# Stakeholder conversations to inform delivery of new HIV prevention methods in South Africa

### INTRODUCTION

The dapivirine vaginal ring (the "PrEP ring" or "ring") received a positive opinion from the European Medicines Agency in 2020 and was endorsed by the World Health Organization (WHO) in 2021. The International Partnership for Microbicides (IPM), which developed the ring, plans to introduce it as an additional HIV prevention option for women when oral PrEP is not or cannot be used or is not available. Injectable cabotegravir (CAB PrEP or CAB-LA) has recently shown great promise in clinical trials as an additional, highly effective HIV prevention method that could be made available in the future. Experience has shown that multiple methods are necessary to meet the HIV prevention needs of women, especially adolescent girls and young women (AGYW), and that expanded method choice has the potential to increase uptake overall. However, little is known about what is needed for health care providers (HCPs) to ensure that adequate counseling is provided on method choice, referral mechanisms are in place, and supportive follow-up is available with regards to multiple biomedical HIV prevention methods. The goal of these conversations with stakeholders, implemented by the PROMISE Collaboration, was to gain input on implementation considerations from provider and potential end-user perspectives, as well as community-level considerations, to inform the introduction of the PrEP ring alongside oral PrEP, and future inclusion of additional prevention methods such as CAB PrEP for women.

### **METHODS**

Individual and group dialogues were held among stakeholders from five provinces in South Africa: Gauteng, KwaZulu-Natal, Eastern Cape, Free State, and Limpopo. A team from the Wits Reproductive Health and HIV Institute (Wits RHI) conducted these dialogues from April to June 2021 using thematic discussion guides. Participants were purposively sampled to include potential end users (female sex workers [FSWs] and young people age 20-30) and family planning and other HCPs. The goal was to purposively sample approximately 75 participants. The Wits RHI team created a list of potential participants after consulting with Wits RHI directors from various departments (research, clinical trials, health program, implementation science, and maternal and child health) to identify individuals within their portfolios who could provide in-depth information on topics related to HIV prevention product choice. The team then scheduled dialogues at the participants' convenience. Among the topics discussed with potential end users

### Sample composition



Research health care providers



**29** 

Public sector health care providers



Female sex workers



15 Yo

oung people









were perspectives on HIV prevention and family planning services, opinions on and experiences with oral PrEP, the PrEP ring and CAB PrEP, as well as support for PrEP method selection and use. HCPs were asked about their perceptions of the PrEP ring and CAB PrEP and experiences with providing oral PrEP and family planning services, including counseling on HIV prevention methods, as well as existing referral and follow-up systems.

Two interviewers, including one young person who received specific training for this purpose, conducted the dialogues. Individual and group dialogues were conducted both in-person and virtually via webbased platforms such as Zoom and Teams. Prior to the start of conversations, participants gave verbal permission to participate in the activity and received a basic overview of the prevention methods. The dialogues were audio-recorded and conducted in English and isiZulu. Individual dialogues averaged about an hour, while group dialogues ranged from 60 to 90 minutes. All efforts related to this activity were conducted following the COVID-19 prevention guidelines and precautions set by the South African government and USAID mission. The activity was determined not to be research by FHI 360's Office of International Research Ethics (IRBNet ID: 1733984-1).

We used a rapid qualitative analysis method to analyze data from the conversations via a two-step process. First, Wits RHI researchers listened to the recordings and referred to the notes from each conversation to summarize the data for each theme, including relevant illustrative quotes, in a structured table in Microsoft Excel. Next, FHI 360 staff consolidated the summaries from the table by participant type (provider, FSW, and youth) to identify common themes and to allow comparison across groups.

### **RESULTS**

### Whom did we consult during the conversations?

A total of 78 individuals participated in the dialogues, including 19 potential end users of new PrEP products (FSWs and youth ages 20–30) (Table 1) and 59 HCPs (Table 2). FSW participants were engaged in face-to-face individual dialogues; young people participated in two group dialogues conducted face-to-face and virtually. HCPs participated in virtual individual dialogues as well as group dialogues conducted both face-to-face and virtually.



Potential end users

TABLE 1: POTENTIAL END USERS (FSWS AND YOUTH) (NN=19)

Group	Age Range (years)	Gender	Marital Status	Education	Oral PrEP Ever Use	Oral PrEP Current Use
FSW (nn=4)	30-35	Female (n=4)	Single (n=4)	Primary n(n=1) Senior high school (n=2) College (n=1)	Yes (n=3) No (n=1)	Yes (n=3) No (n=1)
Youth (nn=15)	20-30	Female (n=13) Male (n=2)	Single (n=8) In a relationship (n=5) Cohabiting (n=1) Other (n=1)	Senior high school (n=4) College (n=4) University (n=4) Graduate (n=3)	Yes (n=7) No (n=8)	Yes (n=7) No (n=8)



**TABLE 2: PROVIDERS (NN=57)** 

Age range (years)	Gender	Role	Type of Provider	Population Provider Serves	Number of Years Providing Service (Years)	Cross Trained on FP or Oral PrEP	Ever Used Oral PrEP
25-70	Female (n=53) Male (n=4)	Nurse (n=21) Counselor (n=13) Researcher (n=8) Medical officer (n=6) Peer navigator (n=5) Community health worker (n=3) Quality assurance officer (n=2) Community liaison officer (n=1)	Research/ academic – sexual and reproductive health/HIV prevention, care, and treatment services (n=30) Public – sexual and reproductive health/HIV prevention, care, and treatment/ primary health care services (n=29)	Adolescent girls and young women (n=30) Women (general) (n=17) Female sex workers (n=6) Pregnant and breastfeeding women (n=6)	Mean (range) (n=7.5) (0.5-40)	Yes (n=56) No (n=3)	Yes (n=16) No (n=43)

### What have stakeholders already heard about new PrEP products?

### **The PrEP Ring**

Among potential end users, many of the youth participants had heard about the ring, but none of the FSW participants had heard of it. Many providers said that they had heard of the ring.

Youth participants who had heard about the ring said that the ring prevents HIV but it protects only against HIV transmission through vaginal sex and lasts for a month (Table 3). Among providers who had heard of the ring, all said that the ring is used to prevent HIV via vaginal sex, and many said that the ring is inserted in the vagina, is effective for a month, and releases "hormones" (Table 3). Other less commonly cited information about the ring is also listed in Table 3.

TABLE 3: WHAT YOUNG PEOPLE AND PROVIDERS HAD HEARD ABOUT THE RING

Young people	Providers
· Prevents HIV	· Prevents HIV
· Is 63% effective against HIV	· Is PrEP in the form of a ring
Protects against HIV acquisition during vaginal sex, but not through anal sex or	<ul> <li>Is inserted in the vagina, stays there for 28 days, and has to be changed after that</li> </ul>
from sharing needles	· Has an efficacy level of 60% against HIV
Lasts a month	Will be available as PrEP
	Releases the drug dapivirine
	· Can be felt by partners during sex
	Only protects against HIV infection through vaginal sex

When asked how participants had heard about the ring, youth participants said that they had heard about it through the internet, during a presentation at work, and from a male friend. Many of the providers said that they had heard about the ring through the internet. Some HCPs had either previously worked in or were working on a PrEP ring study, some had a client or friend who had participated in a ring study, and others had heard about the ring through newsletters or workshops at work.

### **CAB PrEP**

Young people who had heard of CAB PrEP said that they had heard it is an injectable that is used to prevent HIV and is not yet available in South Africa (Table 4). HCPs said that it is an injectable that prevents HIV, with some saying that the efficacy of the injectable is higher than that of the ring in preventing HIV. One participant saying that the ingredients in the injectable can stay in the body for up to two years. HCPs varied in their responses on how often the injectable had to be given, with a range of one to three months, with most saying it should be given every two months.

TABLE 4: WHAT PARTICIPANTS HAD HEARD ABOUT CAB Prep

Young people	Providers
Effective in preventing HIV	Prevents HIV
Not yet available in South Africa	• Is a PrEP method
	Has higher efficacy than the ring in preventing HIV
	Its ingredients stay in body for up to two years
	Participants varied in their responses on how often the injectable had to be taken, with responses from one to three months

When asked how participants had heard about CAB PrEP, youth participants said that they had heard about it through newsletters at work, in the news, and through the internet. HCPs had heard about CAB PrEP from a variety of sources. Some providers said that they had heard about CAB PrEP through conferences, personal reading, the internet, newsletters, friends at work, pamphlets, articles, or a questionnaire. Others are preparing to or are working on CAB PrEP studies.

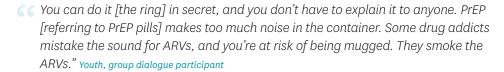
Among potential end users, only a few young people had heard of CAB PrEP, and none of the FSW participants had heard of it. About half of the providers had heard of CAB PrEP, and a few of them were currently working on a CAB PrEP study.

### What do stakeholders think about new PrEP products?

### The PrEP Ring

### Advantages

Young people and HCPs alike said that the main advantage of using the ring is that it does not need to be taken daily like oral PrEP. They said this would prevent users from forgetting to take or worrying about where to store their pills. One youth participant even said that with oral PrEP, one is at risk of their PrEP pills being stolen, which will not happen when using the ring:



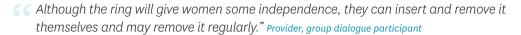


When asked about potential advantages of the PrEP ring, many providers said that it has fewer side effects than oral PrEP and allows a woman to insert and remove it herself, giving her control of her own sexual health without the need to involve her partner. Other advantages frequently mentioned by providers were that the ring could be used discreetly and inserted easily, and that additional PrEP options will give clients more power to select the method that would work best for them. If one method does not work for her, she has other choices. A few providers also said that participants in ring studies have given feedback that they are very happy with the ring, it is comfortable, and it does not disrupt sexual intercourse.

## **Disadvantages**

FSWs and young people were most concerned that the ring only prevents HIV during vaginal sex. They were also worried that the penis could get stuck in the ring or push the ring upward during sex; the ring might not be comfortable to use; there might be vaginal infections if women do not practice good hygiene; and it might be difficult to insert the ring into the vagina.

Providers noted multiple possible concerns. Top concerns were the possibility that partners or clients could feel the ring once inserted and the potential impact for users in abusive relationships wishing to keep their ring use private, as well as concerns that the ring could fall out. Several providers were also concerned about the lack of information about the suitability and acceptability of the ring among FSWs. Other concerns reported by some providers were about side effects; storage and confidentiality questions if multiple rings are prescribed; the possibility that women would take it home and not use it; the effects of vaginal practices, such as inserting herbs into the vagina together with the use of the ring; and that the ring may not be a good option for women who practice anal sex. One provider was also concerned that the ability to self-insert and remove the ring may cause some users to use it inconsistently:





A small number of providers also reported other possible PrEP ring-related challenges:

- Clients may not keep the ring in place for the correct amount of time; counseling should emphasize the importance of keeping the ring in place for a full month.
- · Some providers may feel some participants are too young to use the ring.
- · Some AGYW may not feel comfortable inserting the ring on their own.
- Since the PrEP ring can be removed by the client herself, she could potentially share her ring with a friend.

### Who should be offered the PrEP ring?

HCPs said that all women should be offered the ring. In particular, the ring should be offered to women who will still feel safe to use it even if their partners could feel the ring during sex. Other women who should be offered the ring, according to HCPs, include those who are unable to take oral PrEP every day and those who are using an intrauterine device.



### Advantages

The advantages of CAB PrEP most frequently mentioned by FSW and young people were that an injectable user needs to go to the clinic only every two months and that the injection protects against HIV transmission through both vaginal/anal sex and needle sharing, whereas the PrEP ring only prevents HIV infection through vaginal sex. Other advantages of using CAB PrEP mentioned by potential end users include that the side effects are similar to those with oral PrEP; the injection has no potential impact on sex; it is safe because it is administered by trained professionals; and that those who use CAB PrEP are protected for two months. As one youth participant explained:



66 I would choose the injectable because it's taken once every two months. I would choose it over the ring because it [the ring] only prevents HIV infection through vaginal sex. HIV is not only transmitted through vaginal sex, and oral PrEP and the injectable PrEP protects the whole body." Youth, group dialogue participant

The two advantages of CAB PrEP mentioned most frequently by HCPs were that it can be used discreetly, which is especially important for women in abusive relationships who are unable to negotiate condom use, and that it lasts for two months, which is longer than the ring. Because of its long-acting properties, providers said that CAB PrEP would be a good option for people who find it hard to adhere to daily oral PrEP or for adolescents and young women because they are exploring relationships and do not want to be burdened with daily pill taking. CAB PrEP also reduces clinic visits and allows women to get both CAB PrEP and the injectable contraceptive during the same clinic visit. Advantages less frequently mentioned by HCPs include giving clients more PrEP choices and that the uptake of CAB PrEP will probably be high because women are used to getting injections.

- [CAB PrEP] is something that won't be seen by the partner and people around, especially those who are sharing rooms with others. It is self-controlled and nobody else can be aware of it, you can feel very comfortable" provider, individual dialogue participant
- Having multiple options will help us support our patients who want to take care of their health without having to change their lifestyle so much, because I think that's where adherence becomes the problem. They don't want something that will interfere with their relationship." Provider, individual dialogue participant

## **Disadvantages**

FSW and young people reported several concerns about CAB PrEP, including fear of injections, fear of being hurt by the injection if the nurse is rough, and concerns about the potential side effects of a method that will stay in the body for at least two months, unlike oral PrEP, which can be stopped at any time.

HCPs also had a variety of concerns about CAB PrEP. The two most often cited concerns were the risk of developing drug resistance and concerns about side effects, especially since they may last longer in the body. Concerns less commonly raised by HCPs included the efficacy of the method; lack of comfort advocating for CAB PrEP based on a desire for more research; the possibility that CAB PrEP is painful compared to the PrEP ring; and the need for it to be administered by a healthcare provider. They also said that CAB PrEP does not give a woman independence, unlike the ring, which a user can insert and remove herself, and cited a perceived possibility of weight gain with CAB PrEP use and fears that it may interfere with clients' menstrual flows.



### Who should be offered CAB PrEP?

When asked, most providers said that CAB PrEP should be offered to all women. A small number of HCPs also said it should be offered specifically to women in abusive relationships, because CAB PrEP can be used discreetly, and to people who find it hard to adhere to taking daily oral PrEP, such as teenagers and people who have busy work commitments.

We need to understand that young women, adolescents... they don't want a burden feeling that they have to take medicine [daily oral PrEP]."

Provider, individual dialogue participant

### What PrEP method would young people choose if they had access to all three options (oral PrEP, the PrEP ring, or CAB PrEP)?



The majority of youth participants chose CAB PrEP, followed by the PrEP ring, and finally oral PrEP. Those who prefer CAB PrEP said that they would need to go to the clinic only every two months to get the injection; another said that she could use both CAB PrEP and the two-month contraceptive injectable so that they are given during the same clinic visit. Several young people said that they preferred the PrEP ring over oral PrEP because the ring can be used discreetly, they would not need to remember to take the PrEP pill every day, and the PrEP pill size is too big. Some said they preferred CAB PrEP and oral PrEP over the ring because the ring prevents only HIV transmission through vaginal sex. One participant said that she would like to try the ring but would be more comfortable if she could insert it herself; otherwise, she would not use the ring.

### How will new PrEP products affect use and choice?

Many HCPs feel that the introduction of new PrEP products will be beneficial to women because it will empower them by providing additional PrEP options to choose from.

However, HCPs also cautioned that potential challenges with the new products need to be addressed. For example, HCPs noted that clients may initially be hesitant to try these new methods. In the beginning, there may be myths, misconceptions, and stigma surrounding new PrEP methods, and there will be a need to educate the community by engaging gatekeepers and leaders. In addition, there may be concerns about fertility for users of new PrEP methods. HCPs also noted that FSWs are highly mobile and may not return to the same clinic for refills and injections.

The introduction of new PrEP products also was expected to increase workloads, and HCPs had concerns that they may not have sufficient time to counsel clients and answer their questions. As a result, HCPs may not give clients options and instead may choose a method that is convenient for the provider and not the

The more options you give them, the more power they have. That way they don't feel pushed to one method. If one method doesn't work for them, they can choose another. They can choose methods based on their lifestyle changes."

Provider, individual dialogue participant

client. Other potential challenges include staff shortages at public facilities, stockouts of PrEP methods, and difficulties maintaining proper storage of CAB PrEP, as prescribed by the South African Health Products Regulatory Authority.

### What is needed to support informed choice of PrEP products?

### What information is needed, and who should deliver it?

FSWs and young people said that they would like to receive the following information on PrEP products:

- · All PrEP options available
- · Side effects
- · Efficacy levels
- · Method of administration
- · Length of time the drug stays in the body
- · Length of time for maximum HIV prevention
- · Proper storage
- · Effect on sexual activity (if any)
- · Locations of PrEP-providing facilities

FSWs said that they preferred to receive information on PrEP products through interpersonal channels, such as from a nurse or by phone, but young people were open to receiving information via multiple diverse channels, including through public clinics, handouts/flyers, billboards, media (e.g., television, radio), social media, community events (e.g., soccer tournaments, dialogues, and awareness-raising events), peer navigators, and schools.

### Where should methods be delivered?

Most young people would prefer to get CAB PrEP and the PrEP ring at public clinics. Some also said they would like to get these methods from pharmacies, including online pharmacies.

Although FSW participants said that they would still get their chosen method if it was available only at a different location from their usual health facility, youth participants would be reluctant to do so unless the facility was located nearby. Some youth participants said that going to a different facility would disrupt the feelings of safety and security they have at their regular clinics. Others also noted that they do not want to get PrEP from clinics within their communities because they want to remain discreet. Young people in particular said they would not feel comfortable if

66 I would feel bad, because I have a relationship with my healthcare worker. It's not easy to talk about my sex life with different people."

Youth, group dialogue participant

they had to go to a different provider to get PrEP because they already have relationships with and trust their healthcare providers.

### How can providers support informed decision-making?

HCPs reported that it is important to provide integrated services, including counseling as part of the comprehensive package of prevention options available, to provide information on different PrEP methods and emphasize the dual protection of condoms and PrEP together with HIV testing. They said it is also important to discuss family planning as combination prevention with PrEP and condoms. HCPs should focus on each individual client's HIV prevention needs and support clients to develop strategies to keep themselves healthy. HCPs noted that when discussing PrEP methods, it is essential to include topics such as PrEP disclosure, how to take and store PrEP, and mental health and self-esteem issues.

When asked how they would decide which prevention options to recommend to clients, HCPs said they would need to learn about the client's lifestyle, discuss client behaviors, and ask what methods the client has used and is familiar with. If sexually transmitted infections other than HIV are a concern, then providers should also promote condoms. One HCP noted that client age also plays a role in which options are presented but did not elaborate. Another HCP mentioned that they would address client needs and the reason for the visit. Then, the provider would give a brief summary of prevention methods, gauge the client's overall interest, and introduce new methods.

### Considerations when providing services to FSWs

FSW participants said that they typically disclose their engagement in sex work only to providers at a clinic that provides sex worker-friendly reproductive and sexual health services. They would not disclose their sex work status at other clinics for fear of being judged and stigmatized. FSW participants mentioned that providers at other clinics do not treat them well once their sex work status has been disclosed.

Worker friendly] clinics ask too many questions, and you need to have a good reason why they should give you the service."

FSW, individual dialogue participant

### What is needed to support continued use of PrEP products?

Current users of oral PrEP (three FSWs and seven young people) were asked what helped them continue with oral PrEP to inform support for clients to continue use of PrEP products. Some FSW participants said that they are motivated by the desire to prevent HIV and cannot rely solely on condoms, because sometimes they would have sex without condoms. Several young people said they were motivated to continue oral PrEP because they have seen people living with HIV and want to stay HIV- negative, and that oral PrEP is effective for HIV prevention.

### How can providers support continued use?

Youth participants said that providers can motivate clients to continue using PrEP by giving certificates to clients for adhering to PrEP, organizing PrEP adherence clubs, and having a person living with HIV share their experience with the clients.

HCPs noted that visit reminders were important and suggested using multiple tracking and tracing mechanisms, including staff and peer educators texting or calling clients with reminders. HCPs inform mobile clinic clients of the location of the mobile clinic for their visit date, whereas HCPs who provide on-site services for sex workers track visit dates for clients and coordinate with peer navigators, who also track visit dates. Some HCPs said that they give their clients an appointment card as well. **One HCP supports continued use of PrEP by facilitating a virtual WhatsApp group chat where clients are grouped by age.** These groups focus on daily pill reminders, follow-up visit reminders, and encourage use of the MyPrEP journey app, which has been designed to help users continue taking oral PrEP as long as they need to. The app also sends each user a reminder to take their pill every day and makes a nurse available online who can answer users' questions.

In terms of the resources needed to support continued PrEP use, HCPs talked about the need for a variety of educational materials on PrEP, trainings for HCPs so that they feel comfortable and confident supporting clients' PrEP use, and improving the PrEP register by adding a section on "continuation and re-initiation."

### **KEY FINDINGS & RECOMMENDATIONS**

Provider and potential end-user participants in these dialogues had limited knowledge of the PrEP ring and CAB PrEP. FSW participants had not heard of these HIV prevention methods, and youth and providers who had heard of them gained that knowledge mostly through participation in programs

specifically addressing the introduction of these methods, as well as through other work-related channels. In addition to introducing these methods widely through various types of communication channels — and taking advantage of young people's willingness to learn via various media platforms — programs will also need to engage community gatekeepers and leaders to avoid possible myths, misconceptions, and stigma.

Participants liked the PrEP ring because it is long acting, can be used discreetly, is easy to insert, and can be inserted and removed by the user. However, they were concerned that the ring would not protect against HIV transmission through anal sex and shared needles. They were also concerned about the ring being a vaginal

66 Myths, misconceptions and stigma - we have to educate the community about the products. We need to engage with gatekeepers and those in strategic positions in the community."

Provider, group dialogue participant

product and its potential impact during sex. These concerns will need to be addressed in communications about the ring, not only for potential users but also for male partners and community members.

Participants liked the longer duration of CAB PrEP, that it prevents HIV acquisition not only during vaginal sex but also during anal sex and needle sharing, and that it can be used discreetly. Another advantage of using CAB PrEP that participants brought up was the possibility of getting both CAB PrEP and an injectable contraceptive during the same clinic visit. Counseling on new PrEP methods will need to take clients' contraceptive needs into consideration, and health facilities will need to creatively explore how PrEP and family planning service delivery can be integrated, if they are not already. Potential end users' main concerns about CAB PrEP were fears about the injection, pain at the injection site, and long- lasting side effects. These fears will need to be addressed widely, and especially during initial CAB PrEP counseling.

Providers noted that more PrEP options will increase women's power to select the method that would work best for them and enable them to switch to other methods if they choose.

PrEP service provision will need to address certain issues to attract potential users. For example, FSW participants do not feel comfortable receiving reproductive and sexual health services at public clinics due to stigma and discrimination and prefer to receive them at sex worker-friendly clinics/programs. Young people prefer to receive PrEP services at public clinics but would like to keep seeing the same providers because they have built relationships and trust with them and would find it difficult to talk about sex with different providers. New PrEP methods should be offered in a variety of settings, especially those where potential users are already accessing other health services.

HCPs are also worried about being short-staffed at public clinics and overburdened with providing counseling on additional PrEP methods. To help address these concerns, counseling job aids could be developed with information on the different PrEP methods available, using illustrations and graphics to enhance clients' understanding. Staffing at clinics will also need to be reviewed to ensure they have sufficient human resources to provide additional PrEP methods.

