Ministry of Health and Child Care

Implementation Guide for Clinicians on the Delivery of Long-Acting Injectable Pre-Exposure Prophylaxis (PrEP) in Zimbabwe

May 2026

FOREWORD

Zimbabwe remains firmly committed to ending AIDS as a public health threat through the implementation of evidence-based, person-centered, and innovative HIV prevention, care, and treatment strategies. The introduction of long-acting injectable pre-exposure prophylaxis (LA-PrEP), including Cabotegravir and Lenacapavir, represents a significant milestone in expanding prevention choice and improving access to effective biomedical HIV prevention interventions.

The Implementation Guide for Clinicians on the Delivery of Long-Acting Injectable PrEP in Zimbabwe provides healthcare workers and program managers with standardized, evidence-informed guidance for the safe, effective, and equitable introduction and scale-up of these new prevention options. By expanding the range of available PrEP methods, Zimbabwe aims to increase uptake, adherence, and sustained use among populations at substantial risk of HIV acquisition.

The Ministry of Health and Child Care recognizes that Lenacapavir does not replace other existing prevention options. It is part of combination prevention which remains central to achieving national HIV targets. The successful implementation of these guidelines will require continued collaboration among government, development partners, civil society, communities, and healthcare providers to ensure that services are accessible, acceptable, and responsive to client needs.

I urge all stakeholders involved in HIV prevention programming to utilize this guide to strengthen service delivery and contribute meaningfully to reducing new HIV infections across the country. The Ministry appreciates the technical and financial support of partners who have contributed to the development of this document and to the broader national HIV response.

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List of Acronyms

ADR	Adverse Drug Reaction
ART	Antiretroviral therapy
AGYW	Adolescent Girls and Young Women
AHI	Acute HIV infection
ARV	Antiretroviral
CAB-LA	Long-acting injectable Cabotegravir
DALY	Disability-adjusted life-year
DVR	Dapivirine vaginal ring
ED-PrEP	Event-driven pre-exposure prophylaxis
GBV	Gender-based violence
GRADE	Grading of Recommendations, Assessment, Development and Evaluation
HBV	Hepatitis B virus
HCV	Hepatitis C virus
HIVST	HIV self-testing
ISR	Injection site reaction
LA-PrEP	Long-acting Pre-exposure prophylaxis
LEN PrEP	Lenacapavir for Pre-Exposure prophylaxis
MoHCC	Ministry of Health and Child Care
LEN	Lenacapavir
MSM	Men who have sex with men
NAT	Nucleic acid test
PEP	Post-exposure prophylaxis
PICO	Population, intervention, comparator, outcome
PPPY	Per-person per-year
PrEP	Pre-exposure prophylaxis

RDT	Rapid diagnostic test
STI	Sexually transmitted infection
SOC	Standard of care
TAF/FTC	Tenofovir alafenamide/emtricitabine
TDF	Tenofovir disoproxil fumarate
TB	Tuberculosis
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organization

Definition of key terms

Long-acting Lenacapavir (LEN)	LEN is an HIV-1 capsid inhibitor. It is given to people who do not have HIV, at a dose of 927 mg (2 x 1.5mL injections), subcutaneously, every 26 weeks for the prevention of HIV acquisition. People starting LEN also take an oral loading dose of 600 mg (2 x 300 mg tablets) over two consecutive days, beginning on the day of the first injection.
High risk populations	High risk populations are defined as groups at increased risk of HIV, viral hepatitis or sexually transmitted infections (STIs), irrespective of the epidemic type or local context. Also, they often experience legal and social issues due to stigma and discrimination that increase their vulnerability to HIV.
Key Populations	Populations at higher risk of HIV infection and/or transmission, including: 1) sex workers, 2) men who have sex with men, 3) people who use injectable drugs, 4) people in prisons and other closed settings, and 5) trans and gender-diverse people.
Risk of HIV acquisition	Risk of HIV acquisition is the likelihood that an individual may become infected with HIV. Factors influencing risk include: HIV incidence in a population; HIV incidence in a particular geography, personal behaviors, and behaviors of their partners.
Long-acting injectable cabotegravir (CAB-LA)	CAB-LA is an integrase strand-transfer inhibitor. It is given to people who do not have HIV infection, at a dose of 600 mg intramuscularly, 4 weeks apart for the first two injections and every 8 weeks thereafter, for the prevention of HIV acquisition.
Long-acting injectable PrEP	The use of injectable antiretrovirals that provide extended protection for the prevention of HIV acquisition among people who are HIV-negative.

BACKGROUND

Zimbabwe has made significant progress towards HIV epidemic control, with sustained reduction in HIV incidence and AIDS related deaths. Despite these gains, the number of new HIV infections in the country remains unacceptably high, particularly among populations at increased risk of HIV infection such as adolescent girls and young women (AGYW), female sex workers, pregnant and breastfeeding women. Accelerating combination HIV prevention therefore remains essential to achieving national and global HIV targets.

Pre-exposure prophylaxis (PrEP), the pre-emptive use of antiretroviral (ARV) medicines by HIV-negative individuals to prevent HIV acquisition before potential exposure, is a cornerstone of the national HIV prevention strategy. The ***Guidelines for HIV Prevention, Testing and Treatment of HIV in Zimbabwe (2022)*** recommend PrEP as an additional prevention choice for all individuals who request PrEP and made available to those who are at substantial risk of acquiring HIV. The effectiveness of PrEP is strongly correlated with correct and consistent use during periods of elevated risk. Rapid expansion of access to PrEP, alongside support for effective use, has the potential to substantially reduce new HIV infections, especially among high-risk populations. Currently, the guidelines include oral PrEP (daily and event driven), the Dapivirine Vaginal Ring and Cabotegravir Long-Acting injection (CAB-LA). Following the updated recommendations from the World Health Organization (WHO) released in 2025, Zimbabwe approved and registered Lenacapavir (LEN) as an additional long-acting injectable PrEP method. As more PrEP methods become available, informed client choice becomes central to decision making and effective service delivery. This is more so because clients who can choose a preferred product may be more likely to use it effectively as part of differentiated and simplified delivery models for HIV prevention. Providing additional choices for PrEP and supporting clients to select their preferred methods offers the potential to increase uptake and effective use of PrEP.

This **Implementation *Guide for the Delivery of Long-Acting Injectables for Pre-Exposure Prophylaxis in Zimbabwe*** complements the broader national HIV prevention, care and treatment guidelines and provides focused guidance on the implementation of long-acting injectable PrEP methods (LEN and CAB-LA), within the country's public and private sectors. To implement these guidelines, it is important to address critical aspects of HIV prevention services, including integration with other services. This includes improved and simplified HIV testing as a gateway to prevention and treatment services, differentiated, simplified service delivery models and emphasis on combination HIV prevention in the country, encompassing correct and consistent condom use, lubricants, male circumcision, harm reduction and treatment services for people who use drugs, as well as sustained antiretroviral therapy for people living with HIV. A public health approach to PrEP service delivery will be essential to expanding uptake, improving effective use, and ultimately reducing HIV incidence in Zimbabwe.

Objectives of the guidelines

These guidelines are intended to provide evidence-based clinical recommendations for Long-acting injectable PrEP (both Lenacapavir and Cabotegravir) for HIV prevention. Its primary purpose is to ensure the safe, efficacious and consistent delivery of these novel biomedical HIV prevention interventions by providing standardized step by step guidance for all clinical and operational activities. These guidelines describe the procedures for identifying and assessing clients that will benefit from PrEP, as well as their initiation, monitoring, and follow-up. Additionally, they seek to support Zimbabwe's achievement of national targets of reducing the numbers of new HIV infections.

Target audience

This Implementation Guide is intended for use by health care workers involved in the delivery of long-acting injectable PrEP in Zimbabwe including, but not limited to doctors, nurses, counsellors, pharmacy, laboratory personnel and other relevant stakeholders involved in PrEP implementation. This guide should also be used by the program managers and coordinators in planning and designing service delivery systems.

How to use the guide

This Implementation Guide should be used as part of the *Guidelines for the Prevention, Treatment and Care of HIV in Zimbabwe*. The long-acting injectable PrEP methods are an additional HIV prevention option that **should be delivered in combination with existing and known effective structural, behavioral, and biomedical prevention methods.**

Overview of Long-Acting Injectables for Pre-Exposure Prophylaxis (LEN and CAB)

What is Cabotegravir?

Cabotegravir (CAB-LA) is a long-acting injectable antiretroviral medicine used for pre-exposure prophylaxis (PrEP). It belongs to a class of ARVs called integrase strand transfer inhibitors (like Dolutegravir) that reduce the ability of HIV to replicate itself inside a healthy cell. The first two initiation injections are given 4 weeks apart, followed by injections every 8 weeks thereafter. CAB- LA may be suitable for clients seeking less frequent dosing or increased privacy around PrEP use. It is highly effective at preventing sexual HIV acquisition and provides a discreet, less frequent dosing option for individuals at substantial risk.

What is Lenacapavir?

Lenacapavir (LEN) is a long-acting injectable antiretroviral medicine used for PrEP. It is a capsid inhibitor that disrupts the HIV life cycle by damaging the virus' protein shell. The first two LEN initiation injections are administered, accompanied by two oral LEN pills taken daily on day 1 and day 2. It is highly effective at preventing sexual HIV acquisition and provides a discreet, less frequent dosing option for individuals at substantial risk.

Efficacy

Evidence on the efficacy of both CAB and LEN for HIV prevention was collected in a systematic review of peer-reviewed scientific reports, including published results papers, conference presentations, study protocols, clinical trial registries and other supporting documentation. The largest of these trials for Lenacapavir, PURPOSE 1 and PURPOSE 2, were multi-centered, double-blind, randomized, active- controlled trials which assessed the efficacy of LEN compared with a background HIV incidence cohort as well as with daily oral PrEP (tenofovir disoproxil fumarate/emtricitabine (TDF/FTC)). When compared with background HIV incidence, **LEN showed 100% efficacy in PURPOSE 1**) and **96% efficacy in PURPOSE 2** Trials. When compared with daily oral PrEP with TDF/FTC, LEN showed 100% efficacy in PURPOSE 1 and 89% efficacy in PURPOSE 2. Evidence from two randomized controlled trials (HPTN 083 and 084) showed CAB-LA is highly effective (more effective than oral PrEP) at preventing sexual HIV acquisition and may be offered as an additional prevention choice as part of combination prevention approaches.

Safety

The PURPOSE 1 and 2 trials found little to no differences in rates of adverse events (excluding injection site reactions (ISRs) between those receiving LEN and those receiving TDF/FTC. Injection site reactions (nodules, pain and erythema) were common but typically mild, decreasing in frequency overtime without leading to high discontinuation rates.

Pregnancy and Birth-related Outcomes

Current evidence indicates that all HIV prevention methods-including Lenacapavir (LEN), Cabotegravir (CAB-LA), and oral PrEP are safe for use before, during, and after pregnancy.

HIV Testing for Long-Acting Injectable PrEP

In Zimbabwe, HIV testing for Long-Acting PrEP will follow the National HIV Testing Algorithm for HIV Diagnosis in adults. Currently guidance does not support for initiation or continuation of long-acting injectable PrEP using HIV self-tests. PrEP initiation or resupply should be preceded by an negative HIV test. HIV testing should be done at all PrEP initiations or reinjections

Indications and Contraindications for Long-Acting Injectable PrEP

PrEP should be accessible to all individuals who are confirmed HIV NEGATIVE and are at substantial risk of HIV acquisition as determined by an individual risk assessment.

Indications for long-acting injectable PrEP based on the client's history over the past 6 months:

- HIV negative and has a sexual partner with HIV who has not been on effective therapy for the preceding 6 months **OR**
- HIV negative, sexually active AND has any of the following:
  - Vaginal or anal intercourse without condoms OR
  - A sexual partner of unknown HIV status OR
  - A sexual partner with one or more HIV risk factors, OR
  - A history of an STI by lab testing, self-report, or syndromic treatment of STIs OR
  - Any use of post-exposure prophylaxis (PEP), OR
  - Any use of emergency contraception OR
  - Anyone requesting PrEP.
    Refer to the PrEP Screening Tool

Contraindications for long-acting injectable PrEP

- HIV-positive test results according to the national HIV testing algorithm
- Unknown or inconclusive HIV status
- High indication for post-exposure prophylaxis (PEP) based upon possible HIV exposure in the past 72 hours
- High suspicion of acute HIV infection (AHI) – If you have a high suspicion of AHI after assessing signs/symptoms and exposure history, advise the client to return in 1 month for HIV retesting.
- Weight less than 35kg

- Use of anti-TB medicines – Rifabutin, Rifapentine, and Rifampicin
- Use of anticonvulsants – Phenytoin, Phenobarbitone, and Carbamazepine

Product-specific contraindications and considerations

CAB-LA	LEN
• Previous allergic reaction to INSTI drugs e.g. Dolutegravir • Chronic liver disease and acute hepatitis	• Previous allergic reaction to capsid inhibitors • Use of ketamine – *Lenacapavir is a moderate inhibitor of CYP3A4 and could increase ketamine concentrations.* ***Use with caution.*** • Use of sex enhancers – *Sildenafil, Avanafil, Tadalafil, and Vardenafil are metabolized by CYP3A4, and Lenacapavir being a moderate inhibitor of CYP3A4 has the potential to increase exposure to these sex enhancers and thereby increase the risk of adverse effects, including hypotension, syncope, visual changes, and prolonged erection (priapism).* ***Use with caution.***

Long-Acting Injectable PrEP Eligibility Assessment.

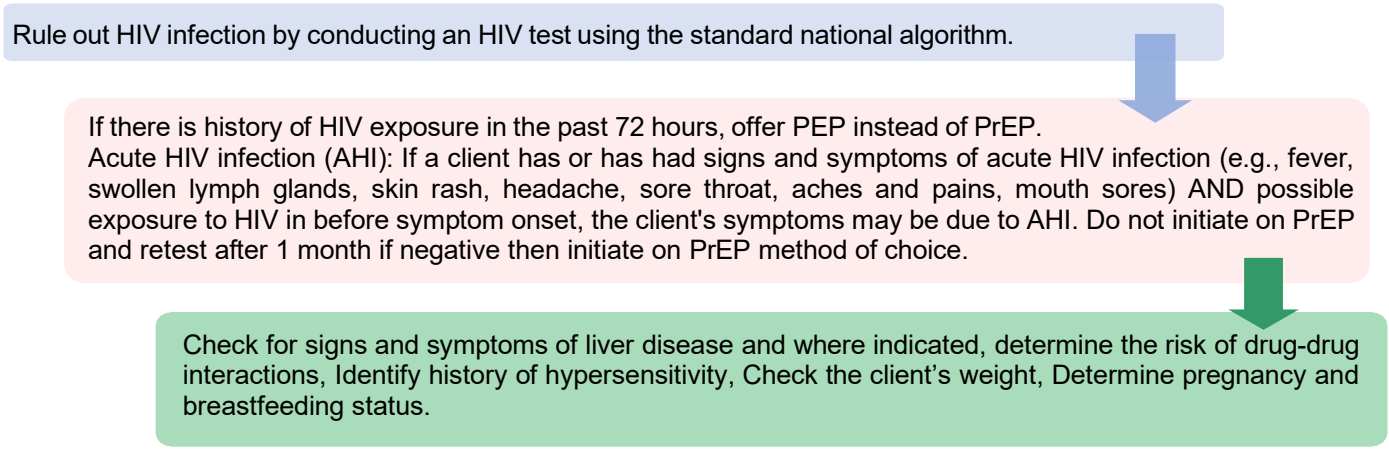


Figure 1. Eligibility Assessment for Injectable PrEP

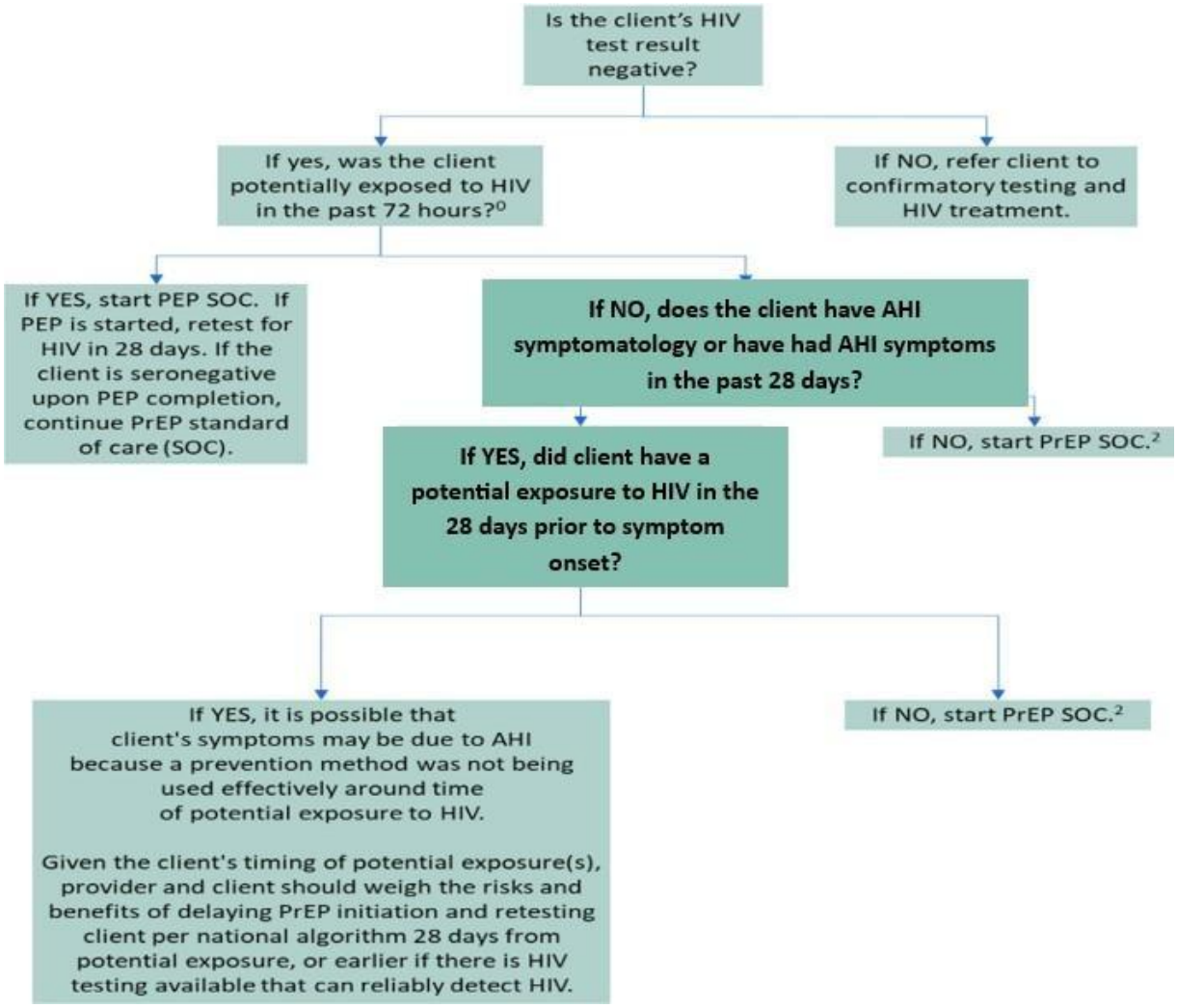


Figure 2. Flowchart for Eligibility Assessment of Clients for Injectable PrEP

Initiation Visit for Long-Acting Injectable PrEP

Choice counselling

PrEP counseling should be based on the following principles:

- Clients should be counselled and supported to make informed PrEP choices, which means individuals have the autonomy, knowledge, and freedom from coercion at any given time to select the best HIV prevention method for them among options available in a specific market.
- The provider and the client should explore the client's knowledge and needs in relation to the available options.

- Be client-driven and person-centered, based on their needs, resources, and preferences.
- Be based on a foundation of respect including an open, honest relationship between provider and client.
- Recognize that behavior change can take time.
- Talk about all the PrEP products, how each method works, potential side effects, frequency of administration.
- Opportunity to ask questions and respond.
- Facilitate informed choice.
- Validate and normalize client concerns, seek to affirm, and encourage client efforts, and not be prescriptive or judgmental.
- Focus on identifying small wins and achievable next steps in reducing potential exposures and/or making effective use easier.
- Include contingency planning when common barriers are encountered.
- Promote choice among available options based on client preferences and acceptability.

Additional Components of Initiation Visit. Assessments.

At PrEP initiation and on each follow-up visit, clients should be assessed for **effective PrEP use** and provided with support to identify and address challenges with effective PrEP use. This must be done in an open, nonjudgmental manner. Additional assessment components at each follow-up visit include:

Table 1. PrEP Assessment Components During PrEP Initiation and Follow-up Visits

Mandatory (Must be done)	Required (Need to be done)
• Eligibility assessment - Valid HIV Negative test • Exclude possible exposure to HIV in the last 72hrs • Rule out Acute HIV Infection (AHI) • Screening and treatment of STIs.	• Provision of GBV services, including IPV screening and management. • Assessment for mental health and substance abuse disorders and provision of supportive services or referrals as needed. • Screening for and treatment of NCDs (non-communicable diseases). • Counselling and provision of family planning services. **If Clinically Indicated** • Hepatitis B and C testing. • Liver function tests.

Dosing and Administration

1. CABOTEGRAVIR

Dosing and Formulation for Long-Acting CABOTEGRAVIR

a. CAB-LA Dosing and Formulation

- CAB-LA is an injection of Cabotegravir extended-release injectable suspension at a dose of 600 mg/ 3ml.
- CAB-LA is administered as a ventrogluteal intramuscular injection.
- Injections are administered one month apart for the first and second injections (INITIATION INJECTIONS 1 and 2) and every two months thereafter (FOLLOW-UP INJECTIONS) for as long as the client wants to remain on CAB-LA.
- However, after 2 months concentrations in the body fall below the protective threshold, although they remain detectable and can contribute to HIV drug resistance if HIV acquisition occurs.

b. Cabotegravir Drug-Drug Interactions

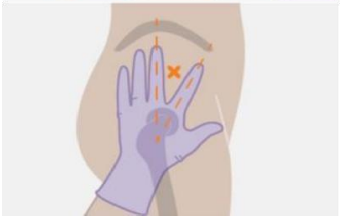
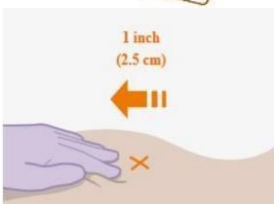
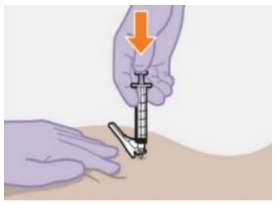
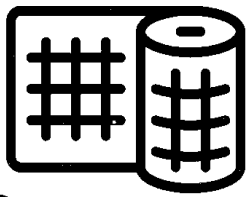
The table below summarizes key drug-drug interactions for Cabotegravir (CAB-LA).

Table 2. Important drug-drug interactions for Cabotegravir (CAB-LA).

Medicines	Recommendations	Comments
Rifampicin, Rifapentine	**Do not co-administer with CAB-LA**	Rifampicin and Rifapentine increase the metabolism of CAB-LA and may result in significantly reduced exposure to protective levels of CAB-LA. Clients using these may need to select a different PrEP method or HIV prevention strategy
Rifabutin	Co-administer with caution	Rifabutin moderately increases the metabolism of CAB-LA and may result in reduced exposure to protective levels of CAB-LA.
Carbamazepine, Oxcarbazepine, Phenytoin, Phenobarbital	**Do not co-administer with CAB-LA**	These anticonvulsants may result in significantly reduced exposure to protective levels of CAB -LA *(weak strength of evidence)*. Clients using these may need to select a different PrEP method or HIV prevention strategy
Hormonal contraceptives	Continue	No significant effect
Feminizing hormones (Spironolactone, estrogens)		Available evidence suggests that the use of gender-affirming hormones by transgender women does not affect drug levels of Cabotegravir

Preparation and administration of injectable Cabotegravir

Generally, CAB-LA should be administered as a deep ventrogluteal intramuscular injection using a 23-gauge needle. However, a 21-gauge needle may be used if clients' body weight considerations make it necessary to use one. The ventrogluteal site is located on the side of the hip, near the greater trochanter of the femur. This site is preferred over other sites because it has less fat and nerve endings and is less likely to cause pain, bleeding, or injection site reactions. This site also has a large muscle mass that can accommodate the volume of CAB-LA injection. It is best to inject the medication as soon as CAB-LA has been drawn and the injection site has been cleaned. If 2 hours passes before injecting the medication, discard the medicine, syringe, and needle; do not attempt to keep the medicine fresh by refrigerating.

a. Inspect vials containing Cabotegravir. - Check that the expiration date has not passed. Inspect the vials immediately. If you can see foreign matter, do not use the product. - Do not use if the expiration date has passed. - **Note**: The Cabotegravir vial has a brown tint to the glass.	
b. Shake the vial vigorously. - Hold the vial firmly, and vigorously shake for a full 10 seconds. Invert the vial and confirm the suspension is uniform. It should look uniform. If the suspension is not uniform, shake the vial again. - It is also normal to see small air bubbles.	
c. Position the client on their side (lateral position), in a prone position, or another position comfortable for the client. Identify the injection site – upper outer quadrant of the buttock and mark it.	
d. Prepare the injection site by cleaning it with an alcohol swab and letting it dry.	
e. Use the z-track injection technique to minimize medicine leakage from the injection site. - Firmly drag the skin covering the injection site, displacing it by about an inch (2.5 cm). - Keep it held in this position for the injection.	
f. Insert the needle at a 90-degree angle. Push the plunger slowly until all the liquid is injected. Withdraw the needle and apply gentle pressure to the injection site with a cotton ball or gauze. Do not rub or massage the injection site.	
g. 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.	
h. Dispose of the used syringe and needle in a sharp's container. Do not reuse or recycle.	

Key CAB-LA Injection Procedure Considerations.

Preventive Action (Z-Track):

- Use the Z-track technique (pulling skin to one side) to seal the medication in the muscle. After the plunger is fully depressed, hold the needle in place for about 5 seconds to allow the suspension to disperse.
- Release Skin: Withdraw the needle before releasing the skin traction.
- Apply Pressure: Apply gentle pressure with sterile gauze immediately.
- Do Not Rub: Strictly avoid rubbing or massaging the area. Rubbing can force the suspension into subcutaneous tissue, causing painful nodules or abscesses.
- Cover the Site: Apply a bandage if necessary.

Mitigating injection site pain

- In previous studies and implementation experience, injection site reactions (ISRs) decreased with subsequent injections.
- Apply ice pack to planned injection sites for 10 minutes prior to injection
- Administer the injection intramuscularly at 90°
- Continue to apply ice packs post-injection
- Apply topical lidocaine or prilocaine cream to the injection site 30 minutes prior to injection
- Oral analgesics (acetaminophen, NSAIDs) before or after injection

Additional resources

Please watch the video below for illustrations on CAB-LA injection technique:
https://rise.articulate.com/share/DIh-FSbYjwiNtUChNBYF7MebZByRDh8u#/lessons/x8EL4kMAt6bMBUKqvHijNIADDYPNucDP

Follow up visits for CAB-LA Long-Acting Injectable PrEP

The initiation injection of CAB-LA is given as 2 injections of Cabotegravir 600mg/3ml given a month apart (Injection 1 and 2). After initiation injections 1 and 2, visits for follow-up injections should be scheduled every 2 months (8 weeks). Follow-up visits have four essential components: 1) HIV testing and counseling, 2) Assessments, 3) PrEP counseling, and 4) PrEP prescription refill.

Managing Missed CAB-LA Injections

Adherence to the injection schedule is important for effective CAB-LA use. If a client misses their scheduled injection the healthcare provider should immediately take steps to contact the client, re-assess the client for PrEP eligibility and if eligible, offer CAB-LA **depending on the injection type missed (initiation or follow-up) and duration since last injection as** follows:

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

CAB-LA: Long-acting injectable cabotegravir.

Figure 3. Management of Clients with Missed CAB-LA Injections

Bridging doses of CAB-LA Long-Acting Injectable PrEP using oral PrEP (Truvada)

If a client is not available to return on time for their scheduled CAB-LA Long-Acting injectable PrEP, they may postpone the FOLLOW-UP INJECTION visit by starting oral PrEP (Tenofovir-Emtricitabine (Truvada), if unavailable Tenofovir-Lamivudine) at the time they were **due for their next injection.**

Management should include:

- Decision support to postpone the next FOLLOW-UP INJECTION.
- Determining the amount of oral PrEP to prescribe: the amount of bridging oral PrEP is calculated by subtracting 60 days from the number of days between "today's injection date and the client's first available return date in the future."
- Guidance on when to start the oral PrEP.
- Scheduling the appropriate future return visit to continue Long-Acting Injectable PrEP.
- Bridging with oral PrEP must not exceed 90 days for CAB-LA

2. LENACAPAVIR

a. Dosing and Formulation for Long-Acting LENACAPAVIR

- The dosing strategy for LEN involves a mandatory oral loading dose of two 300 mg LEN tablets given on each of days 1 and 2, beginning on the day of the first injection (total oral loading dose of 1200 mg).
- The injectable component is delivered **subcutaneously as two 1.5 mL injections** (total injectable dose of 927 mg).
- Follow-up injections are administered every 26 weeks. The window for follow-up injections is from 2 weeks before to 2 weeks after the next scheduled appointment.
- Oral tablets are only given at initiation and not needed for follow up injections provided users return on time for follow up injections (26 weeks) +/- 14 days.
- Individuals who return after 28 weeks and wish to continue LEN will need to receive the same reloading dose with the oral tablets over two days.
- LEN administered subcutaneously in a dose of 927 mg may remain in the body for at least 12 months after the last injection (known as a pharmacokinetic tail).
- However, after 28 weeks months LEN concentrations in the body fall below the protective threshold, although they remain detectable and can contribute to HIV drug resistance if HIV acquisition occurs.

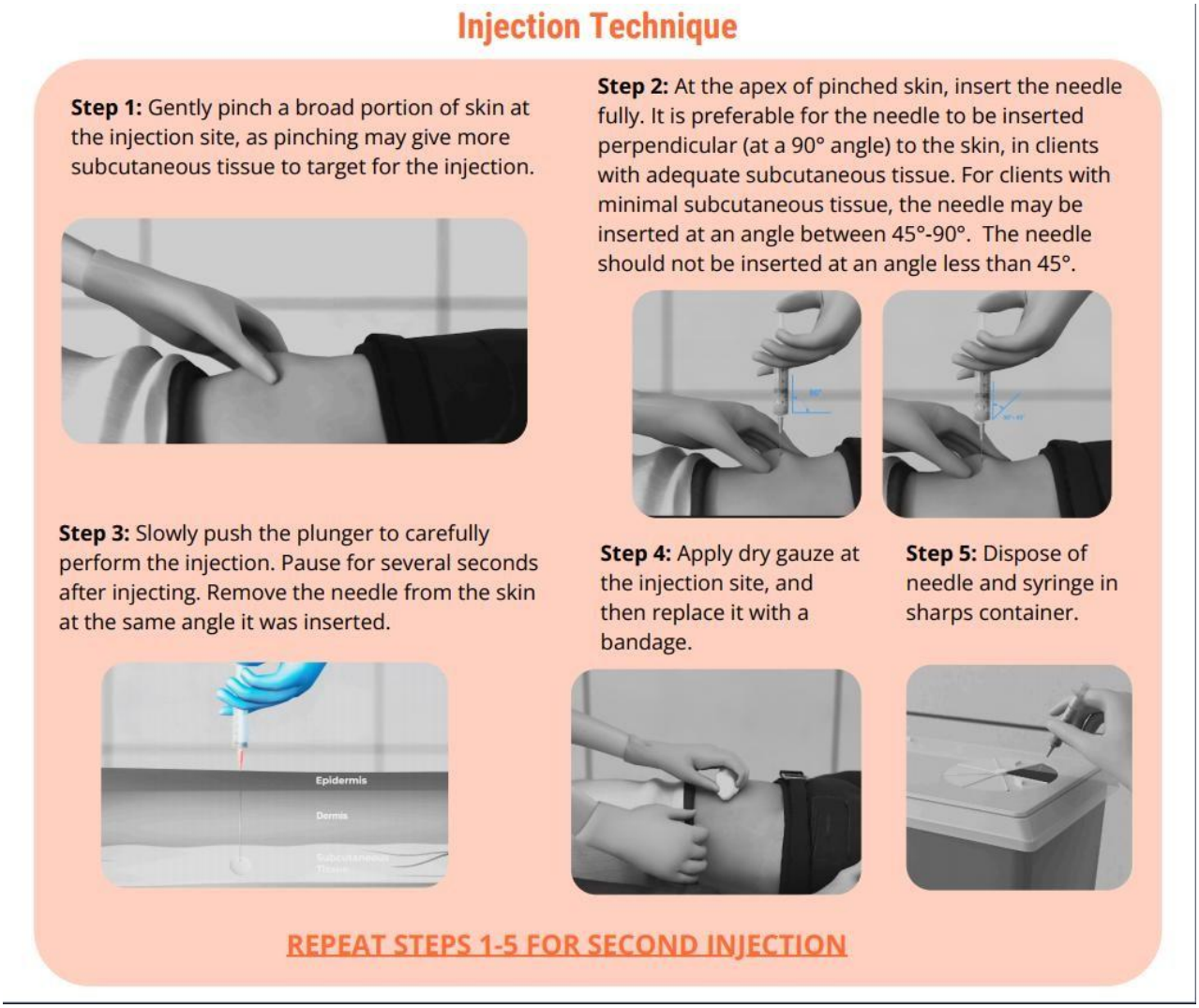
b. Lenacapavir Drug- Drug Interactions

The table below summarizes key drug-drug interactions for Lenacapavir (LEN).

Table 3. Important drug-drug interactions for Lenacapavir (LEN)

Drug class	Interaction and Management
Anti-TBs Rifabutin Rifampicin Rifapentine	**Do not co-administer with LEN** Induction of CYP3A4 can substantially reduce LEN concentrations which may result in loss of its prevention efficacy. Use alternate methods of HIV Prevention
Anticonvulsants Carbamazepine Phenobarbital Phenytoin	**Do not co-administer with LEN** Induction of CYP3A4 can substantially reduce LEN concentrations, which may result in loss of its prevention efficacy. Use alternate methods of HIV prevention
Illicit/recreational Ketamine	**Potential interaction, which may persist after discontinuation of Lenacapavir.** Ketamine concentrations may increase due to inhibition of CYP3A4 by LEN and may increase side-effects associated with ketamine, such as respiratory depression and hallucinations.
Erectile dysfunction Avanafil Sildenafil Tadalafil Vardenafil	**Potential interaction, which may persist after discontinuation of Lenacapavir.** Sildenafil, tadalafil and vardenafil concentrations may increase due to inhibition of CYP3A4 by LEN.
Gender-affirming hormones Estradiol Conjugated estrogens Ethinylestradiol Medroxyprogesterone Micronized progesterone Testosterone	**No dose adjustment required** LEN is a moderate inhibitor of CYP3A4 and could potentially increase exposure of the gender-affirming hormone.
Hormonal contraceptives Ethinylestradiol Etonogestrel Levonorgestrel Medroxyprogesterone Norethisterone Norgestrel	**No dose adjustment required** LEN is a moderate inhibitor of CYP3A4 and could potentially increase exposure of the contraceptive hormone.

c. Preparation and administration of Lenacapavir



Key Injection Procedure Considerations.

Managing leakage after a Lenacapavir injection involves immediate post-injection care to ensure the full dose remains under the skin. Because Lenacapavir is a viscous solution injected subcutaneously, minor leakage from the injection site can occur.

- Preventive Action: To minimize leakage the needle should be held in place for a few seconds after the plunger is fully depressed.
- Apply Pressure: Immediately after withdrawing the needle, apply firm, direct pressure to the injection site with sterile gauze.
- Do Not Rub: Avoid rubbing or massaging the area, as this can increase leakage and irritation.
- Cover the Site: Apply a bandage over the injection site if necessary.

Mitigating injection site pain

- Recipients of care should be adequately counselled on possible side effects like injection site pain.
- If necessary, apply ice packs to the injection site pre and/or post-injection.
- Consider using oral analgesics (Paracetamol, NSAIDs) before or after injection.

Additional resources

Please watch the video below for illustrations on LEN injection technique:
https://share.articulate.com/H6ZdVEy_UF73nFs5v7ECo#/lessons/DfKTJOGxWqZC0h_96mvFObFQFH5SZqLg

Managing Missed Injections for Long-Acting Injectable Lenacapavir

Adherence to the injection schedule is important for effective use of LEN PrEP. If a client misses an injection the healthcare provider should immediately take steps to contact the client (through phone, SMS, and where possible physical follow ups through ancillary support like village health workers or peer mobilisers) and provide advice about how to continue using long-acting injectable PrEP or to talk about switching to a different HIV prevention strategy, which may include using another PrEP method. **The management of missed LEN injections is dependent on the duration since last injection as described below:**

Management of Missed LEN PrEP Injections.

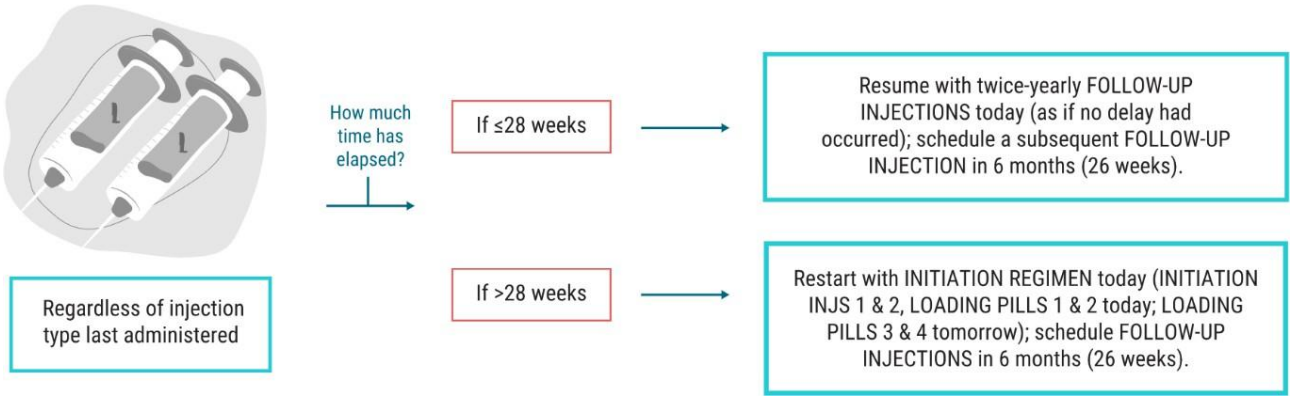


Figure 4. Management of missed LEN injections

General Considerations for Long-Acting Injectable PrEP Follow Up Care.

HIV testing

HIV testing and counseling should be conducted as per national guidelines before each scheduled injection for clients using injectable PrEP to inform decisions on whether to continue or discontinue PrEP.

Monitoring for Potential Side Effects of Long-Acting Injectable PrEP

The common side effects for injectable PrEP include:

Common Side Effects for Both Lenacapavir and Cabotegravir	Cabotegravir Specific Side Effects
Injection Site Reaction (ISR) Hypersensitivity Reaction Nausea Diarrhea Headache Dizziness	Hepatotoxicity Depression

Side effects from Long-Acting Injectable PrEP can be classified as mild, moderate and severe. Most side effects are usually mild or moderate. Mild or moderate ISRs are more common than other potential side effects, becoming less frequent with time as clients get used to the medication. Severe adverse events such as hypersensitivity, hepatotoxicity, and depression were rare and occurred in less than 1% of clinical trial participants. The management of side effects from injectable PrEP is summarized below:

Monitoring for Potential Side Effects of Long-Acting Injectable PrEP

Injection Site Reaction Management

Mild	Clients may wish to use a warm or cold compress, depending on what works best for the symptoms they are experiencing and what is available.
Moderate	Suggest non-prescription pain medication or non-steroidal anti-inflammatory drugs (NSAIDs), which may be taken before or after injections to minimise pain and swelling, provided there is no contraindication to their use in the client. **Note:** Pregnant women should avoid the use of NSAIDs.
Severe	If severe signs/symptoms or a fluctuant abscess are present and do not drain spontaneously, refer for appropriate care, which may include incision and drainage and antibiotics.

Headache/Dizziness Management

Mild	Reassure the client that this is a common issue and that it typically improves with time.
Moderate	Suggest non-prescription pain medication or non-steroidal anti-inflammatory drugs (NSAIDs) to relieve symptoms, provided there is no contraindication to their use in the client. **Note:** Pregnant women should avoid the use of NSAIDs.
Severe	Consider an alternative diagnosis and refer for care.

Nausea/Diarrhoea Management

Mild	Reassure the client that this is a common issue and typically improves with time.
Moderate	Provide symptomatic treatment (antiemetics or anti-diarrheal).
Severe	Check liver function tests, consider an alternative diagnosis, and refer for further evaluation.

Feeling Fatigued or Feverish

Mild	Reassure the client that this is common and improves with time.
Moderate	Suggest symptomatic treatment with a non-prescription antipyretic. **Note:** Pregnant clients should avoid using NSAIDs.
Severe	Refer for further evaluation.

Adverse Reactions Warranting Urgent Return for Assessment

Though most side effects are mild and resolve with no or minimal intervention, client should be instructed to return to the clinic immediately if they experience any of the following severe or prolonged symptoms.

Severe generalized rash associated with blistering, sores in the mouth, fever

Shortness of breath

Severe pain, swelling, discharge around injection site that may suggest infection or fluctuant abscess

Jaundice or persistent/severe nausea/vomiting

New onset of depression or suicidal thoughts or significant worsening of prior depression

Stopping Long-Acting Injectable PrEP

If a client decides to stop using Long-Acting Injectable PrEP, they may stop receiving injections. Clients discontinuing long-acting injectable PrEP should choose an effective HIV prevention strategy after stopping CAB-LA or LEN. This may include oral TDF-based PrEP, Dapivirine vaginal ring (DVR), and/or condoms, depending upon their needs and preferences.

Note: Use of the alternate HIV prevention strategy is especially important throughout the "tail period" of both CAB-LA and LEN.

All clients who have discontinued long-acting injectable PrEP should have a documented HIV result upon discontinuation and should receive quarterly Post-Discontinuation Monitoring Visits throughout the year-long tail phase. The steps to be conducted during each of the Discontinuation visit are listed in the figure below:

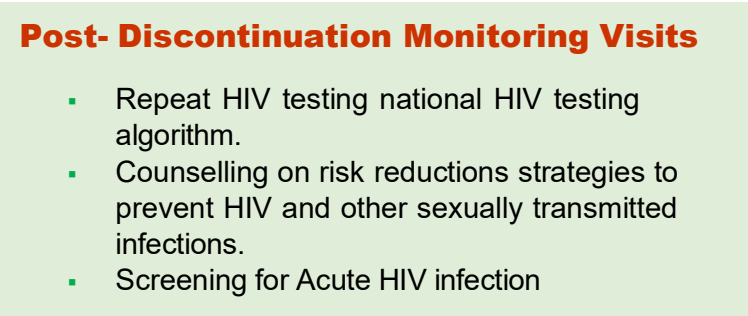


Figure 5. Post Discontinuation Monitoring Visits for Long-Acting Injectable PrEP

The *"tail period"* for Long-Acting Injectable PrEP Methods

The "tail period" refers to the time after stopping CAB-LA or LEN injections during which the drug remains in the body at low, sub-therapeutic levels. This tail period can last for up to a year from the last injection received. For CAB-LA, this means 10 months without protection from the last injection while for LEN, this means 6 months without protection from the last injection. 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 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 long-acting injectable PrEP, they should use another PrEP method or HIV prevention strategy during the tail period if exposure to HIV is possible.

If a client has 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 PEP may be appropriate and ideally should be started as soon as possible within 72 hours of potential exposure.

Post-discontinuation monitoring should be done quarterly throughout the year following the last injection. Clients should choose an effective HIV prevention strategy after stopping long-acting injectable PrEP depending on their needs and preferences.

Restarting Long-Acting Injectable PrEP

Clients who may have been on a long-acting injectable PrEP at some point before stopping and wish to receive it again should contact their provider to discuss strategies for restarting long-acting injectable PrEP. The dosing schedule when restarting either LEN or CAB-LA follows the guidance on missed doses described above.

Switching Between PrEP Methods and Simultaneous Use.

Clients may choose to switch between PrEP methods. Possible patterns of use of different PrEP methods are many; the ideal use pattern during a transition between methods is not currently known and will require careful support and assessment.

There is no evidence that indicates that using more than one PrEP method together will result in any advantage, hence clients should not use two or more PrEP methods concurrently. Whatever the choice, using the chosen PrEP method in a way that is effectively prophylactic (as frequently as directed and for as long as is needed to cover periods of potential exposure) is important to optimize effectiveness of the method. The use of condoms remains important throughout PrEP use as part of combination HIV prevention while protecting against STIs and unintended pregnancy. The figure below summarizes the safe switching between the various PrEP methods.

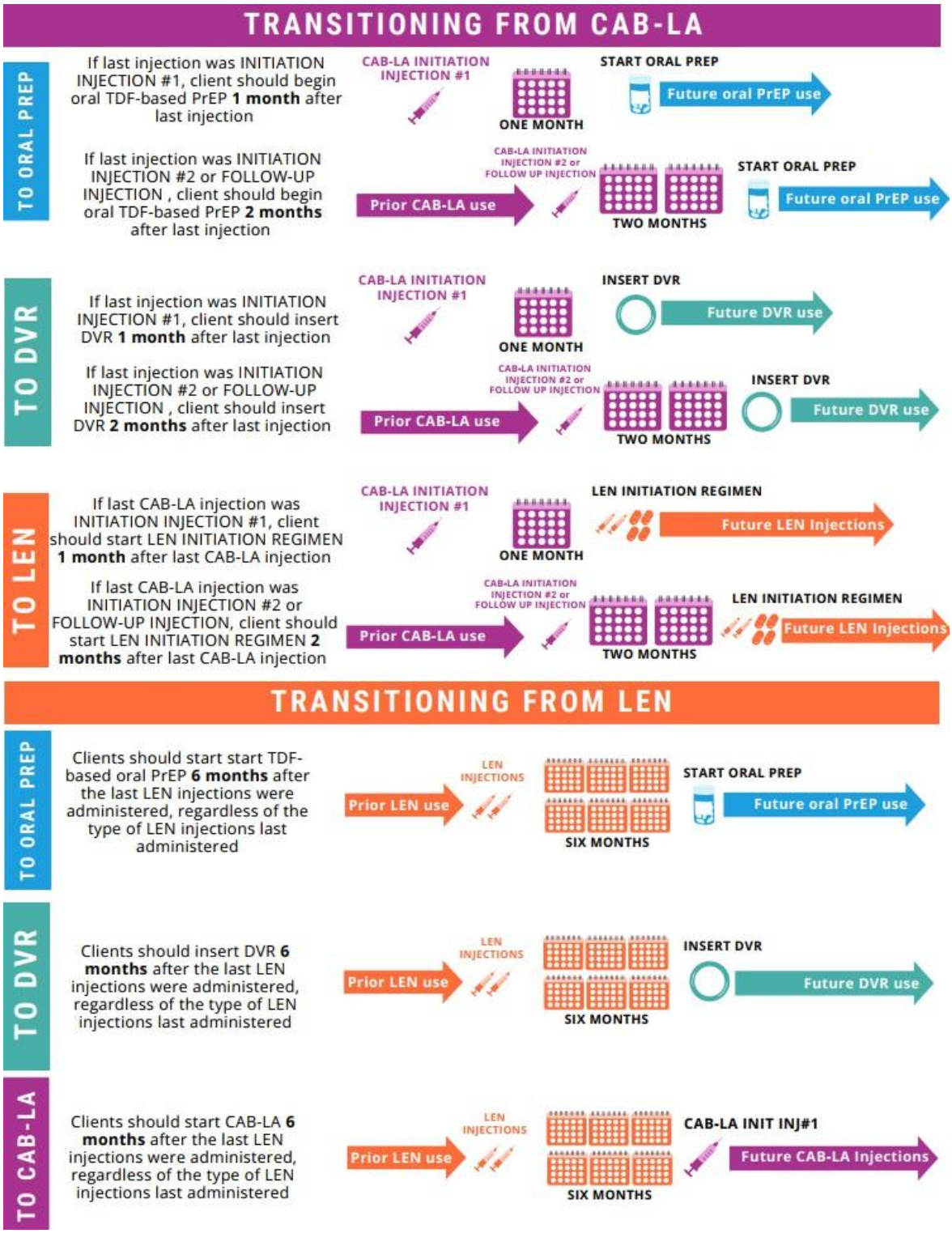


Figure 6. Transitioning from CAB-LA or LEN PrEP Methods

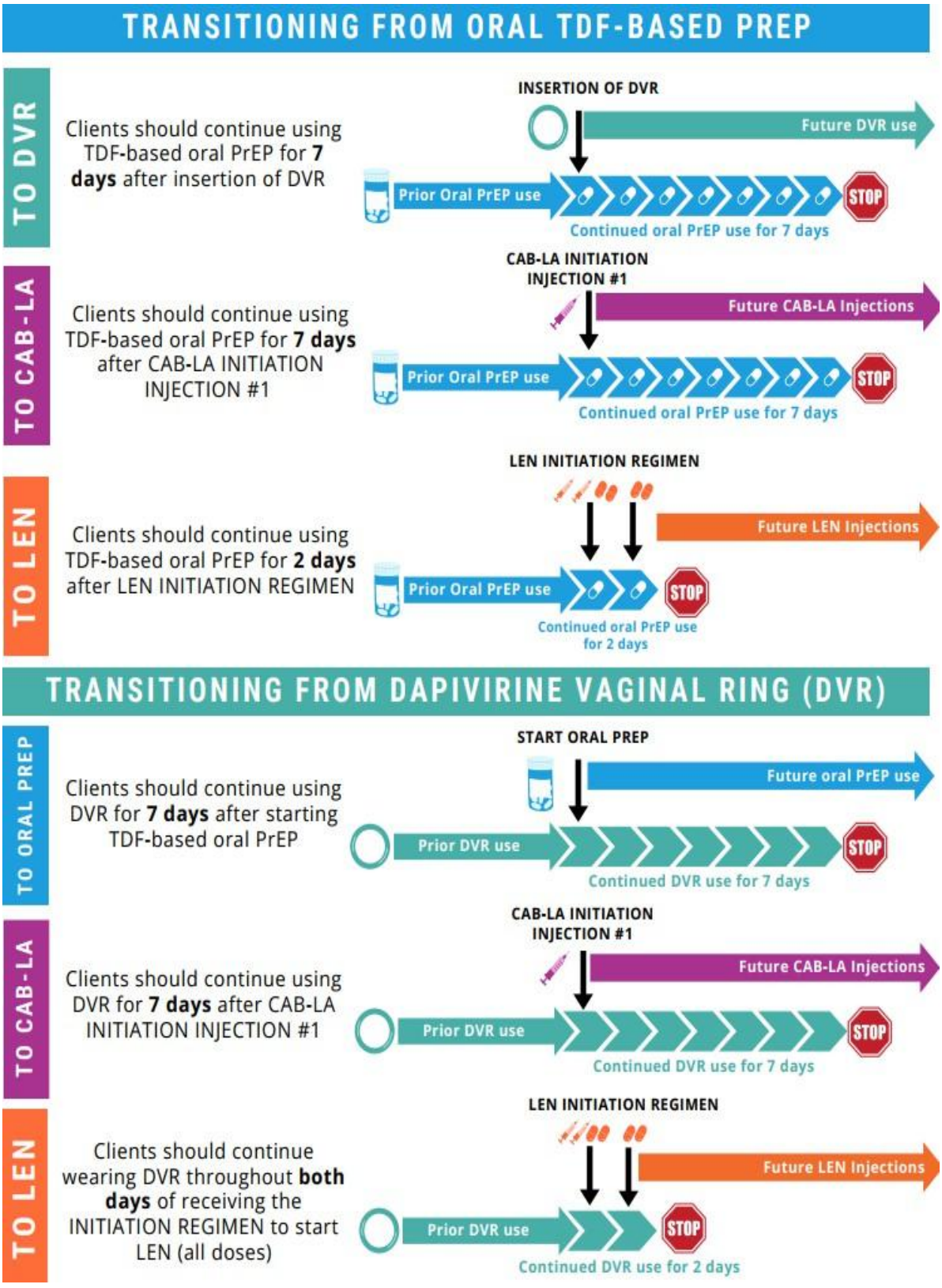


Figure 7. Transitioning from Oral PrEP and DVR

Special Considerations.

Considerations for clients who test HIV Positive whilst on long-acting injectable PrEP:

Clients who test HIV positive whilst exposed to long-acting injectable PrEP i.e., currently receiving injections (initiation or follow-up) or during the discontinuation tail phase should be immediately linked to HIV care and treatment as per the HIV Prevention, Testing and Treatment of HIV in Zimbabwe guidelines (*August 2022*). This entails same day ART initiation using the first line regimen in Zimbabwe: **T**enofovir **L**amivudine **D**olutegravir.

However, HIV Drug Resistance testing needs to be carried out since Cabotegravir is a structural isomer of Dolutegravir and the possibility of cross-resistance is high. This needs to be done as soon as possible as part of the work-up for initiating the client on anti-retroviral therapy (ART) but the clinician **SHOULD NOT** wait for HIV Drug Resistance results to initiate the client on treatment. Once the HIV-DR results are available, these results can then inform the clinician of the next steps to take with regards to either continuation of 1st line ART regimen or switching the client to 2nd line ART regimen as per National Guidelines.

Regarding LEN PrEP, in PURPOSE 1 there were no HIV acquisitions in the LEN arm, and thus no cases of resistance were reported (4). In PURPOSE 2, two participants in the LEN arm were diagnosed with HIV, and both had a mutation associated with resistance to HIV-1 capsid inhibitors. Given the overall high efficacy of LEN and the rarity of breakthrough infections, resistance to **LEN is unlikely to have a significant public health impact at present**. This is because LEN is a first-in-class drug; no other antiretrovirals of this class are routinely used for prevention or treatment.

Age:

Injectable PrEP should not be routinely offered to individuals aged below 18 years (unless in line with HIV testing guidelines and they qualify as mature or emancipated minors and weigh >35kg).

Pharmacovigilance

Reporting and Monitoring of Suspected Long-Acting Injectable PrEP Related Adverse Drug Reactions (ADRs)

Adverse Drug Reaction (ADR): Any response to a medicine which is noxious and unintended, which occurs at doses normally used for the prophylaxis, diagnosis, or therapy of disease in humans, or for the modification of physiological function.

Adverse Event: Any untoward medical occurrence that may present during treatment with a pharmaceutical product, but which does not necessarily have a causal relationship with this treatment. Treatment failure is also considered as an adverse event.

Who Should Report?

- All health professionals (in the public or private sector). This includes physicians, pharmacists, and nurses, including public health professionals, staff in medical laboratories and pathology departments, and pharmaceutical companies.
- Health and community workers should be encouraged to report, preferably to the clinician who prescribed the medicine(s), or directly to the Medicines Control Authority of Zimbabwe (MCAZ).
- Patients or patient's family members.
- General public.
- For instructions on how to report an ADR, please refer to the guidelines below or to the MoHCC Guidelines on HIV Prevention, Treatment and Care (August 2022)

Please report and monitor all known and unknown adverse reactions associated with CAB-LA or LEN and any other drug-drug interactions.

However, more research and safety surveillance in pregnancy is needed to monitor for less common adverse pregnancy and infant outcomes, particularly rare adverse events, through the surveillance of PrEP in larger surveillance program or antiretroviral (ARV) pregnancy registries.

Adverse Drug Reaction Reporting Tools

Healthcare workers should report and monitor all known and unknown adverse drug reactions associated with CAB-LA or LEN and any other drug-drug interactions using the following:

a) Paper-based ADR reporting form

- The standard spontaneous adverse drug reaction (ADR) reporting form attached (Annex 1), which is available from MCAZ offices on request, can be downloaded from the Downloads section of the MCAZ website using the following link: www.mcaz.co.zw
- Completed paper-based forms can be submitted to the MCAZ offices at 106 Baines Avenue, Harare, OR can be scanned and sent via email to mcaz@mcaz.co.zw

b) Electronic ADR reporting tools

- VigiFlow electronic form linked to MCAZ database using the following link: https://primaryreporting.who-umc.org/ZW
- Electronic ADR reporting system using the following link: https://e-pv.mcaz.co.zw
- The mobile applications for Android and iOS (iPhone or iPad) users can be downloaded by searching "**MCAZ Pharmacovigilance**" on the Google Play Store and " **MCAZPV**" on the Apple App Store respectively.
- The desktop applications for three major operating systems (Windows, MacOS and Linux) can be downloaded from the links available on the MCAZ website: https://www.mcaz.co.zw/

In addition, consumers, patients, or patient representatives may report using the following platforms:

- ADR consumer reporting paper-based form attached (Annex 2)
- Consumer electronic-ADR form, accessible from the Online Services tab on the MCAZ website using the following link: https://primaryreporting.who-umc.org/ZW
- VigiFlow is accessible on the desktop/laptop and the Desktop applications have offline functionality i.e., reports can be completed offline, saved, and submitted later when internet is available.

It is better not to wait until final results and any additional relevant information are received, because the report may be forgotten. These additional details can be sent to the MCAZ later. All ADR reports once submitted, are treated as confidential i.e., identities of reporter, patient and institute will remain confidential.

MCAZ contact details are as follows:

- Address: 106 Baines Avenue, Harare
- Email: mcaz@mcaz.co.zw
- Mobile and WhatsApp number: +263 71 885 5934
- Telephone number: +263 242 736 981-7
- MCAZ toll free numbers 08080641 (Econet) and 08004507 (NetOne).

ADRs to be Reported to the MCAZ

All ADRs to marketed medicines or medicines added to the Essential Medicines List even when all the facts are not available or there is uncertainty that the medicine definitely caused the reaction.

- All serious reactions and interactions
- All known and unknown ADRs
- Unusual or interesting adverse medicine reactions

Issues with medical products quality should also be reported to the MCAZ. Healthcare practitioners and consumers are encouraged to report any product defects to MCAZ using the Report on Medicinal Product Defect or Problem Form which is available on the MCAZ website or on request via email to **mcaz@mcaz.co.zw.** These include:

- Suspected contamination
- Questionable stability
- Defective components
- Poor packaging or labeling
- Therapeutic failures

Monitoring and Evaluation Considerations

Background

The Ministry of Health and Child Care (MOHCC) uses the national Health Management Information System (HMIS) to collect and report HIV program data every month. LEN is a new PrEP option, but the *current PrEP register Version 3 January 2024 and HMIS reporting tools do not yet have LEN-specific fields.*

To avoid missing important LEN data during early rollout, clinicians and program managers from phase 1 health facilities must take **temporary action** while awaiting the new official register. This entails the following:

- *Use a separate but current PrEP register for LEN only until the new register with LEN fields is released*
- *Adapt/customise the PrEP Register by adding all required LEN data points manually as indicated in the following section.*

Current Register Customization (Short-Term Solution)

Until the National AIDS & TB Program releases the updated PrEP Register *Version 4 January 2026*, each facility implementing injectable PrEP *must modify the current (old) register* and add the required fields to allow full LEN/CAB-LA data capture.

The following adjustments must be made:

1. *Column 7 – PrEP Type:* Add injectable LEN as an additional PrEP option.
2. *Column 17 – First PrEP Initiation:* Change the heading to: *"Is this the client's first initiation on PrEP?"*
3. *Column 19 – PrEP Type (Detailed):* Add LEN as option on *19.5*.
4. *Client Outcomes Column:* Add new options for:
    - Switch from oral PrEP → LEN
    - Switch from LEN → oral PrEP
    - Any other PrEP transitions
    - Opt out
    - Discontinue
5. *New Column:* Add *Intended duration on PrEP*.

Facilities may add notes, extra rows, or write additional labels as needed to capture all required LEN information.

Transition to the Revised PrEP Register (Long-Term Solution)

When the new PrEP Register with LEN fields is released, all health facilities must:

- S*top using the customized temporary register* and adopt the new national register immediately.
- Ensure smooth transfer of ongoing client information into the new register.

- Train staff on the use of the new register.

Bi-Monthly Reporting for LEN During Rollout

LEN data should follow the same national reporting pathway to ensure full integration and compliance with MOHCC data governance standards. However, since LEN is new and requires close monitoring, facilities must report LEN indicators *twice every month*:

- *Mid-month report*: 1st to 15th
- *End-month report*: 16th to 28/30/31

LEN indicators will be captured using a separate reporting sheet (***refer to the LEN indicator table***).

Roles and Responsibilities

a) Facility Staff

- Customize the current register to add all LEN data points.
- Accurately record all LEN initiation and follow up data.
- Compile and submit bi-monthly LEN reports.

b) District Health Information Officers/ Health Information Officers

- Support facilities in using the modified temporary register.
- *Enter LEN data into DHIS2 after the revision of the **monthly reporting form**. Current data set will not be captured in the DHIS2, but is available.*
- Data Quality Assessments
- Provide feedback to the nurses on data quality.

c) MOHCC Program Officers and Implementing Partners

- Guide health facilities on temporary register customization.
- Provide ongoing mentorship and supportive supervision.
- Collect qualitative data during visits.
- Support the transition to the new official PrEP Register once released.

Qualitative Data Collection

Qualitative information on LEN service delivery—including client experiences, provider challenges, stock issues, and operational gaps—will be collected during:

- facility mentorship, and supportive supervision visits by implementing partners and MOHCC.
- Robust qualitative data collection, especially from clients will also depend on availability of funding.

LEN Indicators

	Disaggregations	Source
L1. Total number of clients newly Initiated on LEN including switches from other PrEP options	PrEP naïve, Switches from other PrEP Options, PrEP restart	PrEP Register
L2. Total number of clients initiated on LEN by typology	Age, Sex, Population type	PrEP Register
L3. Total number of clients re-initiated on LEN	Age, Sex	PrEP Register
L4. Total number of clients experiencing moderate and/or severe adverse events following LEN	Age, Sex	PrEP Register
L5. Total number of clients continuing on LEN (6 months)	Age, Sex	PrEP Register
L6. Total number of clients continuing on LEN (12 months)	Age, Sex	PrEP Register
L7. Total number of clients switching from LEN to other PrEP options	Age, Sex, PrEP types	PrEP Register
L8. Total number of clients who sero-converted while on PrEP	Age, Sex	PrEP Register
L9. Total number of clients who transferred out during the reporting period	Age, Sex	PrEP Register
L10. Total number of clients who transferred in during the reporting period	Age, Sex	PrEP Register
L11. Total number of clients who discontinued LEN during the reporting period	Age, Sex	PrEP Register