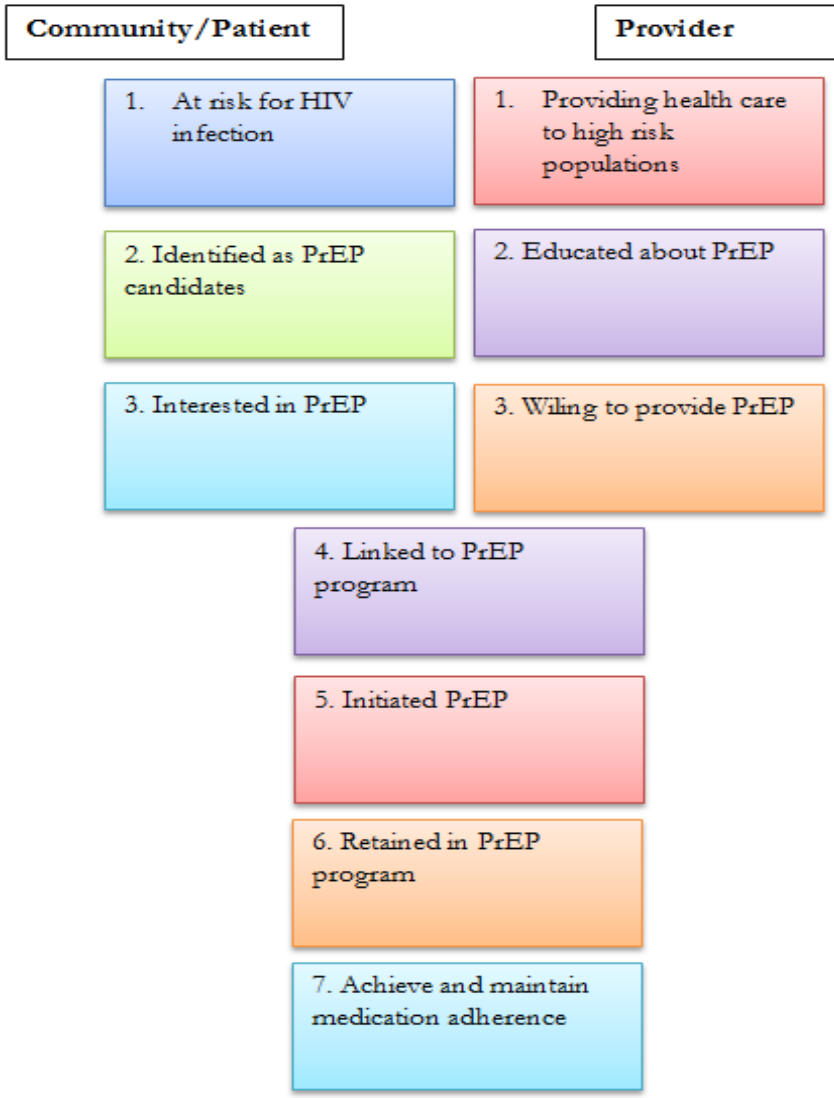
PrEP M&E Tools

- Refer to your participant folder for a:
  - Facility-held card
  - PrEP register
  - PrEP monthly report form
  - Substantial Risk and Eligibility Assessment
- *Begin to think* about how these M&E tools can be adapted for your country/facility.
- **Additional onsite training will be provided for adapting M&E tools.**

Module 4 Summary

- PrEP users should be informed about how to recognize signs and symptoms of acute HIV infection.
- If person using PrEP tests positive for HIV, stop PrEP immediately and start ART as soon as possible, without a gap after PrEP is discontinued.
- If confirmation of positive HIV test result is delayed for more than a few hours, transition to fully suppressive ART (three ARVs as per national treatment guidelines).
- Ideally, blood creatinine (eGFR) should be measured before starting PrEP and *at least every six months* after PrEP is started.
  - Initiation of PrEP should not be delayed while waiting for creatinine result.

PrEP Cascade



PrEP is more than just a biomedical intervention.

Success will also depend on structural and behavioral interventions.

Lui A, et al. IAPAC 2012; Miami. #80040. U.S. Centers for Disease Control and Prevention SHIPP Study 2013-2016

Question

What are concerns you have about implementing PrEP?

PrEP Resources for Providers

- http://www.who.int/hiv/pub/arv/arv-2016/en/
- http://www.who.int/hiv/topics/prep/en/
- http://www.unaids.org/sites/default/files/media_asset/UNAIDS_JC2764_en.pdf
- http://www.prepwatch.org/
- http://www.cdc.gov/hiv/risk/prep/
- Glidden, DV, Amico, KR, Liu AY, et al. Symptoms, side effects and adherence in the iPrEx open-label extension. Clin Infect Dis. 2016;62(9):1172-7.
- Fonner, VA, Dalglish, SL, Kennedy, CE, et al. Effectiveness and safety of oral HIV preexposure prophylaxis for all populations. AIDS 2016;30(12):1973-1983.
- The Fenway Institute. Pre-exposure prophylaxis clinical study data sheet. http://www.projectinform.org/pdf/prepstudydata.pdf . Accessed October 5, 2016.
- World Health Organization. Review: Safety of tenofovir PrEP in pregnant and breastfeeding HIV-uninfected women and their infants. http://emtct-iatt.org/wp-content/uploads/2016/08/WHO-TDF-pregnancy-Lynne-Mofenson.August-21-2016.pdf . Accessed October 5, 2016.

PrEP Resources for PrEP Users

- http://www.whatisprep.org
- http://www.PleasePrEPMe.org/resources
- http://www.iwantprepnow.co.uk
- http://www.cdc.gov/hiv/pdf/risk_PrEP_TalkingtoDr_FINALcleared.pdf
- https://www.facebook.com/groups/PrEPFacts/

Post-Test, Training Evaluation, and Closing

PrEP Specific Competencies

After completing today's training program, participants will be able to:

- Identify eligible candidates for PrEP.
- Conduct an individualized risk assessment.
- Educate and counsel PrEP candidates and users.
- Conduct clinical and laboratory assessments during the initial PrEP visit.
- Prescribe PrEP.
- Conduct clinical and laboratory assessments during follow-up PrEP visits.
- Review PrEP M&E tools.

Training Post-Test

- The objective of this post-test is to find out what you know about implementing PrEP and how much your knowledge and skills have improved since the pre-test assessment.
- Results of the pre-program assessment and post-test will help improve future trainings.
- **Remember to write your name on your post-test.**
- You have 15 minutes to complete the post-test.
- You will receive a copy of the correct answers as you leave the training.

Training Evaluation Form

Training Evaluation Form

Name (optional): _____
Your position (optional): _____
Health facility where you work (optional): _____

INSTRUCTIONS: *Please rate the following statements on a scale from 1 to 5.*

	☹ Strongly Disagree	Disagree	Neither agree nor disagree	Agree	☺ Strongly Agree
1. The training objectives were clear.	1	2	3	4	5
2. This training met my expectations.	1	2	3	4	5
3. The technical level of this training was appropriate.	1	2	3	4	5
4. The pace of this training was appropriate.	1	2	3	4	5
5. The facilitators were engaging (i.e., interesting).	1	2	3	4	5
6. The information I learned in this training will be useful to my work.	1	2	3	4	5
7. I am confident that after this training, my facility will be able to implement PrEP for all eligible candidates.	1	2	3	4	5

How helpful were each of the training modules to you and your work? If you have specific comments, please write them on the next page.

	☹ Not helpful				☺ Very helpful
Module 1: PrEP Basics	1	2	3	4	5
Module 2: PrEP Eligibility, Screening & Contraindications	1	2	3	4	5
Module 3: Initial PrEP Visit & Follow-Up Visits	1	2	3	4	5
Module 4: Monitoring & Counselling PrEP Side Effects, Seroconversion, and Stigma	1	2	3	4	5

What was the best part of this training?

How could we improve this training?

Other comments:

Thank you for your participation and for your commitment to implementing PrEP!

Training Evaluation

(See Participant Folder: *Training Evaluation Form.)*

- We welcome your honest feedback to improve future trainings.
- Your evaluations are confidential — you do not have to include your name.

Thank you for your participation!