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MINISTRY OF HEALTH

Standard Operating Procedure For Implementing Long-Acting Pre-Exposure Prophylaxis Injectable Cabotegravir (CAB-PrEP) in Cambodia

2025



National Center for HIV/AIDS Dermatology and STD (NCHADS)

Table of Contents

Pre	face.	•••••	•••••••••••••••••••••••••••••••••••••••	iv							
Ack	now	ledg	ment	v							
Abb	revi	atior	ns	vi							
I.	INT	ROI	DUCTION	1							
II.	SOI	P OB	JECTIVES	2							
III.	OV	ERV	IEW OF CAB-PrEP	2							
	1.	For	mulation of CAB PrEP	3							
	2.	CA	B-PrEP Regimen and Use	3							
	3.	Mo	de of administration of CAB-PrEP	3							
	4.	CA	B-PrEP Effectiveness	4							
IV.	CA	B-Pr	EP IMPLEMENTATION PROCEDURE	4							
	1.	CA	B-PrEP Initiation	5							
	2.	CA	B-PrEP refill schedule	7							
	3.		pping CAB-PrEP								
	4.		ssing an Injection								
	5.		starting CAB-PrEP								
	6.	Ma	nagement of CAB clients in specific situations								
		Α	Possible Side Effects of CAB-PrEP								
		В	CAB-PrEP and Other Drug Interactions								
		С	Contraindications for CAB-PrEP Use								
		D	Management of HIV Seroconversion								
		E	Management of hepatitis infection								
		F	Management of kidney impairment								
V.	CO		UNITY ENGAGEMENT AND DEMAND CREATION								
	1.		mmunity engagement								
	2.		nand creation								
VI.	CA		EP MANAGEMENT AND MONITORING								
	1.	Rol	e and responsibilities								
		Α	NCHADS	14							
		В	PHD and PASP/MASP	14							
		С	PrEP providers	15							
		D	CBO and OW	15							
		Ε	Other HIV partners	. 15							
	2.	Key	y indicators for monitoring	16							
	3.	Coc	ordination	17							
A.	Coo	rdin	ation	. 17							
B.	Tec	chnical support from the national level									

VII	. C	APACITY BUILDING	18
VII	I.	IMPLEMENTING CAB-PrEP IN CAMBODIA, 2024-2026	18
	1.	Phase 1 – approximately three months	20
	2.	Phase 2 – approximately three months	21
	3.	Phase 3 – approximately three months	22
IX.	R	eferences	2 3

List of Tables

Table 1: Suggested procedure for CAB-PrEP follow-up	8
Table 2: Schedule of lab testing for CAB-PrEP	
Table 3: Injection Dosing Recommendations after Missed Injections	10
Table 4: Key indicators for CAB-PrEP monitoring	16
Table 5: Modeling possible CAB-PrEP enrollment and drug supply*	22
List of Figures	
Figure 1: Effectiveness of all PrEP products	2
Figure 2: Injection procedure of CAB-PrEP	
Figure 3: Flow of CAB-PrEP initiation and follow-up	5
Figure 4: CAB-PrEP "tail period"	9
Figure 5: Roadmap of CAB-PrEP implementation	19
Figure 6: CAB-PrEP VIALS and KP target for 2024-2026	

Preface

Cambodia has made significant strides in its HIV/AIDS response, achieving a reduction in new HIV infections from 15,000 in 1997 to 1,200 in 2023, and trying to meet the 95-95-95 targets set by the Joint United Nations Program on HIV/AIDS (UNAIDS) by 2025. In 2023, Cambodia reached 89% of people living with HIV knew their status, >98% of those who knew their HIV-positive status on antiretroviral therapy (ART), and >98% of those on ART achieving viral suppression. These accomplishments reflect Cambodia's strong political commitment, effective community engagement, and innovative healthcare strategies¹ combining robust prevention strategies such as PrEP, universal access to antiretroviral therapy, and comprehensive care for people living with HIV.

Long-acting injectable Cabotegravir for Pre-Exposure Prophylaxis (CAB-PrEP) is an important addition to the PrEP options, which will be available in Cambodia for those at risk of HIV acquisition. CAB-PrEP was recommended by the World Health Organization (WHO) in 2022 and offers another choice for those at substantial risk, especially young key populations. In addition, it will contribute to reaching the 1st 95 targets through increased HIV testing and reduction in new HIV infections.

Through NCHADS' initiative with technical assistance from EpiC/FHI360, a series of technical and consultative meetings has been conducted to develop this CAB-PrEP SOP with inputs from members of the Technical Working Group on HIV Prevention, Care, and Treatment and development partners including WHO, UNAIDS, United States Agency for International Development (USAID), Maximizing Options to Advance Informed Choice for HIV Prevention (MOSAIC), Meeting Targets and Maintaining Epidemic Control (EpiC/FHI360), US Centers for Disease Control and Prevention (US-CDC), Khmer HIV/AIDS NGO Alliance (KHANA), Reproductive Health Association of Cambodia (RHAC), Men's Health Cambodia (MHC), Men's Health Social Service (MHSS), Cambodian Women For Peace and Development (CWPD), AIDS Healthcare Foundation (AHF) and other partners as well as representatives from young key populations. In addition, this important SOP was aligned with the new recommendations of the WHO, validation studies, and best practices of other contries where CAB-PrEP is implemented.

The Ministry of Health officially approved this "Standard Operating Procedure for Implementing Long-Acting Pre-Exposure Prophylaxis Injectable Cabotegravir (CAB-PrEP) in Cambodia" and strongly hopes that health care providers, relevant development partners, donors, and civil society will implement it effectively and efficiently to contribute to achieving the goal of ending HIV as a public health threat as planned.

Phnom Penh, 0.5../ May/2025

Prof. CHHEANG RA

Acknowledgment

On behalf of NCHADS, I would like to express my appreciation and deepest gratitude to all those who have contributed to the development of the "Standard Operating Procedure (SOP) for Implementing Long-Acting Pre-Exposure Prophylaxis Injectable Cabotegravir (CAB-PrEP) in Cambodia." This document represents a significant milestone in our collective efforts to enhance HIV prevention and contribute to the reduction in new infections of HIV moving toward ending AIDS as a public health threat in Cambodia.

NCHADS extends our heartfelt appreciation to all members of the Technical Working Group on HIV Prevention, Care and Treatment, EpiC/FHI-360 team (Dr. Steve Wignall, Mrs. Seng Sopheap, Dr. Chel Sarim, Mr. So Kimhai, Mr. Keo Vannak, Mr. Tep Romaing, Mr. Rin Channara, and Ms. Virak Vinich), WHO (Dr. Deng Serongkea), UNAIDS (Mr. Ung Polin), GFATM team (Mr. Chris Obermeyer), MOSAIC team (Dr. Njambi Njuguna, Mr. Ted Nierras), US-CDC team (Dr. Ramona Bhatia, Mr. Hy Chhaily), USAID team (Dr. Trena Mukherjee, Dr Sok Bunna), and AHF (Dr. Men Pagnaroat) for their invaluable insights, experiences, and feedback to ensure that the SOP is comprehensive, contextually sensitive, and responsive to the needs of key populations. I would also like to express my special thanks to NCHADS management as well as technical and administrative staff (Dr. Samreth Sovannarith, Dr. Ngauv Bora, Dr. Kay Sokha, Dr. Tep Samnang, Dr. Ky Sovathana, and Dr. Prak Narom) for their unwavering leadership, their inputs and coordination throughout the process to develop this document.

We are also grateful for suggestions and support from Community Based Organization teams (KHANA, RHAC, MHC, MHSS, CWPD, FI), young key populations, international partners, and donors, whose resources and expertise have been crucial in realizing this work. Their collaboration has empowered us to build a robust initiative to serve as a cornerstone for PrEP implementation and sustainability in Cambodia.

Lastly, we appreciate and acknowledge the tireless efforts of all involved partners, whose dedication and advocacy have been pivotal in shaping the PrEP program. Your commitment to fostering an inclusive and supportive environment has laid the foundation for a successful and impactful PrEP initiative. Together, we are making strides towards ending the HIV epidemic in Cambodia.

Phnom Penh, 30./.Ap.k./2025

Director of National Center for HIV/AIDS

Dermatology and STD

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Abbreviations

AEM AIDS Epidemic Model
AHI Acute HIV Infection

AIDS Acquired Immunodeficiency Syndrome

ART Antiretroviral Therapy
ARV Antiretroviral HIV drug

CAB-LA Long-Acting injectable Cabotegravir CBO Community-Based Organization

CSC Chhouk Sar Clinic

DHIS2 District Health Information System 2

DICs Drop-in-Centers

EpiC Meeting Targets and Maintaining HIV Epidemic Control

FEW Female Entertainment Worker
FHI Family Health International

HBV Hepatitis B Virus
HCV Hepatitis C Virus

HIV Human Immunodeficiency Virus
IBBS Integrated Bio-Behavioral Studies

ISRs Injection site reactions

KHANA Khmer HIV/AIDS NGO Alliance MSM Men who have sex with men

NCHADS National Center for HIV/AIDS, Dermatology and STD

OWs Outreach Workers

PEP Post-Exposure Prophylaxis
PrEP Pre-exposure Prophylaxis
PSE Population Size Estimate
PWID People Who Inject Drug
PWUD People Who Use Drug
QA Quality Assurance

RHAC Reproductive Health Association of Cambodia

SOP Standard Operating Procedure
STIs Sexually Transmitted Infections

TB Tuberculosis

TGW Transgender Women

UNAIDS The Joint United Nations Programme on HIV/AIDS

U=U Undetectable=Untransmitable WHO World Health Organization

I. INTRODUCTION

Cambodia is committed to **achieving the UNAIDS 95-95-95** targets and eliminating new HIV infections by 2025. General population HIV prevalence among 15–49-year-olds has decreased from 1.3% in 2000 to 0.5% in 2023² because of concrete interventions and intensive efforts. Integrated Bio-Behavioral Studies (IBBS) among Female Entertainment Worker (FEW), Men who have Sex with Men/Transgender Women (MSM/TGW) and People Who Inject Drug/People Who Use Drug (PWID/PWUD) show continuing high HIV prevalence rates - 4.9% (2022) for FEW; 5.5% (2023) for MSM and 13.5% (2023) TGW; and 15.2% (2017) for PWID. Of an estimated 1,200 new HIV infections in 2023, **86%** were among KPs and their partners. Of the estimated 1,032 KP infections, 722 (70%) were among MSM, TGW and their partners and clients. In addition, among male new HIV infection, 42% of new HIV infections were among young key population members aged 15–24-years³.

Pre-exposure prophylaxis (PrEP) is the pre-emptive use of antiretroviral (ARV) drugs by people who do not have HIV to reduce the probability of HIV acquisition. The level of effectiveness provided by PrEP is strongly correlated with effective use, meaning it is important for clients to use PrEP methods as prescribed during periods when they may be at increased likelihood of acquiring HIV. PrEP is complementary to other HIV prevention strategies, such as condom and lubricant use; risk behavior change; mental health, harm reduction and treatment for drug use; Chemsex counselling; and treatment as prevention "undetectable = untransmutable" (U=U). To prevent unwanted pregnancy, STIs, and HIV infection, it is important to use PrEP in combination with condoms and lubricant.

NCHADS has placed **PrEP** as a core intervention to halt continuing KP HIV transmission and has set a goal of **64,083** new **PrEP** clients from 2024 to 2026. That would include 60% of the MSM national population size estimate (PSE) of (46,676); 70% of TG the PSE (8,849); 20% of FEW the PSE (8,883); and 20% of the PWID PSE (400). While an individual's need for PrEP may vary depending on sexual activity and relationships, NCHADS will work with providers and OWs to promote effective use at individual and population levels.

From 2019 to the end of 2024, NCHADS has established a network of 45 PrEP delivery sites in health facilities and CBO drop-in centers (DICs) in 16 of the country's highest HIV burden provinces/cities and has enrolled over 31,000 PrEP users, including 69% MSM and 14% TGW.

This Standard Operating Procedure (SOP) focuses on long-acting injectable cabotegravir (hereafter referred to as "CAB-PrEP"), one of the three PrEP methods currently recommended by WHO. Until now, only one method (oral PrEP) has been approved by MoH for use in Cambodia. CAB-PrEP and the Dapivirine Vaginal Ring (DVR PrEP) will be introduced in early2025.

As more PrEP methods become available, informed choice is a key factor to consider in client-provider interactions and decision-making, especially because clients who can choose a preferred product may be more likely to use it effectively. Beyond prevention of HIV acquisition, PrEP also has additional user-identified benefits related

to emotional, social, and physical well-being; these value-based preferences also inform method selection and can be incorporated in shared counseling that centers a client's desired experience while benefiting from PrEP.

II. SOP OBJECTIVES

The overall objective of this SOP is to provide clear guidance and clinical instructions to all CAB-PrEP service providers for appropriate CAB-PrEP implementation.

Specific objectives are:

- Provide an overview and effectiveness of CAB-PrEP
- Define the eligibility criteria, initiation flow, and management of CAB-PrEP, including starting, stopping, missing, and restarting.
- Outline the monitoring mechanism and phased introduction plan

III. OVERVIEW OF CAB-PrEP4

The World Health Organization (WHO) has recommended the use of long-acting injectable cabotegravir as pre-exposure prophylaxis (CAB-PrEP) for HIV prevention. This recommendation was made in July 2022 and aims to provide a highly effective prevention option for people at substantial risk of HIV infection.

Cabotegravir (CAB) is an integrase strand-transfer inhibitor (INSTI) used in the prevention and treatment of HIV infection. It is also used in combination with Rilpivirine for HIV treatment. WHO already reported that the modeling studies suggest an overall efficacy for CAB-PrEP of 92–95%, similar to the efficacy reported in oral PrEP trials.

Figure 1: Effectiveness of all PrEP products

	θ	0	員
	Oral PrEP	DVR	CAB-LA
Туре	Oral tablet	Flexible silicone vaginal ring	Injection
All PrEP products are effective HIV prevention options (when used as directed).	At least 90% effective (possibly as high as 94– 99%).*	At least 50% effective. ^b	At least 90% effective (possibly as high as 92–95%).16

- **a.** Effectiveness at preventing sexual acquisition of HIV. There is considerable uncertainty around the effectiveness of using PrEP to prevent parenteral HIV acquisition (see section on Special considerations below).
- **b.** Methods to determine effectiveness and control groups in clinical trial varied across PrEP products. Clinical trials of oral PrEP and the DVR compared these against a placebo, while clinical trials of CAB-LA compared this against oral PrEP. For CAB-LA, mathematical modelling estimated placebo-controlled effectiveness

CAB-PrEP is a long-acting PrEP method containing 600 mg of cabotegravir extended-release injectable suspension. It is an intramuscular injection injected **only** into the gluteal

muscle. Based on pharmacokinetics and modeling, injection in other sites, e.g., the thigh, is not recommended. The first two injections are given four weeks apart, followed by injections every eight weeks. CAB-PrEP delivers cabotegravir systemically, so the drug is absorbed throughout the body.

Evidence from two randomized controlled trials shows CAB-PrEP is highly effective at preventing sexual HIV acquisition. It may be offered as an additional prevention choice as part of a combination prevention approach. It has not yet been studied for HIV prevention for parenteral exposure, e.g., needle or injection equipment sharing. CAB-PrEP may be suitable for clients seeking less frequent dosing, less pill taking, or desire increased privacy around PrEP use.

1. Formulation of Cabotegravir (CAB)

Cabotegravir (CAB) is an injection of cabotegravir extended-release injectable suspension at a dose of 600 mg (3 mL - 200 mg cabotegravir/ml) for PrEP.

2. CAB-PrEP Regimen and Use

CAB-PrEP is a PrEP method given as a 600mg, 3ml injection into the gluteal muscle in the buttocks.

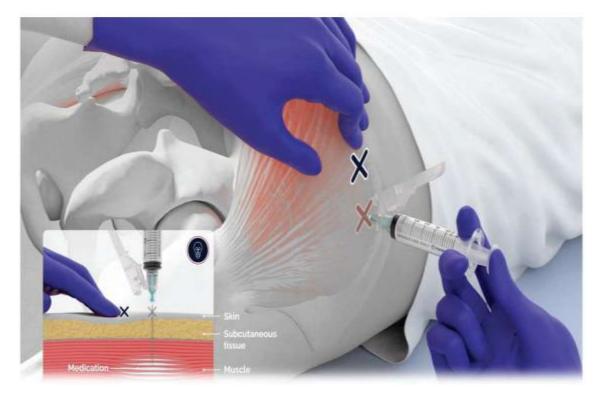
The first two injections are four weeks apart, followed by injections every eight weeks. The current evidence shows it takes about one week for drug concentrations to reach levels at which CAB-PrEP is expected to be maximally effective after initiation injection 1, so clients should be counseled on using another HIV prevention strategy during the first week. The medication will stay in the body up to a year after a client stops using CAB-PrEP because of its long half-life, but at levels that may not prevent HIV, which is termed the "pharmacologic tail."

3. Mode of administration of CAB-PrEP

- CAB-PrEP injections can be given by providers in health facilities approved by MOH/NCHADS.
- The injection requires a 23-gauge, 1.5-inch (3.8-cm) injection needle, though a client's build should be considered to select an appropriate needle length with the syringe (it should be at least 3.8cm length of needle and 5ml of syringe).
- The provider can position the client on their side, in a prone position, or in another position comfortable for the client, and should clean the recommended injection site on the gluteal muscle on the side (ventrogluteal) or back of the buttocks (dorsoglulteal) upper outer quadrant if preferred by the healthcare professional⁵.
- It is best to inject the medication as soon as possible once the injection site has been cleaned, though the medication can remain in the syringe for up to two hours.
- If that two-hour time limit is exceeded, discard the medicine, syringe, and needle; do not attempt to keep the medicine fresh by refrigerating it.
- Inject the medication slowly into the muscle at a constant rate until the syringe is empty. Once administration is completed, wait a few seconds before withdrawing the needle.

 After the injection, the provider can use dry gauze to apply gentle pressure to the puncture site and, if needed or requested by the client, apply an adhesive bandage.
 See the picture below on the way to inject the CAB-PrEP (source: RISE project).





4. CAB-PrEP Effectiveness

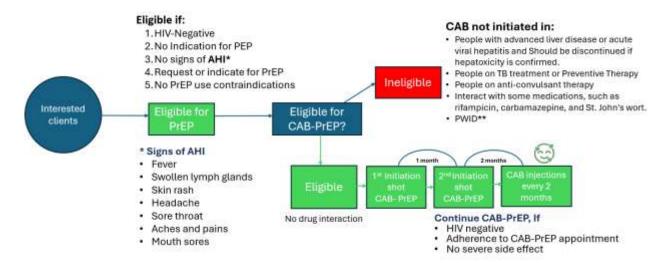
CAB-PrEP has been approved/recommended by WHO for use for people at substantial risk of HIV infection and has been shown to be highly effective in protecting MSM and transwomen⁶⁷⁸.

From HIV infection modeling studies, WHO reported an overall efficacy for CAB-PrEP of 92–95%, similar to the efficacy reported in oral PrEP trials. CAB-PrEP has been shown to improve adherence, making the effectiveness significantly higher than oral PrEP that required daily dosing or as recommended from PrEP providers. If a client is using CAB-PrEP for HIV prevention, it is important they keep up with regular appointments for injections to make sure that there is enough cabotegravir in their body to continue to prevent HIV. When a client misses a scheduled injection or discontinues CAB-PrEP, concentrations of the medication in the body slowly decline. During this pharmacokinetic "tail," CAB-PrEP becomes gradually less protective against HIV acquisition, and HIV infection and seroconversion may occur if the client continues to be exposed to HIV.

IV. CAB-PrEP IMPLEMENTATION PROCEDURE

Figure 3: Flow of CAB-PrEP initiation and follow-up

Flow of CAB-PrEP initiation and Refill



PWID** From WHO guideline 2024: PWID were not explicitly included in the clinical trials on CAB-PrEP but animal models suggest it might be effective. PWUD and PWID will benefit from CAB-LA for sexual exposure as part of comprehensive harm reduction services. Inclusion of PWID for CAB-PrEP for parenteral exposure can be considered once WHO recommends and reports its effectiveness.

The CAB-PrEP eligibility is based on PrEP eligible criteria, a further detailed inquiry about the eligibility for CAB-PrEP injection will be made based on the steps shown in Figure 3. In addition, more detail for initiation and refill will be described in below section.

1. CAB-PrEP Initiation

The clients to be introduced CAB-PrEP should meet all the eligibility criteria for PrEP following the Cambodian PrEP SOP⁹. They must be:

- HIV negative
- Not indicated for PEP
- Assessed for AHI¹⁰ of possible exposure to HIV in the previous 14 days
- Requesting PrEP
- Free from contraindications for use of their chosen PrEP method

The PrEP providers should assess the meeting criteria (at least one) for prioritized clients for CAB-PrEP include:

- Clients at high risk of transmission of HIV (inconsistence condom use or STI disease...)
- Clients engaging in Chemsex (Box 1)¹¹
- Clients reporting poor adherence to other PrEP methods
- Clients experiencing side effects on other PrEP methods

Box 1: Chemsex known as sexualized drug use, is the intentional use of psychoactive drugs to increase sexual pleasure, usually (but not only) by MSM and TG. Chemsex is associated with an increased risk of HIV, STI infections, and both mental and physical health effects.

Moreover, have to assess the potential client benefits and/or contraindications for CAB-PrEP choice, including:

- Should not be initiated in people with advanced liver disease or acute viral hepatitis and should be discontinued if hepatoxicity is confirmed.
- Should not be initiated in people on TB treatment or Preventive Therapy
- Should not be initiated in people on anti-convulsant therapy
- CAB-PrEP may interact with some medications, such as Rifampicin, Carbamazepine, and St. John's wort.

CAB-PrEP counseling includes the benefits and risks of CAB, the importance of effective use, the potential side effects and how to manage them, the need for regular HIV testing and follow-up visits, and the availability of other HIV prevention options, such as oral PrEP, DVR PrEP, and condoms. Clients should be counseled that they can switch between CAB-PrEP, DVR PrEP and oral PrEP or other prevention modalities as suits their lifestyle.

1.1 New clients for PrEP:

For new client eligible for CAB-PrEP should be counseled and recommended for other HIV prevention method during the 1st week of CAB-PrEP initiation:

- Women: required condom use
- MSM and TG with hormone use: required condom use
- MSM and TG without hormone use: required use of condom and/or event-driven oral
 PrEP (2+1+1) during the 1st week after injection

1.2 Current PrEP Clients switching to CAB-PrEP

Clients may choose to switch between PrEP products. This may happen when different products become available or as their needs or preferences change. The best strategy for switching between PrEP products, including any overlapping use of PrEP products, is not well understood. PrEP providers should use their best clinical judgment to support clients to switch between products safely. There may be simultaneous use of different PrEP products as clients switch between them, particularly to cover the start-up or tail periods and ensure no gap in protection. There is no evidence to suggest that using multiple PrEP products at the same time results in any advantage in terms of reduced risk of HIV acquisition (beyond the advantages of each PrEP product individually). It is important that PrEP providers continue to ensure that clients are aware of the range of options available; and support clients to choose the one that best fits their needs. PrEP providers should counsel clients on these PrEP options by explaining the key messages for each product so that clients can make informed decisions.

Switching from other PrEP method to CAB-PrEP should be counseled and recommended for other HIV prevention method during the 1st week of CAB-PrEP initiation:

- Oral PrEP clients
 - Women: continue oral PrEP for another 1st week after injection
 - MSM and TG with hormone use: continue oral PrEP for another 1st week after injection
 - MSM and TG without hormone use: continue oral PrEP (daily dose or even driven dose) during the 1st week after injection
- DVR PrEP clients
 - Women: continue DVR PrEP for another 1 week after injection of CAB-PrEP

<u>Note:</u> HIV testing is required before CAB-PrEP initiation following the eligibility criteria. Women of childbearing age should receive family planning services to prevent unwanted pregnancy and be advised that CAB-PrEP is safe in pregnancy and during breastfeeding¹².

2. CAB-PrEP refill schedule

- After clients receive the initiation injection #1 at initiation Visit 1, providers should schedule initiation Visit 2 for initiation injection #2 four weeks from the date of the first injection.
- After initiation of injections #1 and #2, providers should be scheduled every eight weeks for injection #3, #4......
- When scheduling initiation injections #1 and #2, providers can consider the date of initiation injection #1 as Day 0. Initiation injection #2 should be scheduled four weeks later, on Day 28. There is a +/- 7-day window for receiving initiation injection #2.
- Once initiation injections #1 and #2 have been completed, follow-up visits should be scheduled beginning eight weeks after initiation injection #2 and every eight weeks after each follow-up injection.
- There is a +/- 7-day window for receiving follow-up injections. Ideally, a client with ongoing exposures to HIV who is interested in CAB-PrEP would have the following injection schedule (free of delays or discontinuations):
 - Initiation injection #1
 - Initiation injection #2: four weeks after initiation injection 1 +/- 7 days
 - Follow-up injections: eight weeks after initiation injection #2 +/- 7 days, with continuing follow-up injections every eight weeks, continuing for as long as the client wants to remain on CAB-PrEP and has potential exposure to HIV.

Clients will be monitored during every follow-up visit for adherence of appointment and adverse reactions. Most of these reactions are mild and subside within a few days. Advise the patient to seek medical attention if they experience severe or persistent symptoms, such as signs of hypersensitivity, liver problems, or depression, with a PrEP provider at the health facility.

Table 1: Suggested procedure for CAB-PrEP follow-up

Investigations	Month one (initiation injection#2)	Month three and every two months thereafter (follow-up injection)
HIV tests include HIV/Syphilis dual test	Х	X
Provide CAB-PrEP information including side effects, and injection site reaction, and discuss with clients about CAB use	Х	Х
HBV and HCV tests		Optional annually

Lab monitoring for CAB-PrEP is outlined in Table 2. Before the first injection, the client should be screened either with a fourth-generation combined HIV antigen/antibody test or a third-generation antibody test alone. The client should also be screened for syphilis. For each subsequent injection, clients should be tested for HIV infection and syphilis using a combined HIV/syphilis test, and if negative for HIV, the patient can continue CAB. If the HIV test is positive, the patient has HIV and should be linked to HIV care and treatment.

STI including Syphilis testing is not a prerequisite for CAB-PrEP, but high STI including syphilis rates in Cambodia make it important that CAB-PrEP clients receive regular syphilis and other STI screening and treatment. Syphilis-positive clients are to be treated based on history, prior treatment, and RPR titers with one or more injections of benzathine penicillin. Access to syphilis testing or results should **not delay** the continuation of CAB-PrEP.

Table 2: Schedule of lab testing for CAB-PrEP

	Visits							
		Four weeks later	Eight weeks after	Every 8 weeks				
Test	Initiation Visit #1	Initiation Visit #2	Initiation Visit #2	thereafter				
HIV test	Υ	Υ	Υ	Υ				
Syphilis test	Υ	N	Υ	Υ				
HBV test	Y optional	N	N	Optional annually				
HCV test	Y optional	N	N	Optional annually				

Clients should be provided ongoing counseling and support to promote effective use, address any concerns or challenges, and reinforce HIV prevention messages and behaviors. Encourage the clients to use condoms, lubricants, and access other sexual and reproductive health services as needed.

3. Stopping CAB-PrEP

If a client decides to stop using CAB-PrEP, they may stop receiving injections. The amount of cabotegravir in the blood remains at effective levels for at least eight weeks after the final injection¹³. The time after 8 weeks from the last CAB-PrEP injection when cabotegravir remains in the body but at levels that may not prevent HIV is known as the "tail period" see *Figure 1*).

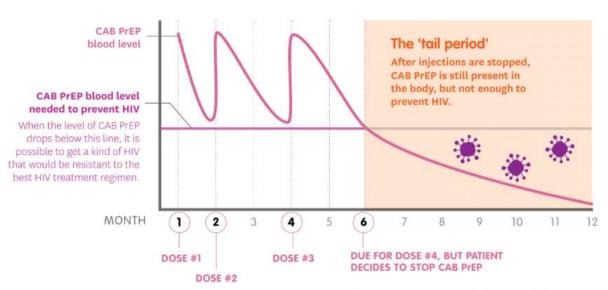


Figure 4: CAB-PrEP "tail period"

Adapted from Columbia University Irving Medical Center and the Bluprint Project

The "tail period" can last for up to a year, but this time frame varies for people based on sex assigned at birth. HPTN 077 found that CAB-PrEP had a significantly longer terminal phase half-life in participants assigned female sex at birth, as compared to those assigned male sex at birth. Data on HIV acquisition during the tail period is limited. For those who do acquire HIV during this time, delayed diagnosis of HIV may be possible ("LEVI syndrome") and could result in HIV drug resistance, meaning that medicines used to treat HIV may be less effective or not work at all. As with all PrEP methods, if a client discontinues CAB-PrEP, they should use another PrEP method or HIV prevention strategy during the tail period if exposure to HIV is possible. A client wishing to transition to oral PrEP may do so eight weeks after the last injection, pending a nonreactive HIV test.

If a client has a potential exposure to HIV during the tail period while not using an HIV prevention strategy, they should speak to a health care provider as soon as possible because post-exposure prophylaxis (PEP) may be appropriate and ideally should be started as soon as possible within 72 hours of potential exposure.

4. Missing an Injection

Adherence to the injection schedule is important for the effective use of CAB-PrEP. A client who misses an injection should contact their healthcare provider immediately to

get advice about how to continue using CAB-PrEP or to talk about switching to a different HIV prevention strategy, which may include using another PrEP method.

If the client does not want to continue CAB-PrEP, providers should support clients by counseling them on alternative PrEP methods or another HIV prevention strategy if the client is still potentially exposed to HIV while choosing to stop CAB-PrEP use. Table 3 shows potential scenarios for those clients who miss injection visits based on the time between injections.

Table 3: Injection Dosing Recommendations after Missed Injections

Time since last injection	Suggested procedure
For second "initiation" injection	on
≤2 months	Administer the CAB-PrEP injection as soon as possible and continue with injection every two months.
>2 months	Restart the client on CAB-PrEP by providing one injection followed by the next dose one moth later. Subsequent injections are two months apart.
For third and subsequent inje-	ction(s)
≤3 months	Administer the CAB-PrEP injection as soon as possible and continue with injection every two months.
>3 months	Restart the client on CAB-PrEP by providing one injection followed by the next dose one moth later. Subsequent injections are two months apart.

5. Restarting CAB-PrEP

Clients who may have been on CAB-PrEP at some point before stopping and wish to receive it again. So, they should contact their provider to discuss strategies for restarting it. For clients who have stopped it, the clinical management of restarting it may vary based on how much time has passed since their last injection. Providers can refer to the injection dosing recommendations after missed injections table outlined in Table 3 above.

6. Management of CAB clients in specific situations

A. Possible Side Effects of CAB-PrEP

The most common side effects of CAB include:

- Headache
- Nausea
- Diarrhea
- Tiredness
- Injection site reactions (ISRs)

These side effects are usually mild or moderate. Mild or moderate ISRs are more common than other potential side effects, becoming less frequent over time as clients get used to the injection. ISRs can include redness, pain, and swelling at the injection site.

PrEP providers should counsel clients on possible side effects and advise clients to contact their PrEP provider if side effects are severe or if the client becomes concerned. Over-the-counter pain medication can be advised for ISR.

B. CAB-PrEP and Other Drug Interactions

- Some anticonvulsants (carbamazepine, oxcarbazepine, phenobarbital, and phenytoin),
- Some antimycobacterial medications (rifampin, sometimes called rifampicin, and rifapentine) may interact with CAB-PrEP and reduce its efficacy by significantly decreasing concentrations of cabotegravir in blood plasma. After a client completes rifampin or rifapentine, they can be considered for CAB-PrEP two weeks after stopping rifampin or rifapentine. These drugs should not be coadministered with CAB-PrEP, and clients using them should be advised about the drug-drug interaction and may need to select a different PrEP method or HIV prevention strategy.
- There are no known interactions between CAB-PrEP and contraceptive hormones or other forms of contraception. Available evidence suggests that the use of gender-affirming hormones by transgender women does not affect drug levels of cabotegravir¹⁴.
- There are no known interactions between CAB-PrEP and recreational drugs or alcohol, but alcohol and drug use could affect the ability to attend necessary health appointments, potentially resulting in missed injections. If a client or potential client thinks that their use of alcohol or other substances is interfering or may interfere with the effective use of CAB-PrEP or even oral PrEP, the provider should engage the client to understand what support or referrals might be valuable to support effective use while also discussing additional prevention options.
- Clients on methadone maintenance therapy may require methadone dose adjustments (CAB may lower methadone levels) to maintain the effectiveness of the medication while they are using CAB-PrEP.
- Clients using high-dose aspirin in the past week, non-steroidal antiinflammatory drugs for pain or anticoagulants or other antiplatelet medications, may have a higher likelihood of bruising or bleeding at the injection site and should be made aware and counseled on mitigation strategies, if relevant.
- If CAB-PrEP client is diagnosed with tuberculosis (TB), they will need to temporarily discontinue CAB-PrEP and receive treatment with a standard rifampin-based regimen. In the interim, the client may use another PrEP method or HIV prevention strategy. If the client completes TB therapy and wishes to continue with CAB-PrEP, they should be assessed for CAB-PrEP use and can restart CAB-PrEP with initiation injection 1. CAB-PrEP can be started two weeks after a client completes TB therapy.
- Clients who receive TB preventative treatment with once-weekly rifapentineisoniazid for 12 weeks (also known as 3HP) should temporarily discontinue CAB-PrEP for the duration of their rifapentine use. They can safely use oral PrEP. Clients can restart CAB-PrEP two weeks after completing 3HP.

C. Contraindications for CAB-PrEP Use

CAB-PrEP should not be provided to people with:

- An HIV-positive test result according to the national HIV testing algorithm
- Potential exposure to HIV in the past 72 hours (these clients should be offered PEP and retested before initiating CAB-PrEP)
- Signs of Acute HIV Infection (Box 2)
 AND potential exposure within the past
 14 days
- Some co-administered anticonvulsants or anti-mycobacterials (see the CAB-PrEP and Other Drug Interactions section above)
- Unwillingness or inability to commit to effectively using CAB-PrEP, i.e., coming for repeat dosing on schedule
- Allergic or hypersensitivity reaction(s) with previous use of CAB or other integrase inhibitor medications

Box 2: Signs of AHI

- Fever
- Swollen lymph glands
- Skin rash
- Headache
- Sore throat
- Aches and pains
- Mouth sores

D. Management of HIV Seroconversion

All PrEP options are highly effective in preventing HIV transmission, but HIV seroconversion can also occur. In most cases, this is because the client has a pre-existing HIV infection that was not detected at the start of PrEP or the HIV was acquired after starting PrEP due to ineffective use. PrEP Discontinuation and initiating ART immediately after confirming positive for HIV is the most essential.

E. Management of hepatitis infection

KP members are at risk for hepatitis B and C infections, annual testing is suggested but not required for starting CAB-PrEP users. People living with Hepatitis B- may want to consider tenofovir-based PrEP, though CAB-PrEP is not contraindicated. If a client were to develop severe liver impairment unrelated to CAB-PrEP, providers and client may decide to stop CAB and switch to another HIV prevention option.

F. Management of kidney impairment

CAB-PrEP has no deleterious effects on kidney function, and regular testing is not needed unless there are other indications. If a client were to develop severe kidney impairment unrelated to CAB-PrEP, providers and client may decide to stop CAB and switch to another HIV prevention option.

v. COMMUNITY ENGAGEMENT AND DEMAND CREATION

1. Community engagement

Community involvement and demand creation – "Nothing for them without them!" As CAB-PrEP rollout begins, it is important to remember that community involvement in CAB-PrEP provision is crucial for its success. Community-based organizations play a key role in raising awareness about CAB-PrEP, providing information about its benefits

and risks, and addressing concerns and misconceptions among key populations at risk for HIV acquisition. Community members must be involved in designing and supporting the CAB-PrEP service delivery programs, ensuring they are tailored to the needs and preferences of their communities. In addition, community members can help promote effective use of CAB-PrEP by supporting and encouraging those using it. This can include reminders about upcoming injections, assistance with transportation to and from clinics, and emotional support for those experiencing side effects or other challenges.

The following are good participatory practices that apply to services for all priority and key populations:

- Recognize the leadership and resilience of priority and key populations in addressing the HIV epidemic locally and sustain their participation through adequate support for community-led organizations.
- Strengthen the capacity of community-based organizations to educate and train their communities about all PrEP and HIV prevention options.
- Promote and expand community-based services, especially services led by members of priority and key populations.
- Ensure that any PrEP option is offered as a choice, free of coercion, and with access to other prevention strategies that individuals at substantial risk may prefer.
- Increase political commitment to rights, including the rights of priority and key populations, by decriminalizing sex work and drug use.

2. Demand creation

Demand creation strategy is to increase awareness and uptake of PrEP options by promoting a comprehensive choice model, where clients can select the prevention method that best aligns with their lifestyle, preferences, and adherence capabilities. CAB-PrEP will be specifically highlighted as a viable choice for clients who may benefit from its long-acting, injectable format.

Since CAB-PrEP is a new product, campaign awareness is essential to create a successful CAB-PrEP demand generation for most at risk populations especially among young people aged 15-24. The following are the key steps for CAP-PrEP demand generation:

- Partnership and collaboration with stakeholders: Collaboration among all key stakeholders to promote CAP PrEP included NAA, Ministry of Information, Ministry of Education, Youth and Sport, Ministry of Post and Telecommunications, CBO partners and KPs representative networks to amplify outreach efforts and maximize impact.
- 2. Community campaign awareness: Involve KPs, youth network, KP representatives, healthcare providers, outreach workers to organize community events to raise awareness about CAP-PrEP, its benefits in HIV prevention and accessible healthcare services.

- 3. Online ads campaign: Develop age-appropriate messages and artworks with community's pre-test to run ads on social media and dating apps to increase awareness and uptake among young KPs.
- 4. Partnership with young KP influencers to raise awareness about CAP-PrEP, its effectiveness and how to access it on their social media platforms.
- 5. Unpaid online campaign: Develop organic contents in different formats such as static post, GIF, and video to increase awareness and maintain engagement with target audiences and stay consistent.
- 6. IEC materials: Pre-test with community on messages and design. The printed promotional materials will be distributed to support community events and distribution at KP hotspots. The online promotional materials will be published on all partners' social platforms.
- 7. Monitoring and evaluation: Pre-test and post-test with the community on the effectiveness of messages and designs.

VI. CAB-PrEP MANAGEMENT AND MONITORING

1. Role and responsibilities

The NCHADS (Technical team-AIDS Care Unit, Behavioral Change and Communication unit, Data Management Unit and Logistic Management Unit) will be responsible for M&E of the implementation and rollout of CAB-PrEP, ensuring safety, and assessing acceptability and efficacy with technical assistance from EpiC/FHI360, USAID, WHO, UNAIDS, KHANA, RHAC and CBOs:

A. NCHADS

- NCHADS Technical team including AIDS Care Unit, and Behavioral Change and Communication units: will oversee the CAB-PrEP implementation at all stages.
 The NCHADS technical team will provide training before starting CAB-PrEP implementation, on-site coaching, and technical support to PrEP sites physically and virtually.
- Data Management unit: will coordinate and monitor the timely submission of recording and reporting forms, lead a review of PrEP data monthly, produce PrEP report quarterly.
- Logistics Management unit: will coordinate and assist PrEP service in requesting drug, test kits and other necessary commodities and equipment. In the event of drug or test kit stockouts at PrEP service, LMU will assist in supplying the drug or test kits.

B. PHD and PASP/MASP

 Oversee the functioning of CAB-PrEP implementation at their hospital and province.

- Coordinate with relevant stakeholders to review and discuss CAB-PrEP in monthly and quarterly meetings and make recommendations to improve the implementation of this approach in his hospital and province.
- Integrate CAB-PrEP topics into existing technical work group meetings;
 Group of Champion meeting and provincial-technical working group meeting;
 Workshop to review the progress of 95-95-95 targets.
- Conduct routine technical monitoring and coaching to CAB-PrEP service.

C. PrEP providers

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

D. CBO and OW

CBO partners and OWs who provide physical and virtual outreach will:

- Introduce and provide information on CAB-PrEP to their clients.
- Provide counselling on CAB-PrEP benefit to clients with HIV non-reactive result and refer them to the nearest clinics for accessing the CAB-PrEP.
- Assess the risk behavior of each interested PrEP client in advance (PrEP Forms 1, 2) before referring to PrEP service.
- Assist PrEP service in follow up of PrEP LTFU or miss appointment.

E. Other HIV partners

- Advocate for supportive policies and funding to facilitate the integration of CAB -PrEP into national HIV prevention strategies. This includes working with government bodies to ensure CAB-PrEP is included in health guidelines and securing financial resources.
- Involve in the strategic planning and coordination of CAB- PrEP programs. This includes developing implementation plans, setting targets, and coordinating with various partners to ensure a cohesive approach.
- Engage the community for the acceptance and uptake of CAB-PrEP including raising awareness, educating the public, and addressing any stigma or misconceptions about CAB-PrEP.
- Training and Capacity Building: Providing training for healthcare providers on the administration of CAB, managing side effects, and counseling

- patients is a key responsibility. This ensures that healthcare workers are well-prepared to deliver CAB effectively.
- Advocate for the reliable supply of CAB drugs and support the Logistic Management Unit for forecasting, procurement, distribution, and management of CAB to prevent stockouts and ensure that it is readily available to those who need it.

2. Key indicators for monitoring

The indicators below are variables for tracking and motoring (to be disaggregated by client type, age, sex, high-risk factors- Chemsex, Male sex worker).

Table 4: Key indicators for CAB-PrEP monitoring

No	Indicators Name	Definition	Remarks
1	CAB-PrEP New	Number of individuals who were newly enrolled on CAB- PrEP in the reporting period	
2	Curr CAB-PrEP	Number of people who have ever started CAB-PrEP since the project implementation	
3	Active CAB-PrEP	Number of PrEP users who continued CAB PrEP (refill) plus those who enrolled (M0) during the reporting period	
4	Refill CAB-PrEP	Number and percentage of clients who refilled in M1, M3, M5, excluding those newly enrolled, during the reporting period	Numerator/Denominat or: # refill of M1/M0, M3/M1, M5/M3
5	Drop out CAB- PrEP	Percentage of individuals who missed their appointment greater than 2months (second injection) or 3 months (Third and other injection) and without providing any information of discontinuation	Numerator/Denominat or: # of drop out clients in each visit/# of refill in each visit Ex: 20 clients schedule for return for M1 but only 5 returns. So= (5/20)*100=25% or a 75% drop out at M1

No	Indicators Name	Definition	Remarks
6	Seroconversion CAB-PrEP	Number and percentage of CAB-PrEP clients who seroconvert and date of seroconversion	Numerator/Denominat or: # of seroconversion case/# of active case
7	Stop CAB-PrEP	Number and percentage of clients who stop CAB-PrEP by informing OWs and PrEP providers about their discontinuation- no longer at risk, switch to another option, move to another place where CAB-PrEP is unavailable.	Numerator/Denominat or: # of stop case/#of active case
8	Restart CAB-PrEP	Number of CAB-PrEP clients due to missed appointment (More 2 months for 2 nd injection and 3 months for 3 rd injection) and at risk of HIV infection	

3. Coordination

A. 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 CAB-PrEP data and take any necessary action to support site implementation. The NCHADS team (ACU, BCC, DMU, and LMU), EpiC team, and relevant partners and CBOs will be invited to the meeting.
- Quarterly meeting: to review the PrEP implementation and seek recommendations for improvement. All Prevention, and relevant Care and Treatment TWG members will be invited.

At provincial, OD, and hospital level

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

B. Technical support from the national level

- Provide technical support to PrEP sites as requested.
- Provide virtual and physical monitoring at PrEP sites.

VII. CAPACITY BUILDING

NCHADS and partners will conduct a 3-day training to build the capacity of PrEP providers (physicians, nurses, counselors, admin staff) on CAB-PrEP provision to include:

Clinical Information and Eligibility

- Lesson 1: The Basics of Cabotegravir (CAB) for HIV Prevention
- Lesson 2: Relative Advantages and Disadvantages of Long-acting Injectable Cabotegravir (CAB-PrEP)
- Lesson 3: CAB-PrEP Eligibility Screening

CAB-LA Administration

- Lesson 4: CAB-PrEP Injection Technique

Ongoing Clinical Management

- Lesson 5: Assessing and Managing Side Effects and Adverse Reactions of CAB-PrEP
- Lesson 6: Follow Up Schedule and Visit Components
- Lesson 7: Managing Missed Visits
- Lesson 8: Using Oral PrEP as a Bridge to Postpone Reinjection Appointments
- Lesson 9: Discontinuation of CAB-PrEP and Tail Phase Monitoring

Counseling Resources

- Lesson 10: Method Choice: Framing Method Benefits Relative to Client Priorities
- Lesson 11: Cross-Cutting Counseling Techniques
- Lesson 12: Translating Technical Information into Counseling Messages

Pregnancy and Breastfeeding

Lesson 13: Special Pregnancy and Breastfeeding Considerations for CAB-LA

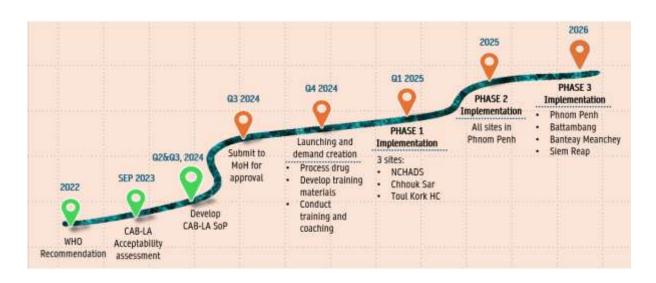
CAB-PrEP Monitoring

Lesson 14: CAB-LA data collection and monitoring

VIII. IMPLEMENTING CAB-PrEP IN CAMBODIA, 2024-2026

Preparation for implementation of CAB-PrEP began after WHO recommended CAB-PrEP in 2022. Meetings and discussions with the Core and Technical Working Group on Prevention, Care and Treatment resulted in the inclusion of CAB-PrEP in the GFATM application and regular meetings from mid-2023. The Technical Working Group, led by NCHADS, decided to develop a roadmap to guide the Task Force in preparing for the CAB SOP and other key activities to be undertaken to ensure the successful implementation of the approach (see Roadmap below).

Figure 5: Roadmap of CAB-PrEP implementation



Through GFATM, for 2024 -2026, NCHADS will provide CAB-PrEP injections to 3,568 high-risk KP (MSM, TG and FEW) as planned below.

Figure 6: CAB-PrEP VIALS and KP target for 2024-2026

		CAB-PrEPVIAL	S2024-2026		
Years/Wieght	MSM	FEW	TGW	PWID/PWUD	Total
rears/wiegrit	75%	10%	15%	0%	100%
2024	6075	810	1215	0	8100
2025	5569	743	1114	0	7425
2026	7088	945	1418	0	9450
Total	18731	2498	3746	0	24975
	KP target for	CAB-PrEP imp	plementation	2024-2026	
	MSM	FEW	TGW	PWID/PWUD	Total
Assumption	7 v	ials for CAB-L	Ausers per yea	ar	
2024	868	116	174	0	1157
2025	796	106	159	0	1061
2026	1013	135	203	0	1350
Total	2676	357	535	0	3568

According to the World Health Organization (WHO), CAB-PrEP service delivery should be in areas where people at substantial risk of HIV infection can easily access it. This includes areas with high HIV prevalence, such as urban centers and border regions, as

well as areas with high rates of key populations at risk of HIV, such as men who have sex with men, transgender people, and people who inject drugs. In addition, it recommends that CAB-PrEP information be added into existing HIV prevention programs' message, such as HIV testing and counseling, condom/lubricant distribution, and harm reduction services for people who inject drugs. The provision of service delivery should be primary health care clinics, sexual and reproductive health services, ante- and post-natal care services within the health care facilities. Many of these settings have experience in implementing other types of preventative health services relevant to the provision of CAB-PrEP.

Injectable CAB-PrEP, outside of research studies in Vietnam and Thailand, is new to the south-east region as well to providers and clients. The CAB-PrEP demand creation has been part of PrEP training and promotions for some time, but it is still new to many. Rollout will be phased to ensure safe, well-organized delivery that can be scaled based on the initial experience. CAB-PrEP introduction will begin in Phnom Penh which hosts the largest number of KPs at risk as well as the most experienced PrEP delivery sites along with CBOs that have been both promoting and now delivering PrEP since 2019. Gradual expansion to all facility sites in Phnom Penh will be followed by expansion to the most-affected provinces with large KP populations and high HIV.

1. Phase 1 – approximately three months

CAB-PrEP will be introduced in Phnom Penh initially in the NCHADS Clinic, Chhouk Sar Clinic (CSC) and the Toul Kork Health Center.

- NCHADS Clinic is a KP friendly government ART site open seven days a week where on NCHADS compound in eastern Phnom Penh. It is a hub site which oversees three CBO drop-in-center PrEP sites under MHC, AHF and FI. The three sites and NCHADS enrolled approximately 137 PrEP clients per quarter and cared for 2,136 PrEP clients at those three sites in Q2 2024.
- Chhouk Sar Clinic (CSC) is a KP-focused clinic in central Phnom Penh. CSC enrolls approximately 141 PrEP clients per quarter and has 1,766 active PrEP clients as of June 2024.
- Toul Kork Health Center is a government health center in Phnom Penh open 24 hours a day and 7 days a week and the most active PrEP site in the country. They currently enroll approximately 600 PrEP clients/quarter. It has 5,241 (51% of those ever enrolled) active PrEP users as of June 2024.

In the phase 1 implementation, NCHADS and relevant partners and CBO will:

1. NCHADS will train clinic staff responsible for PrEP delivery on CAB-PrEP eligibility and exclusion criteria; appropriate counseling about CAB-PrEP; safety and side effects; the importance of receiving injections on schedule; and the significance of the drug 'tail' after stopping. CAB-PrEP providers will be the same providers as for oral PrEP.

- 2. The three clinics will provide certified nurses with refresher training on safe gluteal injection practices, and NCHADS will monitor safe injection practices.
- 3. The three clinics will prepare spaces where gluteal injections can be given in privacy with the patient lying in the prone position.
- 4. Data will be collected using the existing DHIS2-based, real-time PrEP data collection tool. With client consent, automated reminders for the next injections and HIV/syphilis testing will be sent using the PrEP data collection tool.
- 5. Outreach staff will be trained to provide information on and eligibility for CAB-PrEP and can refer clients to the three sites. Similarly, other facility-based and CBO DIC PrEP sites will be trained and can inform and refer clients wishing to start CAB-PrEP or switch from oral to injectable. Clinical site and outreach training should go hand in hand so that each cadre sees their respective roles in encouraging uptake and successful use.
- 6. Clinics will work with NCHADS and Central Medical Store to assure an adequate supply of consumables gloves, alcohol wipes, needles and syringes and sharps disposal containers.
- 7. CAB-PrEP clients will be monitored at each visit for side-effects or other issues. They will be tested for HIV using a combined 3rd generation HIV antibody and syphilis test at each visit.
- 8. Possible issues with screening and counseling tools, data collection, the reminder system and any other problems will be addressed in the first three months of implementation and coordination meeting will be convened monthly to review and monitor the implementation.

2. Phase 2 – approximately three months

- After a brief review and assessment at the end of three months of implementation,
 a determination on whether to move to the next phase of providing CAB-PrEP at
 all health facilities with PrEP services to deliver CAB-PrEP in Phnom Penh.
- Health-facility PrEP staff would receive training like that provided to NCHADS and Chhouk Sar and CAB-PrEP rolled out in those sites.
- CBOs will be apprised of the expansion of CAB-PrEP sites in Phnom Penh. CAB-PrEP availability will be disseminated via dating apps and social media. QR codes used to make appointments for CAB-PrEP using the TohTest online reservation app will appear in dating app ads, Facebook, Instagram and TikTok.
- Like Phase 1, any issues with screening and counseling tools, data collection, and the reminder system and other problems will be immediately addressed.

Table 5: Modeling possible CAB-PrEP enrollment and drug supply*

CAB-PrEP Targets												
Number of sites	1	3	3	5	5	5	11	11	11	11	11	11
Month	1	2	3	4	5	6	7	8	9	10	11	12
New enrollments	50	100	150	300	300	300	300	350				
Follow-on injections		50	100	150	300	300	300	300	300	300	300	300
				50	100	150	300	300	300	300	300	300
						50	100	50	100	50	100	50
								150	350	150	350	150
Drop-outs @ 5%			8	13	25	35	40	50	58	53	40	53
Injections/month	50	150	243	438	575	565	700	800	1,050	800	1,050	800

^{* 1,850} clients will be enrolled, and 7,222 injections would be given under this scenario by month 12

3. Phase 3 – approximately three months

- Like Phase 2, after a brief review and assessment at the end of three months of expanded implementation and depending on drug availability, a determination whether to move to the next phase of allowing CAB-PrEP at all health-facilities with PrEP services to deliver CAB-PrEP in Siem Reap, Battambang, Banteay Meanchey, Sihanoukville and Kandal Provinces.
- Health-facility PrEP staff would receive training like that provided to NCHADS and Chhouk Sar and CAB-PrEP rolled out in those sites.
- CBOs will be apprised of the expansion of CAB-PrEP sites in the new provinces.
 CAB-PrEP availability will be disseminated via dating apps and social media. QR codes used to make appointments for CAB-PrEP using the "TohTest" online reservation app will appear in dating app ads, Facebook, Instagram and TikTok.
- CBOs would be trained in assessments and counseling on CAB-PrEP and could refer clients to facility PrEP sites after having HUB approval simply for the CAB-PrEP injection. The client would return to CBO DIC for follow-up and referral back to the facility for injection, again with HUB approval.
- NCHADS Behavior Change Communication will work with CBOs, social media, and dating apps to bring demand creation for PrEP including CAB-PrEP to scale nationally. Like Phase 2, any issues with screening and counseling tools, data collection, and the reminder system and other problems will be immediately addressed.

o 3,325 - 1st order arriving February 2025 will last 6 months

 ^{4,175 - 2&}lt;sup>nd</sup> order arriving by June 2025 will allow adding 650 in months 7 and 8. All cabotegravir supplies exhausted at month 13 if no third order.

IX. References

- Joint Press Release- NAA, NCHADS and UNAIDS on HIV/AIDS response in Cambodia, 2023: https://cambodia.un.org/en/226998-despite-impressive-treatment-results-cambodia%E2%80%99s-hiv-response-must-address-inequalities
- 2 Cambodia HIV estimates based on AEM and spectrum modelling estimates in 2024
- 3 Cambodia HIV estimates based on AEM and spectrum modelling estimates in 2024
- 4 WHO guidelines advise countries to deliver long acting cabotegravir: https://www.who.int/publications-detail-redirect/9789240054097.
- 5 WHO recommends long-acting cabotegravir for HIV prevention: https://www.who.int/news/item/28-07-2022-who-recommends-long-acting-cabotegravir-for-hiv-prevention.
- 7 The new England journal of medicine: Cabotegravir for HIV Prevention in Cisgender Men and Transgender Women, https://www.nejm.org/doi/pdf/10.1056/NEJMoa2101016.
- S Delany-Moretlwe et al. Initial evaluation of injectable cabotegravir safety during pregnancy in the HPTN 084 open-label extension. International AIDS Conference. Thursday, July 25, 2024
- 9 Standard Operating Procedure (SOP) For HIV Pre-Exposure Prophylaxis (PrEP) Implementation in Cambodia, January 2022.
- 10 WHO implementation tool for pre-exposure prophylaxis (PrEP) of HIV infection (Provider module for oral and long-acting PrEP), 2024.
- An exploratory study report on Chemsex, HIV risk behaviors and access to services among MSM and TG in Phnom Penh, Cambodia, NCHADS, December 2022.
- 12 AIDS 2024: CAB-LA Pregnancy Safety Data from HPTN 084, July 26, 2026: AIDS 2024: CAB-LA Pregnancy Safety Data from HPTN 084 | The HIV Prevention Trials Network.
- 13 Grinsztejn B, Hanscom B, Wang Z, Donnell D, Richardson P, Sullivan P, et al. Transgender women (TGW) in HPTN 083: an evaluation of safety, efficacy, and gender affirming hormonal therapy interactions with long acting cabotegravir (CAB-PREP) [abstract]. 24th International AIDS Conference; 2022 Jul 29 – Aug 2; Montreal, Canada. Available from: https://programme.aids2022.org/Abstract/ Abstract/?abstractid=12707.