KINGDOM OF CAMBODIA

NATION RELIGION KING

MINISTRY OF HEALTH

Standard Operating Procedure (SOP)

For HIV Pre-Exposure Prophylaxis (PrEP) Implementation in Cambodia

January 2022

NATIONAL CENTER FOR HIV/AIDS, DERMATOLOGY AND STD (NCHADS)

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Preface

The Standard Operating Procedure for HIV Pre-Exposure Prophylaxis in Cambodia will be implemented in health and non-health facilities settings is a part of PrEP concept note and support to prevention strategy and to increase HIV case detection which aimed at eliminating new HIV infections by 2025.

In compliance with the new recommendations of the WHO, NCHADS collaborated with concerned development partners who are the members of PrEP-TWG in developing this SOP in cooperating with experiences from Cambodia and other countries in the region were also used in developing the SOP.

The Ministry of Health agreed and approved of Standard Operating Procedure for HIV Pre-Exposure Prophylaxis in Cambodia and expects that national program and all concerned stakeholders will implement it effectively and efficiency.

Phnom Penh, 14 / 01 / 2022

For Minister of Health

Prof. ENG HUOT
SECRETARY OF STATE

Acknowledgement

The National Center for HIV/AIDS, Dermatology and STD (NCHADS) would like to extend thanks to PrEP Technical Working Group members for their commitment and contribution to the development of this SOP.

On behalf of NCHADS, I would like to thank the TWG that worked tirelessly on the development of this important document. My special thanks to NCHADS colleagues (H.E Dr Lan Van Seng, Dr. Samreth Sovannarith, Dr. Ngauv Bora, Dr. Kaoeun Chetra, Dr. Tep Samnang, Dr Frits Van Griensvan, Dr. Steve Wignall, Dr. Chel Sarim, Mr. Nhim Dalen, Mr. Keo Vannak and experts from development partners including WHO, UNAIDS, EpiC, KHANA, RHAC, MHC, MHSS, CWPD and others who have provided suggestions, relevant documents, and shared experiences to ensure the successful development of the SOP.

Phnom Penh, 06/01/2022
Director of National Center for HIV/AIDS,
Dermatology and STD

Dr. OUK VICHEA

Abbreviation

Abbreviation	Full terminology
3TC	Lamivudine
ACU	AIDS Care Unit
ART	Anti-Retroviral Therapy
BCC	Behavioural change and communication
CBO	Community Based Organization
CMS	Central Medical Store
CWPD	Cambodian Women for Peace and Development
DIC	Drop-In Centre
DMU	Data Management Unit
ED	Event Driven
FHC	Family Health Clinic
GBV	Gender-based violence
GFATM	Global Fund to Fight AIDS, Tuberculosis and Malaria
HBV	Hepatitis B Virus
HCV	Hepatitis C Virus
HIV	Human Immunodeficiency Virus
HIVST	HIV self-testing
KHANA	Khmer HIV/AIDS NGO Alliance
KP	Key Population
LMU	Logistic Management Unit
LTFU	Loss To Follow Up
MHC	Men's Health Cambodia
MHD	Municipal Health Department
MHSS	Men's Health Social Service
MSM	Men who have sex with Men
NCHADS	National Centre for HIV/AIDS, Dermatology and STD
NGO	Non-Government Organization
OD	Operational District
OW	Outreach Worker
PASP	Provincial AIDS and STI program
PDB	Prevention Database
PEP	Post-exposure Prophylaxis
PHD	Provincial Health Department
PLHIV	People Living with HIV
RH	Referral Hospital
RHAC	Reproductive Health Association of Cambodia
SOP	Standard Operational Procedure
STD	Sexually Transmitted Disease
TDF	Tenofovir
TGW	Transgender Women
TWG	Technical Working Group
UNAIDS	United Nations Programme on HIV/AIDS
VCCT	Voluntary Confidential Counselling and Testing
WHO	World Health Organization

1. BACKGROUND

The Ministry of Health approved the NCHADS Concept Note on HIV Pre-Exposure Prophylaxis (PrEP) Implementation in Cambodia on 21 May 2019[1]. The PrEP Concept Note describes benefits of PrEP and how it will contribute to eliminating transmission HIV in Cambodia by 2025. The PrEP Concept Note provided guidance on PrEP implementation PrEP was first introduced and implemented at Chhouk Sar Clinic, the country's first PrEP site. To date, there are ten sites offering PrEP services in four provinces.

NCHADS has established an ambitious target of 10,000 PrEP clients by 2023 in the new 2021-2023 GF grant[2] and plans to expand PrEP access from four to 15 provinces by 2023. Family Health Clinics (FHC), NGO clinics and medically supervised CBO drop-in centers (DIC), especially those serving key populations, will be centers of PrEP expansion. The burden of HIV is higher among KPs, and PrEP can prevent both new and downstream infections among their partners.

This PrEP Implementation SOP will serve as a more detailed guide for NCHADS, partners and providers at FHC, NGO clinics and medically supervised CBO DICs by incorporating the updates from new WHO recommendations. The SOP highlights ways that PrEP can be implemented to better meet client needs and stop HIV transmission, as well as outlining roles and responsibilities and the monitoring needed to make implementation a success.

2. GOALS AND OBJECTIVES

The **Goal** of this SOP is to provide clear guidance and instruction for clinicians, health care workers and supervised CBO providers on appropriate PrEP implementation.

The specific objectives of this SOP are to:

1. Describe PrEP implementation procedures, client flow and PrEP modalities - daily or event driven.
2. Provide a guide for evaluating eligibility of PrEP clients.
3. Provide a guide on proper counseling, and steps for initiating and monitoring clients on HIV PrEP.
4. Provide guidance on the standardization of reporting of PrEP enrollment, retention, and program monitoring.

3. Implementation procedure

3.1 Considerations for offering PrEP service

PrEP is offered to at-risk populations who are HIV negative. Such individuals can be reached by physical and virtual outreach, outreach workers (OW), community peers, websites, and STI, VCCT and ART services. Not all individuals will directly admit risk out of shame and embarrassment but still request access to PrEP. They should receive it. There are three PrEP access modalities as following:

3.1.1 PrEP-direct

KPs eligible for PrEP-direct services are those who want to take HIV PrEP based on self-evaluation and -education and who wish to protect their sexual health and that of their partners (if none of the ineligibility criteria applies). In these cases, there is no need for sexual behaviors history taking to determine opt-in- or opt-out PrEP eligibility type. PrEP-direct candidates will proceed straight to project procedures and will have a visit schedule of activities like that of all other PrEP clients. PrEP-direct candidates can walk-in, may make an appointment through social media, during prevention outreach activities or via the HIVST website (khmertest.org).

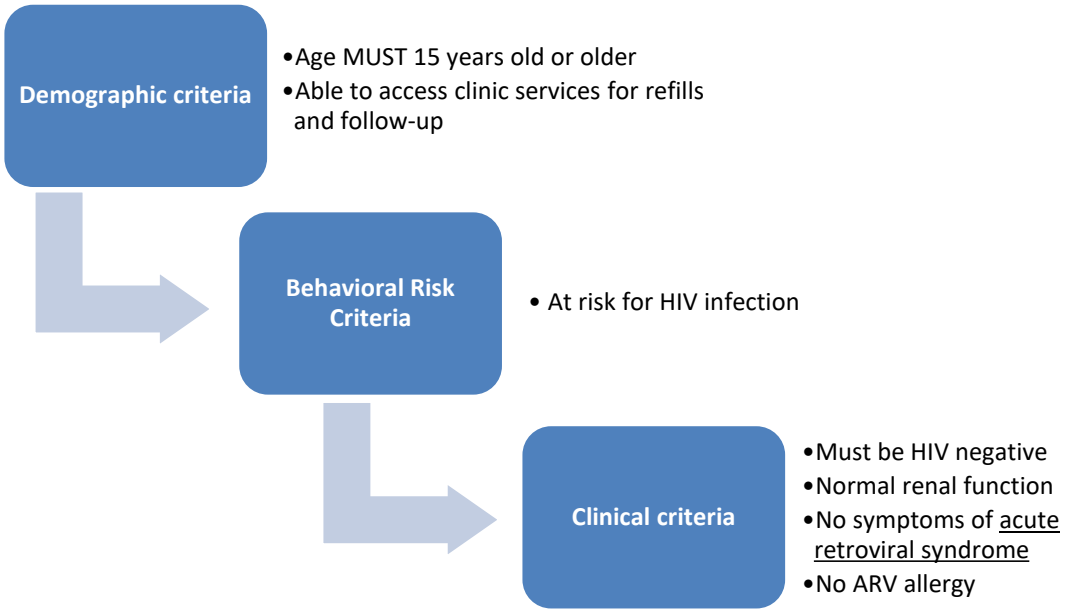
3.1.2 Opt-in PrEP

Opt-in PrEP eligibility is suitable for MSM and TGW who may consider taking HIV PrEP now or later based on evaluation and discussion of their sexual behaviors with a counsellor. This option is also available for MSM who are currently not at-risk for HIV-infection but may become at risk anytime in the future. Opt-in PrEP is particularly indicated for MSM and TGW who wish to take control of their sexual health in situations where safer-sex options are difficult or impossible to negotiate or when they are unsure of the sexual health behaviors or HIV-status of their sexual partner(s).

3.1.3 Opt-out PrEP

Opt-out PrEP eligibility applies to key or priority populations who are in need HIV PrEP based on evaluation and discussion of their sexual health behaviors with counsellor such as MSM and TGW. These people are at high-risk for HIV infection and will be prescribed HIV PrEP unless they choose not to participate in the HIV PrEP program.

Figure 1: Eligibility criteria for PrEP enrolment



1.1.1. Demographic criteria:

People with substantial risk for HIV infection who are at least 15 years old[3] and agree to return for follow-up visits.

1.1.2. Behavioral Risk Criteria

The criteria for assessing the risk are listed below.

- Client is the uninfected sexual partner of a PLHIV who is not virally suppressed or result of viral load testing is unknown (i.e., HIV discordant couples) and where condoms are not consistently used.
- Had unprotected anal/vaginal/neovaginal sex in the past 6 months with more than one partner.
- History of any new sexually transmitted infection (STI) in the past 6 months.
- Used drugs with sex for pleasure during the past 6 months.
- Injected drugs in the past 6 months with shared injecting equipment or where there is inadequate access to sterile injecting equipment.
- Received post-exposure prophylaxis (PEP) one or more times in the past 12 months.
- If the sexual partner of the potential client has one or more of the HIV risk factors listed above.

1.1.3. Clinical criteria

Even though PrEP has a good safety profile, there are a few contra-indications for prescribing PrEP. The following individuals may take PrEP:

- Must be HIV uninfected.
- Must be free of symptoms of acute retroviral syndrome (ARS).
- Must have good renal function (creatinine clearance (≥ 50 mL/min) [4].
- Must be free of any ARV drug allergy (either to TDF or its companion drug 3TC).
- Must have body weight ≥30 kg.
- Clients with chronic or acute Hepatitis B infection may take PrEP but with caution under the guidance of an experienced physician. For someone on PrEP, he/she should be warned that stopping may cause suppressed HBV infection to flare.

PrEP has no or minimal drug interactions with commonly prescribed medicines nor significant side-effects and has proven to be safe in many randomized controlled trials. PrEP **can be used safely** by most people including[4]:

- Pregnant or breastfeeding women.
- Women using hormonal drugs for contraception.
- Transgender persons on gender-affirming hormone therapy.

3.2 PrEP modality

Oral co-formulated TDF/3TC[5] PrEP can be used daily for a considerable time quite safely and is the preferred PrEP regimen. PrEP can also be effective if taken daily for short periods of time or around single events of possible HIV exposure. Daily continuous PrEP use is believed to facilitate adherence because of its routine character and the unpredictability of HIV risk in many situations and persons. Dosing, duration, follow-up, and adherence to PrEP, are recommended as follows:

3.2.1 For daily PrEP

This modality is recommended for all individuals at substantial risk for HIV infection as mentioned in eligibility criteria. Oral co-formulated TDF/3TC should be taken daily and continuously during periods of elevated risk for HIV infection.

Dosing: To be effective (98% protection against HIV infection), PrEP clients must take one pill daily for seven days and continue one pill every day thereafter. If clients opt for daily dosing

and will have sexual intercourse during those first seven days, they should protect themselves by using condoms appropriately and consistently.

MSM clients and TGW (not using feminizing hormones) initiating event driven (ED) may elect to continue as daily PrEP by simply continuing daily PrEP administration after initiating with the two-pill loading dose. TGW and women would not be protected until they have taken seven (7) days PrEP and should use condoms. Tissue levels in the vagina and rectum of TGW need additional doses to achieve protective levels.

When to stop: Taking PrEP is not like providing antiretroviral therapy. It is not necessary if clients no longer have risk of HIV infection (e.g., in a committed, monogamous relationship or stop having sex or using drugs). They can stop **two days after** a last unprotected sexual intercourse or shared needle use.

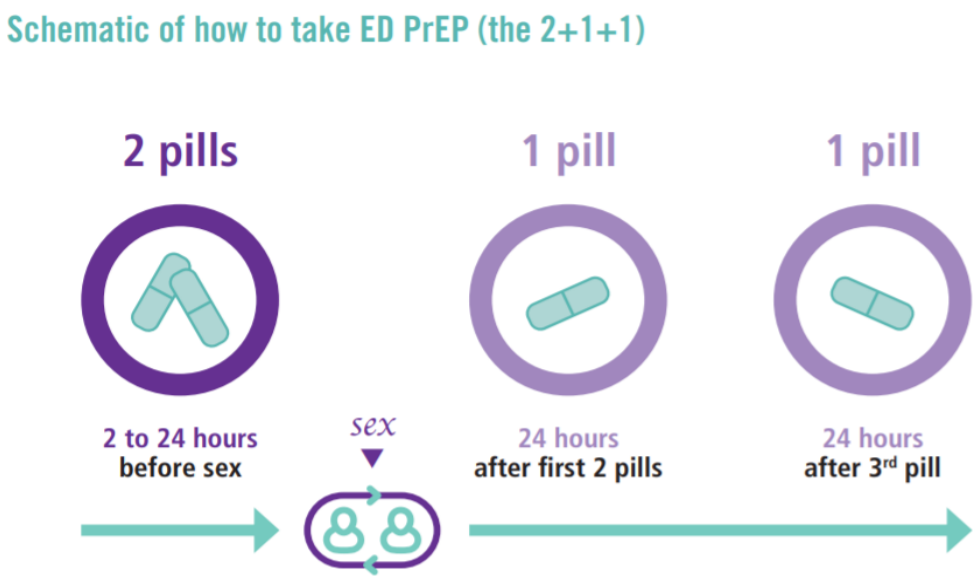
3.2.2 Event Driven (ED) dosing:

For individuals who may have only occasional high-risk sexual exposure, WHO has recommended another option for PrEP use. It is referred to as event driven PrEP. It is not taken daily but in a 2-1-1 dose scheme and has the same efficacy as daily dosing[4]. The 2-1-1 means that two PrEP pills (same PrEP drug as daily dose) are taken at least two hours but not over then 24 hours before having sex and is continued as one pill a day while the sexual exposure is occurring and then when there is no more risk continue one pill per day for 2 days after the last sex.

Even-driven PrEP is only for MSM and for those who have an episodic risk behavior or clear plan/schedule for sex. In addition, the updated recommendation from WHO in July 2021 clearly stated that the ED dosing is the best fit for cisgender men, transgender women NOT taking gender-affirming hormones and non-binary individual assigned male at birth NOT taking gender-affirming hormones[6]. The regimen does not protect women or transgender women due to vaginal and neovaginal drug levels are not sufficient to protect.

MSM clients initiating event driven may elect to continue as daily PrEP by simply continuing daily PrEP administration after initiating with the two-pill loading dose. TGW and women would not be protected until they have taken seven (7) days PrEP and should use condoms.

Figure 2: Event driven dosing for MSM



* Note: for PrEP clients who want to switch PrEP options (from daily to ED dosing versus) should consult with their healthcare provider.

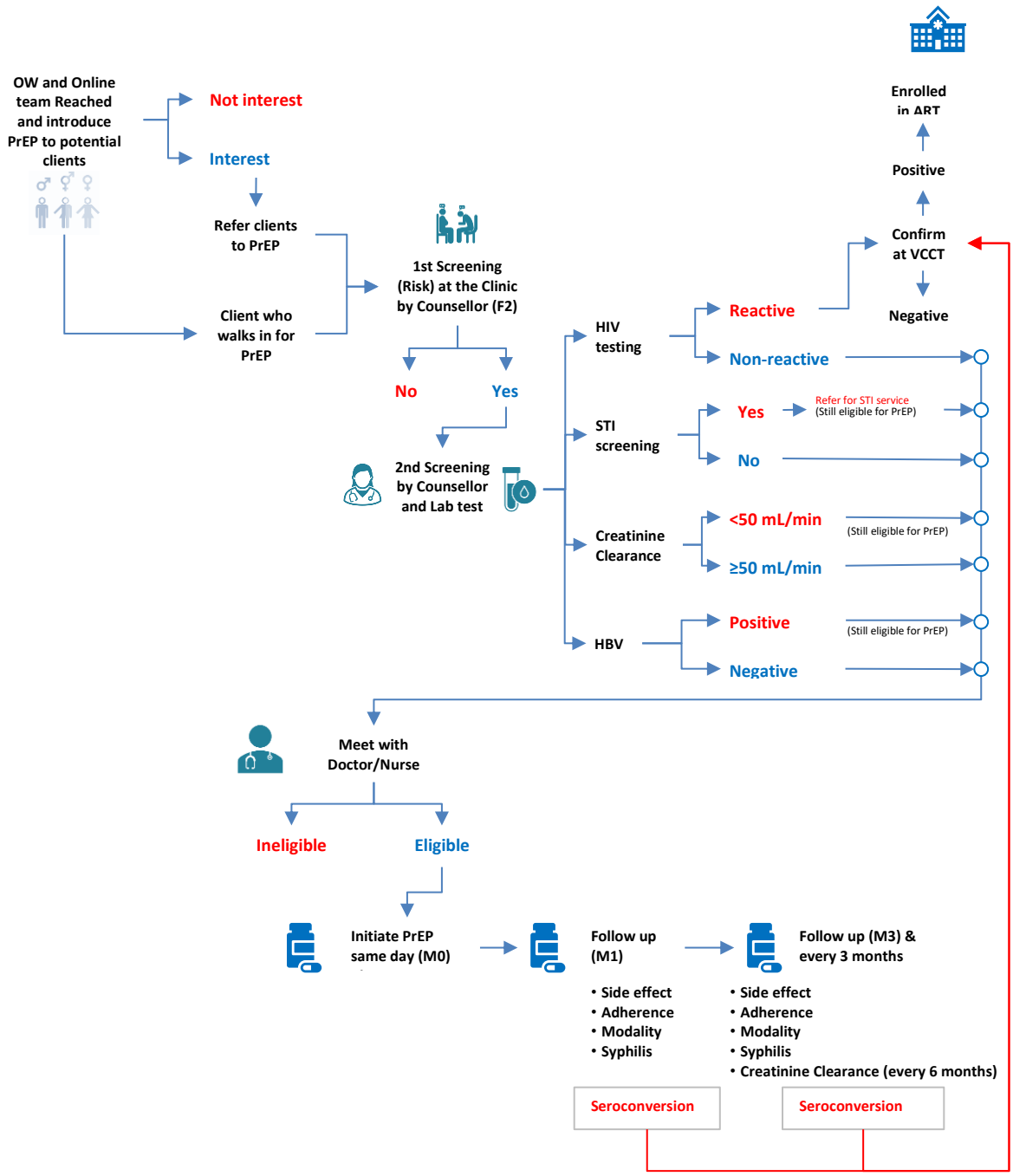
3.2.3. Follow up and adherence to PrEP

- PrEP users should be followed-up for laboratory, clinical and adherence monitoring at one-month post initiation and then every 3 months. This follow-up can be physical or virtual if HIVST is available.
- Adherence to PrEP should be addressed at every follow-up visit by self-report and pill-count by PrEP counselor.
- Those who are poorly adherent but are willing and eligible to continue PrEP should be given additional adherence counseling or referred to peer-based adherence support services.
- Those with persistent insufficient adherence (<4 pills per week) after counseling may compromise both PrEP efficacy and individual safety, may lead to drug resistant HIV and should be taken off PrEP.

4. PROCESS OF PrEP IMPLEMENTATION & MANAGEMENT

4.1 PrEP delivery

Figure 3: PrEP delivery diagram



Implementation can be in RH (FHC, ART and other services), NGO clinics and in medically supervised NGO settings. The following steps are necessary for PrEP implementation:

- Referred PrEP clients or walk-in clients are welcomed by receptionist

- The clients are assessed for behavioral risk of HIV infection (Form 2) by counselors/nurses if not evaluated by OWs in community settings before referring to PrEP service.
- For those interested PrEP clients who are eligible after assessing risk and their HIV test results are non-reactive, they will be further assessed for other clinical criteria (Form 3) before offering enrollment for their Month 0 (M0) visit
- Clients are expecting and should get same-day PrEP tailored to their needs – daily or ED. Unless there is a history of significant renal disease, all clients can be started on PrEP while creatinine or other liver infection screening tests are pending. They can be called back, or the results discussed at their M1 visit.
- PrEP clients need to return to the clinic or DIC one month (M1) after initiation to refill their drugs; to test for HIV; and meet with PrEP counselors/nurses if they have any concerns about PrEP use. They should come for follow-up visits every three months for adherence counseling by counselors/nurses; clinical examination by health care providers based on chief complaint or any symptom; HIV and syphilis testing; and PrEP drug refill. Adherent clients can be checked by phone and meds delivered by courier.
- PrEP providers/nurses will communicate with CBO or OWs if a client misses their appointment date or is lost to follow up. Reasons for stopping or dropping out of PrEP should be recorded on the PrEP form if it is possible to get feedback from PrEP clients.
- Record and report PrEP services to RH, OD, PASP/PHD and NCHADS monthly
- PrEP is highly effective if taken appropriately but there are occasional breakthrough infections. Patients who seroconvert at M1 may have been infected before initiating PrEP and should be immediately started on three-drug ART. Patients who are found to have seroconverted on subsequent visits should have a thorough history taken regarding adherence and should also initiate ART immediately. They may initiate 1st line treatment (TLD) despite having been on TDF-3TC regimen for PrEP.
- The CrCl can be monitored in condition with their age and Kidney-related comorbidities.

Table 1: Renal function monitoring for oral PrEP in Cambodia

Population		Initiation	Follow-up
Kidney-related comorbidities	Age		
No	<30	No	No
No	30-49	No	At M3 after initiation, If M3 (CrCl<90ml/min), Follow up every 6 months
No	≥50	Yes	Every 6 months from M0
Yes	Any age	Yes	At M3 and every 6 months after M3

**Note: at any time, if PrEP clients suspected of Kidney-related comorbidities develop, then the CrCL should immediately done*.

4.2 Roles and Responsibilities for PrEP implementation

To ensure that the implementation of the PrEP is smooth and successful, all parties must actively participate and be responsible for their task as follows:

4.2.1 NCHADS and technical advisory staff

- **Technical team of NCHADS including ACU, BCC and STI units:** Will oversee the PrEP implementation at all stages of implementation. The NCHADS technical team will provide training before starting **PrEP delivery.**
- **Data Management unit/NCHADS:** will coordinate and monitor the timely submission of recording and reporting forms as well as lead a review of PrEP data monthly.
- **Logistics Management unit/NCHADS: will** coordinate and assist FHC or NGO clinic in requesting drug, test kits and other necessary equipment. In the event of drug or test kit stockouts at FHC, LMU will assist in supplying the drug or test kits.

4.2.2 NGOs and OWs

NGO partners and OWs who provide outreach physically and virtually:

- Introduce and provide the information on PrEP to their clients.
- Provide counselling on PrEP benefit to clients with HIV non-reactive result and refer them to nearby clinic or convenient clinic for taking PrEP. This information should be recorded and reported in the PDB.
- Assess the risk behavior of each interested PrEP clients in advance (form 1, 2 and 5) before referring to FHC or NGO clinic.
- Deliver PrEP drug to eligible PrEP clients at community and follow up their adherence.
- Assist NGO clinics or FHCs in follow up of PrEP LTFU or miss appointment.

4.2.3 PASP/PHD/MHD, OD and RH management teams

- Oversee the functioning of PrEP implementation at their hospital and province.
- Coordinate with relevant stakeholders to review and discuss PrEP in monthly and quarterly meetings and make recommendations to improve the implementation of this approach in his hospital and province.
- Integrate PrEP topics into existing technical work group meeting; GoC-B-AICM and pro-TWG
- conduct the routine technical monitoring and coaching to PrEP service.

4.2.4 Family Health Clinics

- Provide physical and lab examination for client at first and follow up visits.
- Provide counselling to interested PrEP clients at first and follow up visits
- Pharmacists make a quarterly request by using the standard format and submit to hospital pharmacy for compilation. Then, submit to LMU/NCHADS for reviewing before sending to CMS. The drug will be channeled and transported through CMS system to PASP/PHD, OD and RH before placing at FHC. in case of shortage, the FHC pharmacist should immediately report and make a request submit to LMU/NCHADS.
- FHC and NGO clinic staff will complete all PrEP recording forms

4.2.5 CBO Drop-in-Centers

- Collect history and provide screening lab examination client at first and follow up visits. Rapid screening tests for HIV 4th generation, HBsAg, HCV and syphilis will be done in the CBO DIC. Photos of the strips will be printed and saved in the client record and sent by Telegram to the medical supervisor.
- If the client meets risk criteria and all labs are negative. A summary will be sent along with the lab result to the supervising physician who will approve PrEP initiation. His/her text approval will be printed and saved in the client record.
- If a client is thought to have physical or lab abnormities that might affect proper PrEP implementation or the medical supervisor requests, the client will be referred to the PrEP clinic for evaluation.
- Provide counselling to interested PrEP clients at first and follow up visits
- Staff make a quarterly logistics request by using the standard forms and submit them to supervisory clinic for refill. The supervising clinic will submit to LMU/NCHADS for reviewing before sending to CMS. All PrEP providers should aim to keep some buffer stocks of ARVs for PrEP on hand.

- CBO staff will complete all PrEP recording forms and submit them to their supervisory clinic.

5. COORDINATION and MONITORING

5.1 Coordination

Regular coordination meetings must be set up to review the implementation as well as to address any challenges that may arise during implementation.

At national level

- Monthly meeting: to review the PrEP data and take any necessary action to support site implementation. The NCHADS team (ACU, BCC, STI and DMU), EpiC team, MHC, MHSS, CWPD and RHAC will be invited to the meeting.
- Quarterly meeting: to review implementation with PrEP TWG and seek recommendations to improve implementation by inviting all members of prevention TWG.

At provincial, OD, and hospital level

- At provincial and OD levels, PrEP discussions should include in the meeting of RH, OD, PASP/PHD and CBO management team. CBOs must be able to share their views, challenges, and solutions at community level where they are facing and need advice from meeting members for improving access of PrEP at communities and facilities.

5.2 Technical support from national level

- Provide technical support to PrEP sites as requested.
- Provide virtually and physically monitoring at PrEP sites.

5.3 Monitoring and Reporting

Measuring progress and gathering collective results of the PrEP implementation is a crucial part of program monitoring. It is important for program management and stakeholders to understand the level of PrEP service uptake, retention, referral for relevant services (STI, VCCT, ART and GBV), obstacles and successes of PrEP implementation. In addition, those data are used by sites, ODs and provinces for program improvement and any decision-making related to policy or guideline revisions.

To measure PrEP implementation progress, NCHADS has developed a PrEP form for community-based organizations and providers to record and keep track the detailed case

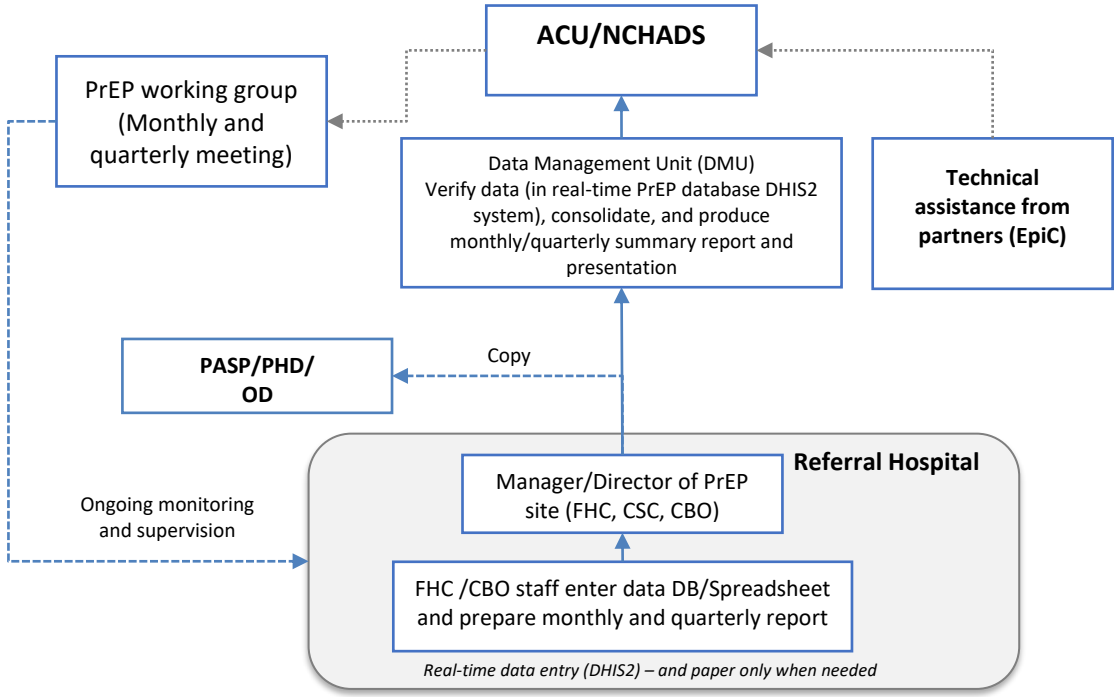
information and enter information in the real-time PrEP data tracker using DHIS2 system that exist in the National Prevention Database. The real-time PrEP data tracker in DHIS2 will automate aggregate data from every PrEP site into the national prevention database and make data available for users at site level, provincial level and the national level so that key stakeholders involved in the PrEP implementation, technical support and management will be able to access PrEP data (PrEP dashboard in DHIS2) and use data to improve program performance. Data management unit (DMU) of NCHADS will review data in DHIS2 system frequently (biweekly basis) to ensure consistency, accuracy and completeness of reported data in the system and will communicate with PrEP sites and CBOs to ensure data quality.

The PrEP report and data collection is driven by the below core indicators:

1. Number of clients offered PrEP services (by type of population)
2. Number and percent of clients who received screening and eligible for PrEP (by eligible and ineligible [reason for ineligible)
3. Number and percentage of clients initiating PrEP (by modality: daily and event driven)
4. Number and percent of PrEP clients who sero-convert and are enrolled in ART
5. Number and percent of clients with STI diagnosis and receiving treatment
6. Number and percentage of clients retained on PrEP by (by period: M1, M3, M6, M9, M12)
7. Number and percentage of clients with PrEP interruption (by drop out, terminated by provider, LTFU, and by period)

It is very important to have a frequently meeting, can be monthly and quarterly, among PrEP implementers under the leadership of NCHADS to review data of core indicators to see the progress of the implementation, identify challenges, and define possible solution to overcome challenges.

Figure 4: PrEP recording and reporting flow



**Note: PrEP online database system will be developed in DHS2 platform*

6. DRUG AND TEST KIT SUPPLIES

ARVs and laboratory test kits will be supplied with no cost by using the existing mechanisms for supplying drugs from CMS to PHD, OD and RH. All FHCs where PrEP is implemented must submit their requests quarterly to CMS. NGO clinics submit their requests directly to LMU/NCHADS. CBO DICs submit their requests via their supervisory clinic. Shortages of drugs and/or test kits within a quarter can be reported directly to NCHADS for FHCs, NGO clinics and CBO DICs.

REFFERENCES

1. Ministry of Health Cambodia. (2019). Concept-note on HIV pre-exposure prophylaxis (PrEP) implementation in Cambodia. Ministry of Health: https://niph.org.kh/niph/uploads/library/pdf/GL199_PrEP_concept_note-EN.pdf

2. National Center for HIV/AIDS, Dermatology and STD. (2019). GF Proposal of PrEP target of PrEP covering 2020 - 2023 endorsed by the Director of NCHADS during a meeting dated 10 March 2020

3. Van Griensvan, F. (2021). Assess effective HIV PrEP service delivery models and demand creation activities for key-populations in Cambodia. Phnom Penh. UNAIDS.

4. World Health Organization (WHO). (2019). Technical brief: What's the 2+1+1? Event-driven oral pre-exposure prophylaxis to prevent HIV for men who have sex with men: update to WHO's recommendation on oral PrEP. Geneva: WHO; 2019. Available online at: https://apps.who.int/iris/bitstream/handle/10665/325955/WHO-CDS-HIV-19.8-eng.pdf

5. World Health Organization. (2016). Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV. Recommendations for a public health approach. Second edition. Geneva: Available at: https://www.who.int/hiv/pub/arv/arv-2016/en/

6. Shieh E et al. Transgender women on oral HIV pre-exposure prophylaxis have significantly lower tenofovir and emtricitabine concentrations when also taking estrogen when compared to cisgender men. Journal of the International AIDS Society 22: e25405, 2019 (open access). doi: 10.1002/jia2.25405.