Dapivirine Ring:
Messaging & Positioning

Eswatini
Phase 4 - Final Dissemination Guide
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Introduction

A brief background and HIV profile of Eswatini and how to use this guide
Background

HIV continues to be a major public health issue globally, having claimed approximately 36 million lives as of November 2021. Over two-thirds of all people living with HIV are in Africa, with eastern and southern Africa recording the highest prevalence rates. Eswatini has the highest national HIV prevalence in the world: 27.3% of all adults are living with HIV. Knowledge of how to prevent HIV is also poor, particularly among young men and women ages 15–24 years.

Women in Eswatini are disproportionately affected by HIV; 35.1% of them are living with HIV compared to 19.3% of men. The reason for this disproportionate prevalence stems partly from gender inequality within Eswatini society. Women are often subordinate to men, there are high levels of gender-based violence, men engage in multi-concurrent partnerships, married women often need their husbands’ consent to access sexual and reproductive health services, and marital rape is a major issue.

Formative research revealed that the major barriers to HIV prevention in Eswatini are social stigma, gender discrimination, and a lack of data and resources. The government of Eswatini, through the Ministry of Health, has undertaken various campaigns to address the HIV problem with varying degrees of success. This work focuses on women and seeks to understand the context of Eswatini, the segments of women in this society, and the nuanced perceptions of both rural and urban women. Ultimately, the work aims to reduce the prevalence of HIV by generating demand for, and increasing the adoption and correct and consistent use of, the dapivirine vaginal ring (DVR) once it becomes available in Eswatini.
Brief profile of HIV in Eswatini

High HIV prevalence
Eswatini has the highest HIV prevalence in the world: 27.3% of all adults are living with HIV. This corresponds to almost 210,000 people.

Existing initiatives
Multiple agencies have collaborated with the government and have initiated condom distribution programs, radio awareness programs, and school campaigns to educate young children about HIV.

HIV prevalence is high among FSWs
Eswatini has the highest HIV prevalence among female sex workers in the world, estimated at 60.5% in 2015.

Poor knowledge about HIV
Only 49% of young women and 51% of young men have adequate knowledge about HIV, prevention, and treatment.

Gender differences
1. Women are disproportionately affected by HIV. Just over 35% of all women are living with HIV, compared to 19.3% of men.

Main barriers for HIV prevention
The biggest barriers to HIV prevention in Eswatini are social stigma, gender discrimination, and a lack of data and resources.

The dapivirine vaginal ring (DVR)

Existing prevention methods have not done enough to stop the spread of HIV among women, who bear a disproportionate share of the burden of the epidemic, particularly in sub-Saharan Africa.

The monthly DVR is the first discreet, long-acting HIV-prevention product designed specifically for women. It is a flexible silicone vaginal ring that provides sustained release of the antiretroviral (ARV) drug dapivirine over one month to reduce the risk of HIV acquisition. The ring reduced the likelihood of HIV acquisition by approximately 30% in Phase III trials, and modeling of results from follow-on studies suggests that the ring can reduce the chances of HIV acquisition by about 50% with consistent use. Because the activities described in this report were conducted by the product developer, all communications with participants utilized the 30% efficacy level confirmed in the Phase III trials in order to comply with regulatory guidelines.

The ring delivers dapivirine directly at the site of potential infection, with low systemic exposure, which could minimize side effects. Women insert the flexible, long-acting ring themselves into the vagina and replace it every month. The ring is an option for women who cannot or choose not to use systemic PrEP but still need a way to reduce their risk of HIV infection.

The ring received a positive scientific opinion from the European Medicines Agency in 2020 for its use among women ages 18 and older in developing countries. Later in 2020, the ring received WHO prequalification, a designation that confirms the product meets global standards for quality, safety, and efficacy and will help guide national and global procurement decisions, pending country regulatory approvals for its use. WHO also issued a recommendation for the dapivirine ring in 2021 as an additional prevention choice for women at substantial risk of HIV infection.¹

Overview

This guide was prepared by the Busara Centre for Behavioral Economics in partnership with International Partnership for Microbicides (IPM) and Ulwazi. It begins with a country and product profile and the audience segments among women identified in our earlier research as well as their barriers and levers to using the DVR. It then lays out the foundation, design, and purpose of the guide. Later, it introduces the interventions that were co-created with the women and incorporates the feedback from stakeholders.

A total of **12 recommended communication strategies** are presented for positioning of the DVR in Eswatini.
Desk research
We did a literature review on the current HIV landscape in Eswatini, including the government’s efforts to control new infections.

Oct 2021
Quantitative survey
We conducted an in-person quantitative survey with 400 women ages 18–45 drawn from 5 locations in Eswatini. The survey focused on women’s preferred communication channels, sexual behaviors, partner dynamics, risk profiles, consequences of COVID-19, past clinic experiences, decision-making processes, misperceptions about HIV, and perceptions of the DVR.

Nov 2021
Co-design workshops
We facilitated 4 co-design workshops with 20 end users and 20 male influencers and generated over 60 ideas. These ideas were synthesized for presentation to end users and stakeholders for validation.

Dec 2022
Segmentation analysis
Using the data from quantitative surveys, we applied algorithms to identify 3 segments of the audience of (potential) end users (women) in Eswatini with varying sexual activity, risk profiles, and perceptions of HIV and the DVR.

Jan 2022
Dissemination workshops
We facilitated 3 workshops with community-based organizations, healthcare workers, and the Eswatini Ministry of Health, respectively. They weighed in on the ideas co-developed with end users and provided recommendations to improve the ideas.

Feb 2022
Final playbook
The phases of research and co-design have resulted in this guide providing 14 evidence-based prototypes to increase demand for the DVR once it becomes available in Eswatini. The guide also provides some implementation recommendations.

1 Key terms used for the literature review include: HIV, knowledge of HIV, SRH, family planning, HIV initiatives, and prevalence.
Respondents were recruited from across a number of locations in the **Lubombo, Manzini, and Shiselweni** regions.
Who is this guide for?

This dissemination guide is for stakeholders in Eswatini who will be involved in the introduction of the dapivirine vaginal ring. Stakeholders include, but are not limited to, the Ministry of Health (MoH), community health workers, NGOs and UN agencies, community and religious leaders and organizations, humanitarian agencies, and civil society organizations.

How to use the guide

- **No prior knowledge required**
  Using this guide does not require any prior knowledge of behavioural science.

- **Reference this document to build future implementation plans**
  It contains interventions specific to the Eswatini context to increase ring demand, uptake, and confidence. You may want to consult this dissemination guide when building your own implementation plan.

- **Contextualize**
  The implementation and use of this guide should be tailored to the local context beyond what has been provided. For all interventions in this book, consider how they might work in your region, what might need to be changed to make them more contextually appropriate, and how they might be perceived by the community.

- **Limitation to generalizing content**
  This guide is based on a study conducted in Eswatini with a limited sample (N=455). These interventions therefore might not be appropriate or effective for all cases. More research, testing, and adaptation should be conducted before these interventions are implemented in other regions or cases.
Overview

Understanding of the ring, how it works, the segments of potential users, and their barriers to ring uptake
End-user profiles

Persona-based segmentation is based on characteristics that a proportion of women in that segment share that make them distinct from women in other segments. As a result, the behaviors of women within the segments will differ and will be more nuanced than the personas are able to present, partially because people rarely behave in identical ways across multiple variables.

**Tinah**
The ring advocate

- Most likely to be a woman ages 18-29 (60%)
- 80% Likelihood to use ring
- 68% In a relationship (not married)
- 47% From urban area

Tinah is a young woman in a relationship from an urban area. She is most certain that her partner is having sex with other people, and she also has multiple partners herself. She is really interested in the ring because she knows she has a high likelihood of contracting HIV and it is better than nothing.

**Zama**
The concerned woman

- Most likely to be a woman ages 18-29 (54%)
- 71% Likelihood to use ring
- 59% In a relationship (not married)
- 45% From rural area

Zama is a woman living in a rural area and is in a relationship. She is exposed to HIV in her relationship and has little agency in it. She cares about the opinions of her partner. She is interested in the ring but feels the efficacy is too low. She underestimates her likelihood of contracting HIV.

**Selina**
The trusting woman

- Most likely to be a woman ages 30-45 (57%)
- 35% Likelihood to use ring
- 36% Are married
- 70% From rural area

Selina is a slightly older woman from a rural area and is in a relationship with an older partner. She has a trusting relationship with her partner and thinks she has a low likelihood of contracting HIV. She is least likely to use the ring and thinks it will make women behaviorally more exposed to HIV.
WHAT ARE HER SOURCES OF INFORMATION?
- Mostly talks to friends for sexual matters
- Trusts doctors most for sexual health information
- More likely to use social media and radio

WHAT ARE HER RELATIONSHIPS LIKE?
- Close to her friends and is influenced by their opinions on using HIV prevention
- Is likely to have more than one partner and is most certain that her partners also have other partners
- Compared to other segments, least likely to receive financial or material support from her partner
- Most likely to have experienced sexual violence, insults, and other types of violence from her partners
- Less likely to refuse sex without a condom

HOW DOES SHE PERCEIVE HER RISK OF HIV?
- High perceived need for HIV prevention
- Most likely to rarely or never use a condom when having sex (62%)
- When she uses a condom, it is most likely to protect herself against HIV or to prevent pregnancy
- Most likely to have sex with people with unknown or positive HIV status
- Gets tested less frequently than women in other segments and is least likely to have been tested more than 5 times

HOW DOES SHE PERCEIVE THE RING?
- Has the highest likelihood of using the ring and is willing to incur the cost of getting it
- Is not very concerned about the ring’s efficacy and would use it
- Her likelihood of using the ring increases after efficacy is explained in detail
- Likes that the ring is easy to use and is under her control
- Her partner’s opinion is less likely to affect her decision on using the ring

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.
WHAT ARE HER SOURCES OF INFORMATION?
- Trusts friends and her sister to discuss sexual matters
- Trusts doctors most for sexual health information
- More likely to get information from radio and TV and trusts internet less

WHAT ARE HER RELATIONSHIPS LIKE?
- Close to her friends, with whom she can discuss her sexual activities
- Compared to other segments, she is the most likely to have more than one partner
- Fairly certain her partner is having sex with someone else
- Likely to have faced violence of a verbal nature from her partner
- Comparatively, receives average financial or material support from her partner
- Not very likely to refuse sex without a condom

HOW DOES SHE PERCEIVE HER RISK OF HIV?
- Low perceived need for HIV prevention
- Less likely to use a condom because her partner would think she does not trust him, but uses condoms when she does not know the partner’s HIV status
- Uses a condom to protect herself from HIV because she has multiple partners and does not trust her partner
- Very likely to have been tested for HIV more than 5 times

HOW DOES SHE PERCEIVE THE RING?
- High likelihood of using the ring
- Unwilling to incur the cost for it but would pay for travel costs
- Is concerned about the ring’s efficacy, and her likelihood of using the ring decreases drastically after efficacy is explained in detail
- Likes the ring because it may protect against HIV and can be used without partner’s knowledge
- More likely that partner’s opinion would affect her decisions to use the ring

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WHAT ARE HER SOURCES OF INFORMATION?

- Trusts her sister the most for advice on sexual matters
- Trusts the internet most for sexual health information
- Trusts doctors and community health workers for information on HIV
- More likely to use print media

WHAT ARE HER RELATIONSHIPS LIKE?

- Close to her sister and can discuss sexual activities with her
- Compared to other segments, is the most likely to be married
- Least likely to have more than one partner
- Least likely to be certain her partner is having sex with someone else
- Unlikely to experience sexual violence
- Most likely to receive financial or material support from her partner
- Can refuse sex without a condom

HOW DOES SHE PERCEIVE HER RISK OF HIV?

- Low perceived need for HIV prevention
- Most likely to use a condom every time and usually uses them to prevent pregnancy
- Least likely to have sex with a person with unknown or positive HIV status
- Most likely to have been tested for HIV more than 5 times

HOW DOES SHE PERCEIVE THE RING?

- Is the least likely to use the ring but thinks that others would use it.
- Is concerned about efficacy, vaginal insertion and thinks that the ring would make women more behaviorally vulnerable to HIV
- Is more unwilling to incur any costs associated with the ring
- Likes that the ring provides backup and helps with forgetfulness but would not use it on its own
- Her partner’s opinion is unlikely to affect her decision to use the ring but is concerned about others knowing

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<table>
<thead>
<tr>
<th><strong>WHO IS SHE?</strong></th>
<th><strong>KEY BARRIERS</strong></th>
<th><strong>KEY LEVERS</strong></th>
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<tbody>
<tr>
<td><strong>Tina</strong> The ring advocate</td>
<td><strong>A young woman in a relationship</strong>&lt;br&gt;<strong>She has more than one sexual partner.</strong>&lt;br&gt;<strong>She is close with her friends who she trusts and discusses her sexual matters with.</strong>&lt;br&gt;<strong>She rarely or never uses condoms and is not frequently tested for HIV.</strong></td>
<td><strong>Side effects:</strong> 30% identify side effects as a reason to dislike the ring, with 33% thinking side effects will dissuade other women from using the ring.&lt;br&gt;<strong>Costs associated with acquiring the ring:</strong> because she is the most likely to be unemployed and least likely to receive financial or material support from a partner</td>
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<td></td>
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<tr>
<td><strong>Zama</strong> The concerned woman</td>
<td><strong>A woman in her late twenties to early mid-thirties and in a relationship</strong>&lt;br&gt;<strong>She has more than one partner and is fairly certain that her partner also has other partners.</strong>&lt;br&gt;<strong>She trusts her friends and her sister for sexual advice because she feels comfortable and is open with them.</strong>&lt;br&gt;<strong>She rarely or never uses condoms but is tested frequently for HIV.</strong></td>
<td><strong>Concern about the ring’s efficacy:</strong> 85% think it is too low, and only 24% would use the ring alone.&lt;br&gt;<strong>Worries about potential side effects of the ring and thinks they would be a barrier for other women</strong>&lt;br&gt;<strong>Worries that the ring may dislodge and cause complications</strong>&lt;br&gt;<strong>Only 21% are willing to pay for costs associated with acquiring the ring.</strong></td>
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<td></td>
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<tr>
<td><strong>Selina</strong> The trusting woman</td>
<td><strong>A woman in her thirties in a trusting and monogamous relationship or marriage</strong>&lt;br&gt;<strong>She is close to her sister with whom she can discuss sexual matters.</strong>&lt;br&gt;<strong>She mostly uses a condom and believes she has a low likelihood of contracting HIV.</strong>&lt;br&gt;<strong>She is tested frequently for HIV.</strong></td>
<td><strong>Is concerned about side effects</strong>&lt;br&gt;<strong>Concern about efficacy of the ring:</strong> 88% think it is too low.&lt;br&gt;<strong>Is uncomfortable with inserting the ring,</strong> even after being shown by a medical professional&lt;br&gt;<strong>Stigma associated with the ring:</strong> She would be concerned by others knowing she is using the ring and thinks that women’s behavior would change with the ring and make them more vulnerable to HIV.</td>
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Key barriers and facilitators for ring uptake and confidence in Eswatini

Facilitators (levers) and barriers are in many cases two sides to the same coin: both are usually driven by mental models or heuristics.

What can be a barrier to behavior in one context can serve as a lever in another.

For example, herd behavior may lead you to spread fake news (barrier to consumption of trustworthy information) or may lead you to take up a health product.

A holistic approach, delivered through a communication campaign, will help Tinah, Zama, and Selina at multiple points in their user journeys, ultimately driving them to sustained DVR ring use.
### Key challenges for ring uptake in Eswatini

The problems outlined below are the most common challenges to ring uptake that were identified during our study. These problems are not presented in any particular order and may occur independently or in tandem.

<table>
<thead>
<tr>
<th>PEOPLE AREN’T AWARE OF THE RING IN ORDER TO DEMAND IT</th>
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<tbody>
<tr>
<td>Lack of awareness about prevention products.</td>
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<tr>
<td>There is also general lack of knowledge about HIV prevention, particularly among young people (15–24), in Eswatini.</td>
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<tr>
<th>WOMEN ARE CONCERNED ABOUT SIDE EFFECTS — UNLESS THEY KNOW OTHERS WHO HAVE USED THE RING OR HAVE BEEN COUNSELED EFFECTIVELY</th>
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<tbody>
<tr>
<td>Major concerns from both women and men were around side effects of the ring and the spread of misinformation regarding the ring.</td>
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<tr>
<td>Despite being told the ring has no reported side effects, they are still concerned about them, possibly because of associations with other medical products, e.g., family planning.</td>
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<tr>
<th>WOMEN LACK SUPPORT FROM THEIR PARTNERS WHO INFLUENCE THEIR DECISION-MAKING AROUND THE RING</th>
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<tr>
<td>In order for a woman to continuously use the ring, she needs to have buy-in from her partner and provide accurate information about the ring.</td>
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<tr>
<td>However, the fact that the ring can remain undetected by partners is particularly attractive for some of the women who have agency over their sexual health.</td>
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<tr>
<th>WOMEN ARE STIGMATIZED BY THEIR COMMUNITIES FOR HEALTH-SEEKING BEHAVIORS</th>
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</thead>
<tbody>
<tr>
<td>The need to destigmatize the use of HIV prevention products is really important for the uptake of new products.</td>
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<tr>
<td>Women, particularly those living in rural areas, are worried about how they would be perceived if people knew they were using the ring.</td>
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</table>
Primary Findings

To develop these recommendations, we conducted stakeholder interviews, focus group discussions with members of target audiences, a quantitative survey, and co-design workshops with target audience members, influencers, and stakeholders.
**Quantitative Survey**

**Methodology**

- Respondents were recruited from various neighborhoods in 5 different locations in Eswatini.
- Enumerators approached every 5th or 8th person or household, depending on population density, and administered an eligibility screener. Those who met the criteria were recruited for the study.
- Randomization factored in demographic characteristics such as age and marital status to ensure good representation in the sample.
- A quantitative survey was administered in-person to 400 eligible women ages 18–45 years, including a subsample of 50 sex workers.

*Detailed report available upon request*

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**Key Findings**

- A majority of the women in our sample responded positively to the ring. 66% of them would use the ring if it were offered to them today, mainly because the ring offers protection against HIV. Though the overall response was positive, it was lower than that in Kenya, South Africa, Malawi, and Zimbabwe, where we have done similar work.

- The ring is more appealing to women living in urban or periurban parts of Eswatini. Only 56% of women in rural areas are likely to use it, compared to 75% of the women from urban locations in Eswatini.

- The ring is more appealing to younger women (18–29). Younger women are more likely to use the ring than older women in Eswatini. This trend is similar to those in other countries across Africa where we carried out similar studies.

- The main barriers to using the ring are concerns about the ring’s efficacy, perceived side effects, concerns about the ring dislodging, and concerns about insertion of the ring.

- The main levers for using the ring are the ring’s ability to provide protection against HIV and that the ring can be used discreetly (can be hidden from partner), is under the user’s control, and can act as a backup method.

- COVID-19 has impacted health-seeking behavior. Respondents who felt overwhelmed, anxious, or depressed and who also had less social support and access to healthcare services stopped seeking HIV prevention healthcare.

- However, a majority of the respondents are more likely to use the ring now than they would have been before the pandemic.
**Co-Design Workshops**

**Methodology**

- We facilitated 2 6-hour co-design and prioritization workshops with potential ring users in both rural and urban areas.
- Additionally, we facilitated 2 4-hour co-design workshops with male influencers in both urban and rural locations.
- The 4 co-design workshops led to the generation of more than 60 ideas.
- These ideas were then passed through multiple iterations.
- Final ideas were prioritized and further developed based on the feedback from the dissemination workshops.

*Detailed report available upon request*

**Key Findings**

- All women participating in the workshops had ambitious aspirations for themselves and their futures, such as wanting a higher level of education, running their own business, being successful business owners, and maintaining healthy lifestyles. Women from urban areas also exerted greater agency compared to women in rural locations.

- To appeal to women in urban areas, it is important to highlight that the ring is controlled by women. Women also expressed a desire to belong and indicated peers as key influencers. Leveraging in-group bias, where women similar to them are using a product, is likely to increase demand.

- Women in the rural areas of Eswatini would need information on how the ring works in terms of preventing HIV. This includes how long the ring must stay in a woman’s vagina as well as the information on the side effects of the ring. The discreet nature of the ring is important to women in rural areas. Therefore, emphasizing the discreetness of the ring and that the partner would not be able to detect ring during sex would enhance the positioning of the ring.

- Men from urban locations found brands such as “Nike, Puma, Vessage, Adidas” very appealing, making them “feel on top of the world” or symbolizing “quality.” Most men agreed they frequented taverns and sports’ bars where they met their peers. Other sources of information included clinics, Google (online platforms), or mass communication channels.

- Men in the rural areas of Eswatini would need information on how the ring works in terms of preventing HIV acquisition among women. There is a need to emphasize that by providing HIV protection for their partners, the ring can also reduce the chance that a man will be exposed to HIV. Emphasizing that the ring does not have any side effects for men and does not affect their sexual pleasure is important information.
Prototype Testing

Methodology

- We conducted 8 focus group discussions (FGDs) with end users (women) and male influencers drawn from urban and rural areas in Lubombo, Manzini, and Shiselweni Regions.
- Data were collected in person. Respondents were a mix of male and females ages 18–45.
- We collected feedback on the feasibility, desirability, and viability of each idea.
- The final ideas were refined based on the user testing.

Detailed report available upon request

Key Findings

- **Power and agency**: The participants expressed preference for prototypes that showcased that women had agency over their sexual and reproductive health. These were prototypes that had slogans expressing sexual freedom and highlighting the power of the ring in helping to protect women from HIV infections.

- **Concerns over safety and side effects of the ring**: Consistent with the dissemination workshops and findings from other countries, women suggested that the prototypes should include all the possible side effects of the ring listed. In addition, women wanted clear illustrations on how to use the ring. Men were concerned that the ring might lead to reduction in sexual pleasure and also wanted the side effects clearly addressed in the prototypes.

- **Convenience**: The findings suggest that women liked prototypes that allow them to access information about the ring in time without delays. This was mostly about being able to get information about how to use the ring and any side effects they might experience, and how to deal with such concerns. Women also liked the convenience that the ring offered because they could insert it at their homes without requiring any assistance.

- **Privacy**: Mostly rural women and young urban women expressed a desire for privacy and confidentiality in their use of the ring. These findings were similar to those in other countries such as Kenya and Zimbabwe, and may be attributable to the stigma associated with HIV.

- **Social proof**: In most prototypes, young women wanted some social proof and interactive two-way communication for them to feel confident about using the ring. For about every prototype, they asked for testimonials and contact details they can use for more information.

- **Authority bias and credibility**: The findings indicate that the participants expressed greater trust in testimonials with quotes and images of healthcare workers. Generally, both men and women expressed a liking for prototypes with images that looked more natural.
Recommendations

The interventions designed take into account feedback and considerations from all the phases of work — segmentation, co-design workshops, and testing — in order to refine them for final implementation.
Interventions to increase awareness and demand for the ring
1. Expose information about the ring with general posters

NOTE: The ring reduced the likelihood of HIV acquisition by approximately 30% in Phase III trials, and modeling of results from follow-on studies suggest that the ring can reduce the chances of HIV acquisition by about 50% with consistent use. Because the activities described within this report were conducted by the product developer, all communications with participants utilized the 30% efficacy level confirmed in the Phase III trials in order to comply with regulatory guidelines.

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.
Exposé information about the ring with general posters

**DESCRIPTION OF INTERVENTION**

The use of posters is included as a clear representation of images and messages that can be employed in increasing the demand for the ring. Given the versatile nature of posters, our consideration for Eswatini is their use in both online and offline channels, with an emphasis on offline channels.

Including pictures of the ring on the posters can help the end users have a sense of the look and feel of the ring. This can combat negative perceptions of the ring, especially around ring size.

Pictures on the posters should range from young women/men to older women/men to target all age groups who are potential users of the ring.

The posters should include educative information about the ring targeting both men and women. Using pictures of male partners who support the ring can increase awareness and demand.

**BEHAVIORAL INSIGHTS**

**Remove Hassle Factors**
Ensure that once a woman has the intention to use the ring, there are no barriers that lead to further procrastination/fear of initiation.

**Social Proof**
Showing pictures of women that end users can identify with creates a sense of social proof of using the ring and can help reduce stigma.

**KEY INSIGHT**

- Most women identified with the images of women on the posters and felt seen through them.
- Include women representing different age groups and body types was key.

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**TARGET POPULATION**

Women  
Men

**BARRIERS TO OVERCOME**

Stigma  
Lack of knowledge
1. **Expose information about the ring with general posters**

**KEY FOR IMPLEMENTATION**

Position the ring as an alternative HIV prevention method. Some men reported that they would support their partners to use the ring because that would protect them from HIV infection in case they engaged in sex without any other form of protection. However, it is imperative to emphasize during positioning that the ring is not a replacement for other methods, but a complement to already existing HIV prevention methods. *This can be included as a simple statement across all prototypes.*

Increase the legibility of content. Participants would like the font size on the posters to be increased to make the information easier to read. In addition, enlarging the font will ensure that they don’t miss important information.

Use brighter colors. The colors of the posters were described as dull. Participants recommend that brighter colors be used to make the posters more appealing.

Include information about side effects. Both men and women were interested in knowing the side effects of the ring. Thus, it is imperative to address concerns about side effects and emphasize that the ring does not interfere with sexual pleasure.

**MOTIVATORS FOR USE**

**Empowering message for women**
Both rural and urban women were happy that the posters referred to a woman’s choice and her protection, both being empowering messages for women.

**Source of HIV information**
The rural male participants appreciated the poster for providing information about HIV. They would be happy for their partners to see the posters so that they are all protected.

**Social proof messages on the efficacy of the ring**
Among both men and women, the participants reported that they would support the initiation of the ring if they heard success stories from women who have already used the ring.

**FURTHER EXPLORATION**

1. Using images representing women with different age groups and body types
2. Adding pictures of couples as well
2. Increase the salience of the ring by placing banners in major locations.

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.*
2. Increase the salience of the ring by placing banners in major locations

TARGET POPULATION

Community

BARRIERS TO OVERCOME

- Lack of sensitization
- Stigma
- Norms around HIV

DESCRIPTION OF INTERVENTION

The design of the banners is created to be more generic to enable the dissemination of messages across the health domain — including norm-related information around the use of other HIV prevention methods — to create awareness and normalize conversations.

The banners should be permanently positioned (with a replacement for the visual image every 4 months, to create novelty and attract attention) in offline channels. For online channels, the banners should be placed in sites most frequented, such as Google and YouTube.

Information on the banners should include compatibility with other HIV prevention methods to ensure the ring is seen as an addition to other methods.

Adding pictures of public figures who endorse the ring alongside pictures of the ring would resonate better with the target audience instead of plain words.

BEHAVIORAL INSIGHTS

Injunctive Norm Mechanism

Using the voices of public figures could act as a popular reference point for community perceptions surrounding the ring. Endorsement of positive messages by public figures could support reduced community stigma regarding HIV in general.

KEY INSIGHTS

- Include additional information on the banners.
- Use publicly known faces and influencers on the banners.
- Use pictures of the ring on banners to give the target audience an idea of what it is.
- Avoid sensitive wording such as “vaginal” on the banners.
- Use brighter colored backgrounds on the banners.
2. Increase the salience of the ring by placing banners in major locations

MOTIVATORS FOR USE

Short and straightforward quotes
Male influencers were impressed by the short, straightforward quotes on the banners.

Pictures increases understanding of the ring
The banners with pictures of the ring were preferred by both women and male influencers because they are able to quickly identify what the poster is talking about and what the ring looks like.

Diversity shows ring targeted to all women
The different body sizes of the women shown in the posters signaled that the ring is targeted to a diverse audience.

KEY FOR IMPLEMENTATION

Enhance the visual appeal and legibility.
Using brighter colors on the background would encourage many people to be interested in the information on the banners, and increasing the font size would make the information easier to read.

Include more information about the ring.
Adding details on how the ring works, insertion and removal, side effects, and how long the ring stays in the body would help spark interest in the ring.

Include pictures of the ring.
Including pictures of the ring and specifically with the women holding the ring would give the community an idea of what it looks like and who it is for.

FURTHER EXPLORATION

1. Place banners on well-kept billboards and buildings.
   In order to attract more attention, male influencers would prefer the banners to be placed on well-kept infrastructure instead of dilapidated buildings like those on the banner prototype.

1. Place banners near hospitals and health facilities.
   Placing the banners near health facilities was suggested as a way to encourage interested end users to visit professionals nearby to find more information about the ring.
3. Share in-depth information using a brochure

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.

**WHAT IS THE DVR?**

The dapsone vaginal ring is a small ring that is inserted into the vagina (similarly to a contraceptive ring) and releases dapsone, an antiretroviral drug, slowly over the course of one month.

It is woman-controlled (a woman inserts and removes the ring herself) and releases dapsone locally in the vagina with very little of the drug being absorbed by the rest of the body.

**FACTS ABOUT THE RING**

- The DVR should be replaced after a month.
- The ring should be offered only after comprehensive counseling on safer sex practices and a discussion on the most effective and safe option of HIV prevention tools suitable for the women to consistently adhere to using it.
- It should always be used with condoms.
- The Dapsone Vaginal Ring alone is not fully effective in reducing the risk of HIV-1-acquisition. In the clinical Phase III program there was a reduction in HIV-1-acquisition of approximately 30%.
- The ring has limited to no side effects.

**WHERE CAN I GET A RING?**

The ring is available at any time through your healthcare provider, or at any pharmacy.

**FAQs**

How does the ring work?
The ring contains a medication called dapsone that reduces the chance of HIV-acquisition during vaginal sex. The medicine is released from the ring slowly over one month.

Should I remove the ring before sex?
No. The ring reduces the chance of HIV-acquisition during male to female vaginal sex. It is possible that your partner may feel the ring during sex; the ring will not harm you or your partner.

Can I use products to cleanse my vagina while using the ring?
No. Cleaning the inside of the vagina with soap or other products may cause harm and may affect the ability of the ring to reduce the risk of HIV-1-acquisition.

Does the ring prevent pregnancy?
No. The ring only reduces the chance of HIV-1-acquisition during vaginal sex; it will NOT prevent you from getting pregnant.

What to do if I suspect that I am pregnant?
Remove the ring and contact your clinic immediately for advice. Discuss other HIV prevention methods with your doctor.

Can I use the ring with contraception/birth control?
You should use the ring with male or female condoms and all other forms of contraception that do not need to be inserted into the vagina. DO NOT use the ring with other vaginal rings or diaphragms. If you are unsure, contact your clinic/doctor.
DESCRIPTION OF INTERVENTION

Booklets/leaflets are unique because they contain more detailed information, are take-home materials, and can serve as a way to help women initiate conversations with their partners. These booklets/leaflets with core information about the ring can encourage women and men to refer to the other sources or touchpoints about the ring and can answer some of their questions.

Brochures can be developed targeting different end users with specific messaging. For example, some brochures can be developed with information that specifically targets female sex workers, while others can be tailored for other users.

Pictures used in the brochure should cover both younger and older women to signal ring use is open to both young and old.

TARGET POPULATION

Zama (Concerned Women)
Selina (Trusting Wife)

BARRIERS TO OVERCOME

Lack of information
Discomfort with insertion

BEHAVIORAL INSIGHTS

Remove Hassle Factors
Ensure that once a woman intends to use the ring, there are no barriers that lead to further procrastination/fear of ordering.

Salience
It is important that the information be visible to prospective users, so that they can start considering ring use when the moment of decision arrives.

KEY INSIGHT

Most participants liked the brochures because they include information that addresses concerns women might have about the ring, but there was a general feeling that the use of an image of an older woman created the impression that the ring is used only by older women.
KEY FOR IMPLEMENTATION

Use the image of a younger woman.
The young women and men reported that the use of an image of an older woman created the impression that the ring was only for older women. Thus, they wanted the image replaced with that of a younger woman.

Use language that appeals to readers.
Both men and women highlighted that the brochures look a bit crowded and less interesting. They suggested using language that appeals to the target audience.

Include contact details for follow-up.
The participants suggested that the brochures should include the contact details and address(es) in case they needed to ask questions about the ring.

Enhancing the visual appeal of the content.
Both men and women reported that the brochures were not visually appealing or easy to read due to the small font used. Thus, they suggested improving the brochures by replacing the image used with that of a younger woman, using more bright colors, and increasing the font size of the content.

FURTHER EXPLORATION

1. Test content in different local dialects and see what works.
2. Use images of younger women and assess how it changes people’s decisions about ring uptake.

MOTIVATORS FOR USE

To help a prospective ring user to make a decision on initiation
Some participants reported that the information on the brochures was important in helping women interested in using the ring to make the initiation decision.

As prompts for questions to providers
Some participants suggested that women interested in using the ring could use the information contained in the brochures as prompts to seek more information relating to their interest in using the ring.

Social proof messages from ring users
Women also mentioned they needed to hear testimonial stories of other women who have used the ring and statistics showing many people have used the ring and their success stories.
Interventions for people who lack support from their partners
4. Provide conversation starters and information about the ring for support through talking cards.
Provide conversation starters and information about the ring for support through talking cards

TARGET POPULATION

Women
Men

BARRIERS TO OVERCOME

Lack of understanding around the ring
Partner support

DESCRIPTION OF INTERVENTION

The “talking cards,” which are intended to serve as inspiration prompts, help with questions that arise in conversations about the ring for women who are more open to disclosure but do not know how to have the conversation with their partners and families. The cards can be distributed to women and influencers and can be carried wherever they go.

Providing online versions of the cards can be an alternative to physical cards. They can be posted on online platforms such as whatsapp or can be integrated in an online platform such as U-Report.

Include information about the mechanism of the ring, side effects, insertion and removal, effects on sexual pleasure, and disposal of ring. These are the most frequently asked questions about the ring.

BEHAVIORAL INSIGHTS

Social Cooperation
For women with a positive partner dynamic, encouraging partner conversations about the ring can address underlying misconceptions around ring use, such as promiscuity and trust.

Careful Use of Gain & Loss Framing
Like family planning decisions, decisions about using HIV prevention methods are important for all individuals in a relationship, so it is important to involve men too.

KEY INSIGHTS

- Including additional information on the cards would be essential.
- Cards in the local dialect would reach a wider audience and include those who cannot read English.
- Include cards that have content targeting men as well.
KEY FOR IMPLEMENTATION

Include contact details for health organizations.
In order to increase the credibility of the talking cards, including the health organizations that endorse the information, as well as their contact details for additional information, would be useful.

Add a variety of cards that also target male influencers.
The cards currently have information mostly targeted to women; including information targeted to men or the general public would increase their appeal for men.

Include more information about the ring.
More information about what the ring is, how it works, and illustrations on insertion and removal as well as side effects would improve the cards and make them more useful to both end users and male influencers.

Include copies of translated cards.
Having a set of cards in the local dialect would include those who do not read English as a target audience of the cards.

Enhance the visual appeal and readability of the talking cards.
The font used in the cards should be increased to enhance readability. A good balance between textual information and use of illustrations, as well as a brighter color palette, would enhance the visual appeal of the cards.

FURTHER EXPLORATION

1. Make the talking cards shareable on social media.
To increase those reached in the target audience, the talking cards can be made available on social media in a format that is easy to access, download, play, or share.
5. Promote partner support through the couples posters

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.
5. Promote partner support through the couples posters

DESCRIPTION OF INTERVENTION

The couples posters are aimed at bringing men into the conversation about the ring and speaking to their fears about sexual pleasure and protection. Showcasing couples and messaging around pleasure can alleviate concerns and create supportive environments for women.

Ensure the wording on couples posters is inclusive of both men and women. Show the collective responsibility of the couple in protecting themselves from HIV.

Include pictures of both older and younger men in the posters to ensure no age group is left out. Consider the size of the font to ensure the important and informative message is in a font large enough to be read.

TARGET POPULATION

- Zama (concerned woman)
- Men

BARRIERS TO OVERCOME

- Lack of supportive environments
- Effect on sexual pleasure

BEHAVIORAL INSIGHTS

Social Peer Pressure

Reinforcing social peer pressure influencers such as men should support women choosing the ring because they are protecting the family and/or relationship as a whole.

Positive Identity

Good partners support a partner’s choice to use the ring.

KEY INSIGHTS

- Partner support is essential for ring uptake.
- Additional information and contact details can increase trust in posters.
- Social proof can be included in posters through testimonials from partners.
5. Promote partner support through the couples posters

KEY FOR IMPLEMENTATION

Include pictures of the ring on the posters.
Both women and men wanted the posters to include pictures of the ring and specifically with women holding rings. They would like to get an idea of what the ring looks like and who it is for.

Include contact details on health organizations.
Women wanted the posters to include the logos of and information on the organizations that endorse the ring, including contact information.

Change font in posters to increase legibility.
Increasing the size of the font used for the messaging and quotes in the posters and making them bolder would increase readability.

Include pictures of realistic couples.
The participants would like the couples on the posters to look more intimate, as opposed to standing next to each other as friends.

MOTIVATORS FOR USE

Happy couples showcased on the poster
The participants liked the smiling pictures on the posters showing a happy couple who use the ring.

Testimonials from other users
Most men were willing to support their partners to use the ring if they heard success stories about the ring from other users.

Information on ring having no effects on sexual pleasure
Women were concerned that their partners would be worried about the effect of the ring on sexual pleasure; however, a couples poster addresses that concern.

FURTHER EXPLORATION

1. Try to include pictures of older women and older couples.
2. Endorsement of the poster from a known organization could increase people’s trust in the ring.
Interventions for people who are concerned about ring side effects and misconceptions
6. Share facts about the ring through myth-busting campaigns

**FACT**

DID YOU KNOW THE RING **CANNOT** GET LOST INSIDE YOU?

The ring cannot be pushed up too far or get lost in the body as it sits near the cervix and fixes itself. Any activity can be performed with little or no discomfort.

**FACT**

THE RING **DOES NOT AFFECT** SEXUAL PLEASURE

Prior studies have shown that the ring has little to no effect on sexual pleasure and cannot be felt by male partners. As the ring sits on the cervix, it cannot be pulled out during sex and offers protection for the women against HIV.
6. Share facts about the ring through myth-busting campaigns

TARGET POPULATION

- Women
- Community

BARRIERS TO OVERCOME

- Addressing misconceptions

DESCRIPTION OF INTERVENTION

Run a myth-busting campaign on radio and print and social media to deal with side effects and other challenges associated with ring use. This campaign would target men more than women to help dispel their fears based on traditional beliefs. The aim is to offer a basic level of understanding to ensure that male partners do not become a hindrance to women using the ring while also reducing hesitancy among women.

Addressing major concerns about the ring and presenting answers to frequently asked questions would be essential in these campaigns. For example, the misconception that it is harmful to insert the product in the vagina is one of the major concerns in Eswatini and should be dispelled in myth-busting campaigns.

Phrasing the facts as questions such as, “Did you know...?” can help spark curiosity among potential end users. These include both those who hear of the ring for the first time and those who know about the ring and are interested in more information.

BEHAVIORAL INSIGHTS

Status Quo Bias
Highlighting that ring use will not change a woman’s lifestyle or existing relationships — particularly sexual relationship — can increase interest in using the ring.

KEY INSIGHTS

- Localize myths by using key words or community slang for greater appeal.
- Framing facts about the ring as questions can help spark curiosity about the product.
6. Share facts about the ring through myth-busting campaigns

KEY FOR IMPLEMENTATION

Frame the facts as questions.
This can be a way of educating the community, e.g., “Did you know the ring cannot get lost in the vagina?”. Such questions can also spark curiosity among both men and potential end users.

Leverage influencers.
Key opinion leaders and influencers can be leveraged to communicate the facts about the ring. Distribute the information in health facilities and clinics to allow follow up conversations with healthcare providers.

Use illustrations.
Illustrations will improve ease of understanding and help reach illiterate populations. In testing, rural women were particularly happy with visuals alongside the messaging.

Disseminate through all channels.
Women mentioned they were afraid of using ring due to some of their preconceived notions. However, once they saw the posters and heard the radio segment, they were more curious to learn about the ring. Dissemination should be through multiple online and offline channels, such as social media, community centers, places where both men and women convene, and bus stops.

MOTIVATORS FOR USE

Sparks curiosity to learn
Urban women believe that once people see the posters, it will spark their curiosity to discuss the ring and use internet resources to find more information.

Myths are effectively addressed
Highlight key information to dispel misconceptions and provide tangible steps to address them.

FURTHER EXPLORATION

1. Conduct further research to understand the kind of beliefs that exist within communities. Differences across locations should be considered when designing the campaigns.

2. Consider video and audio versions of the campaigns to reach those who cannot read and expand the target audience.

3. Engage celebrities to share facts through the myth-busting campaigns, especially on social media.
7. Organizing peer discussions between women & men to discuss HIV and the ring

I was worried it would affect sex, but after my girlfriend got it, nothing changed.

I felt so silly inserting it myself the first time...

Yes! But then after you’ve put it, you don’t even feel it.

It’s about time we had HIV prevention that was in our control, not of men.

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.
Organizing peer discussions between women & men to discuss HIV and the ring

7.

DESCRIPTION OF INTERVENTION

Create peer discussion groups among community members from similar areas or age groups to discuss HIV and the ring. People are interested in hearing from others like them, and this can be effective at reducing stigma/perceived awkwardness.

Sharing information in small groups of peer who know each other increases relatability, which can in turn increase demand for the ring.

Peer discussions have a higher likelihood of diffusion with regards to encouraging demand for the ring and passing on information about the ring. Natural leaders in the community can serve as peer educators, because they are part of the target group and are assumed to have a level of trust and comfort with their peers that will allow for open discussion.

Peer discussions might be useful, especially among female sex workers, because peer educators might have better access to this population, which may have limited visibility and interaction with more traditional health programs.

TARGET POPULATION

Zama (Concerned woman)
Community

BARRIERS TO OVERCOME

Addressing misconceptions

BEHAVIORAL INSIGHTS

Social Proof: People are more likely to use the ring if they believe their peers are doing so as well. It may be helpful to demonstrate the norm in an alternative reference group (such as other women).

💡 KEY INSIGHTS

- Discussions should include both men and women to signal solidarity and collective action.
- Peer discussions increase relatability among the group and can encourage demand for the ring.
- Leverage community leaders to act as peer educators to increase the perceived validity of information.
7. Organizing peer discussions between women & men to discuss HIV and the ring

EXPECTED MOTIVATORS FOR USE

Success stories
Women listening to the success stories of other women will feel comfortable using the ring and can clarify any misconceptions they have had about it.

Being able to relate
Peer discussions may enable women to be able to relate to others, which will build trust among them. Hence, one person’s decision to use the ring will influence everyone else to do so as well.

SUGGESTED KEY FOR IMPLEMENTATION

Convene smaller groups.
Larger groups may lose proximity and may find it more difficult to form close bonds and make women feel comfortable sharing their experiences. It would also be preferable to keep the groups smaller to maintain confidentiality and confidence while discussing sensitive topics.

Provide inter-group diversity and intra-group similarities.
Inter-group diversity will ensure all women are catered to, and intra-group similarities will make it easier for women to communicate with and relate to each other.

Train community leaders.
Training community leaders to act as peer educators among the peer groups will increase the validity of the information and the chances of the right information being shared during discussions.

FURTHER EXPLORATION

1. Create virtual peer discussion spaces for women and men to learn from each other in a private manner.
2. Consider variations of formal and informal peer discussion sessions and test the effect of both before implementing.
3. Leverage already existing groups, such as women’s saving groups, to introduce discussions about the ring and HIV prevention methods in general.
8. Share testimonials from others who are using the ring

**THE RING ALLOWED ME TO TAKE CONTROL OF MY HEALTH WITHOUT WORRY OVER GETTING HIV**

Who say’s you can’t enjoy sexual pleasure while keeping yourself protected against HIV?

The dapivirine vaginal ring lowers women’s chances of contracting HIV by up to 30%. The ring has little to no side effects and does not affect sexual pleasure.

Talk to your healthcare worker about getting one today.

---

**I BARELY EVEN NOTICED THE RING WAS THERE DURING SEX!**

Who say’s you can’t enjoy sexual pleasure while keeping yourself protected against HIV?

The dapivirine vaginal ring lowers women’s chances of contracting HIV by up to 30%. The ring has little to no side effects and does not affect sexual pleasure.

Talk to your healthcare worker about getting one today.

---

**PROTECTION IS IMPORTANT BOTH FOR MEN AND WOMEN**

The ring gives the power of sexual freedom back to women.

The dapivirine vaginal ring is the first ring earning HIV prevention product for women, lowering their chances of contracting HIV by up to 40%.

Talk to your healthcare worker about getting one today.

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.*
DESCRIPTION OF INTERVENTION

Identify and recruit a diverse range of women and men from different backgrounds who have used the ring and are willing to share their experiences with it. The testimonials should showcase empowerment for users and the ring as a lifestyle choice and should bear affirmative captions connected to perceived future self for key populations. Given concerns about side effects and sexual pleasure, the testimonials should include details on these to alleviate these worries.

Testimonials from public figures and celebrities can be included to increase trust in the ring. Pictures of the influencers can be used to ease identification with the community.

Some targeted posters should be designed to address female sex workers and the experiences they have had with the ring. These posters should be placed in popular places such as taverns to reach the intended target audience efficiently.

BARRIERS TO OVERCOME

- Side effects
- Partner support

TARGET POPULATION

- Tinah (ring advocate)
- Men
- Zama (concerned woman)

BEHAVIORAL INSIGHTS

Descriptive Social Norms
In situations where a person doesn’t know what to do, information (presented through testimonial posters) on what others like them are doing might help.

Social Cooperation
For women with a positive partner dynamic, encouraging partner conversations about the ring can address underlying misconceptions around ring use, such as promiscuity and trust.

KEY INSIGHTS

- Use figures of authority to endorse the ring and give testimonials.
- Include a diverse set of individuals in testimonials to increase the relatability of the information.
8. Share testimonials from others who are using the ring

MOTIVATORS FOR USE

Partner support in ring use
Partner testimonials for buy-in on the ring and showcasing other men interested in the ring

Information on the ring having no effects on sexual pleasure
Women were concerned that their partners would be worried about the effect of the ring on sexual pleasure; however, a couples poster addresses the concern. The men also like the poster's information on the ring not affecting sexual pleasure, which is important to them.

KEY FOR IMPLEMENTATION

Use authority figures.
Using a figure of authority and knowledge, such as a nurse or doctor, increases the credibility of the testimonial posters due to authority bias. Such individuals should be used on the posters.

Ensure diversity in testimonials.
When developing testimonial posters, ensure those giving the testimonies are representative of a variety of ages and locations. The images used should also be diverse to increase the relatability of the information in the posters.

Build a virtual community and campaign.
This will allow people to share their real experiences with using the ring to encourage transparent conversations.

Provide additional information.
The testimonials should be accompanied by additional information about the ring, especially for individuals who are not familiar with the ring and for those interested in more information about the ring.

FURTHER EXPLORATION

1. Celebrity endorsements through posted testimonials of their own experiences using the ring could increase confidence in the ring.

2. Create private support groups, online and offline, where women can share their stories and learn from others.

3. Create video and audio versions of the testimonials in a storytelling format to make the information more interesting and entertaining, as well as accommodating those who cannot read.
Interventions for people who are seeking validation from their community
9. Put up murals for signing to show community commitment to actively seek protection against HIV.
Put up murals for signing to show community commitment to actively seek protection against HIV

TARGET POPULATION

Community

BARRIERS TO OVERCOME

Stigma   Lack of support

DESCRIPTION OF INTERVENTION

A public commitment, made visible through a signature campaign, represents a pro-normative endorsement for the ring. Community members are asked to come together to sign a shared promise to protect the community against HIV and protect all. The idea is based on the belief that making a public commitment to protect their community from HIV infections can motivate those at risk to use the ring and help mitigate the stigma associated with HIV infections and ring usage. This form of pre-commitment can help people follow through on goals when they create a plan and intent that can help keep them on track.

The mural can be placed in various areas within Eswatini in key cities. A poster can be put up in the location where the pledge was made and in other areas within the community to maintain its salience.

BEHAVIORAL INSIGHTS

Injunctive Norm Mechanism: To use soft expert power and institutionally signal the norm, individual's social referents (i.e., community leader) would openly declare the endorsement of the ring as something that is expected of them and is mutually shared by the rest of their community. This act could also align with the safety-in-numbers belief and assuage the fear women have of being stigmatized.

● Using familiar faces and public figures on the boards would encourage people to sign.
● Including more information about the ring on the boards would be more effective.
● Place mural in medical facilities and in general public areas.

KEY INSIGHTS

9. Put up murals for signing to show community commitment to actively seek protection against HIV

KEY FOR IMPLEMENTATION

Include pictures of the ring.
A picture of the ring would make the concept of the ring clearer because it would help potential end users as well as male influencers know what the ring looks like.

Use brighter colors for board background.
Using brighter boards to make the boards stand out and be more appealing to the public would be ideal, to draw attention to them. Participants expressed the background being too dull as a concern.

Include more information about the ring.
More information about what the ring is, how it works, and contact details to access more information would encourage people to show interest and sign the board, because they will be well informed about the ring.

Use local faces that are relatable to the people of Eswatini.
Natural-looking photos the people of Eswatini can relate to should be included in the murals for the potential end users and male influencers to "see themselves" in the boards and feel they are the target audience of the product.

MOTIVATORS FOR USE

Social proof from the community supporting ring use
The signatures on the murals are a signal of support for the ring. Women expressed feeling encouraged to use the ring if they note that the community supports and likes the ring.

Signatures on the mural suggest ring use as a social norm
Creating a social norm around HIV prevention methods, such as using the ring, could encourage many women to take up the ring.

Appeal to sense of community identity and responsibility
Participants liked that the mural depicts stopping new HIV infections as a duty shared by all community members.

FURTHER EXPLORATION

1. Including celebrities and known individuals to endorse the ring on boards.
Using celebrities as influencers, as well as publicly known figures, to endorse the ring: the popularity and trust of these individuals would encourage ring uptake.

2. Place mural boards in popular areas to attract more signatures and normalize the ring in the community.

3. Introduce pledges on social media that include people posting pictures of their signatures on the mural boards and supporting use of the ring.
Host: Hello my name is Ndumiso, and thank you for tuning in! Today is a special day as we’re joined by a professional in the studio who is going to talk about HIV prevention. Welcome to the show, Dr. Simphiwe.

Dr. Simphiwe: Hello! And thank you for having me.

Host: Now doctor, you know me, straight to business. Just before we went on air, you were telling me about this new form of protection — a ring?

Dr. Simphiwe: Yes! The dapivirine ring is made of flexible silicone and is placed in a woman’s vagina to keep her from getting HIV.

Host: Up where? It won’t interrupt when me and my girl want to get down?

Dr. Simphiwe: *laughs* No, not at all. The ring does not affect sexual pleasure. It just slowly releases the ARV dapivirine to keep a woman protected.

Host: That sounds great. Let’s see if anyone on the lines has anything to say. Caller, you are on with Ndumiso! What’s on your mind?

Caller: Hi, my name is Sho. I’ve heard about this ring, and I just wanted to ask the doctor: People won’t think that I’m sleeping around extra now that I have the ring?

Dr. Simphiwe: Hello, Sho. Thanks for your question. You can’t control how people think. But think of using the ring like using a condom. Will you stop using a condom because someone might judge you? Or will you consider your safety first?

Caller: Thanks, doctor! I hadn’t thought of it that way.

Host: Yes Dr, doctor! That’s a fantastic way to look at it. While on this note, let’s listen to some music. When we’re back, Dr Simphiwe and I will talk more about this DVR and where you can find it.
Air radio shows to sensitize the community on ring use and reduce stigma around ring

TARGET POPULATION
Community

BARRIERS TO OVERCOME
Lack of support from key influencers

DESCRIPTION OF INTERVENTION

Produce radio scripts that focus on:

Addressing the key barriers of stigma, especially for Zama; the benefits of ring use for the family; and the decision-making power of women.

Messengers to leverage for radio:
- Mother
- Husband/Male
- Peer
- Healthcare worker

Use radio jingles and shows where the audience can call and ask questions. Consider the timing to place shows when many people actively listen to radio.

Including short plays and comedy sessions during the shows can increase listeners’ interest because the information will be packaged as edutainment.

BEHAVIORAL INSIGHTS

Authority Bias
Audiences attribute greater accuracy to the opinion of an authority figure and are more likely to be influenced by that opinion.

Salience
It is important that the information is visible to prospective ring users, so that they can start considering its use when the moment of decision arrives.

Messenger Effect
The weight decision makers give to information depends on their reaction to (the perceived credibility of) the messenger.

KEY INSIGHTS
Female-driven peer-to-peer levels of communication and information delivered from authority figures are likely to be key drivers of increasing the awareness of the ring. Message framing that is direct and open about sexual health was preferred.
10. Air radio shows to sensitize the community on ring use and reduce stigma around ring

MOTIVATORS FOR USE

Social proof
There was a general belief that because there is a doctor talking about the ring, and it is being aired on radio, the information should be trustworthy.

Perceived authenticity
The participants liked the radio clip because it seems that proper investigation and fact-checking is done before any content gets on air. Thus, it is important to leverage radio’s perceived credibility when positioning the ring.

KEY FOR IMPLEMENTATION

Piggyback on existing radio shows for young people and about health.
In order to ensure buy-in and destigmatize HIV, utilize existing radio shows catering to a younger audience in order to normalize HIV use. Opportunities could be created by leveraging existing relationships with radio stations such as university radios.

Include success stories of women.
Participants suggested women can come on the shows and share their personal experiences in the form of a story as well. This will enable people to trust the ring and gain confidence in it.

Include more information and contact details.
All audience segments, and especially women, suggested the radio clip include more information about the ring, its use, and where they can get it. They also wanted contact information included in case they have more questions about the ring.

Offer detailed Information about the ring.
Provide specific, detailed information about the ring to ensure target audiences understand how the ring works and feels.

FURTHER EXPLORATION

1. Explore different framing of radio messages, such as jingles or peer conversations, to build trust and create salience.
2. Build a radio campaign that can create a viral effect, with participants sharing their stories and experiences using the ring.
3. Explore times where listeners actively engage with content on radio to reach a larger audience.
4. Introduce segments of the radio shows where listeners can call to ask questions and win points/vouchers if they give correct responses about information related to the ring.
Interventions for people who need continuous support
11. Share up-to-date information with an interactive chatbot
**TARGET POPULATION**

Zama (the concerned woman)

**BARRIERS TO OVERCOME**

Lack of knowledge

**DESCRIPTION OF INTERVENTION**

An interactive chatbot either as an SMS or a whatsapp chatbot:

1. **SMS response system:** Using a short code, end users with USSD (Unstructured Supplementary Service Data)-capable phones can dial in and be presented with different journey points relating to the ring.

2. **WhatsApp chatbot:** A chatbot with prompt messaging offers more interactivity with potential end users, with the capabilities of media sharing and interpersonal conversations.

The chatbots could add call functions to a helpline on information about the ring in case of additional questions not found on the chatbot.

Add links to the responses that can guide the users to different webpages that offer more information specific to the questions asked in the bot.

The overall use of the chatbot is to offer support to women initiating on the ring and those continuing ring use whenever they have questions along their user journey, as well as increasing privacy and confidentiality.

**BEHAVIORAL INSIGHTS**

**Remove Hassle Factors**

Ensure that once a woman intends to use the ring, there are no barriers that lead to further procrastination/fear of ordering.

**Product Feature – Convenience**

Make it as easy as possible for her to get information about the product and its side effects.

**KEY INSIGHTS**

- Chatbots are liked due to their convenience and confidentiality.
- A chatbot should be paired with an in-person support feature.
- A chatbot should include a version in the local dialect to reach more people.
- Integrate the system with a non-automated response from a helpline center.
11. Share up-to-date information with an interactive chatbot

Motivators for use

Source of information
Both women and men were interested in learning about using the ring through the chatbot because it would help support women at the start and continuation phases of ring use.

Privacy and convenience of access to information
Participants liked that the chatbot offered them convenience in that they could use it in the comfort of their homes. In addition, women liked that the chatbot offered them privacy so they could easily ask sensitive questions without fearing stigmatization.

KEY FOR IMPLEMENTATION

Pair the chatbot with an in-person support.
Chatbots can incorporate a feature that gives users access to the contact information of an individual they can reach in case they need additional information.

Include essential information.
Information about insertion and removal of the ring and side effects is important and should be included, as well as testimonial messages that will offer social proof.

Translate content to local language.
Potential end users would like to have the content in their local language to include those who cannot read English and reach a larger audience.

Brighter colors in chatbot and bolder fonts.
The chatbot background and content should include brighter color to increase visual appeal and bolder fonts, especially for titles, for better readability.

FURTHER EXPLORATION

1. Include a voice-over narration and a video option
Including audio and video descriptions of the ring would augment the existing automated system and be a form of edutainment for users.

2. Introduce a feature that allows the users to anonymously post questions on the platform and receive information from other users.

3. Include information on other HIV prevention methods on the chatbots to encourage users to combine use of the ring with other methods.

4. Varying the sender of the SMS messages in the chatbot could be tested to optimize whether the messenger has an impact on perceptions of the information provided about the ring.
12. Leverage mobile clinics to disseminate information in rural locations
**DESCRIPTION OF INTERVENTION**

Since women trust healthcare professionals more for information, we can leverage healthcare facilities to communicate how to use the ring. These mobile clinics could be at different parts of the country with trained professionals to educate women and men about the ring. These clinics could also function as a space for peer networking where women and other target populations could learn from each other about the ring and strategies for effective use.

The clinics can target women in remote areas and rural areas with limited access to healthcare facilities.

Offering several services in the mobile van, such as contraceptive clinics and other general check-ups, could prevent stigma because it would be difficult to identify the exact service a woman had visited the mobile clinic to receive.

**TARGET POPULATION**

Selina (trusting wife)

**BARRIERS TO OVERCOME**

Lack of access  Lack of information

**BEHAVIORAL INSIGHTS**

Product Feature - Convenience

Make it as easy as possible for a woman to get information about the product and its side effects.

**KEY INSIGHT**

It takes 2 hours on average for a person living in Eswatini to reach a clinic; hence, promotion of the ring through mobile clinics could be successful.
12. Leverage mobile clinics to disseminate information in rural locations

EXPECTED MOTIVATORS FOR USE

Accessibility
A study in Malawi[1] showed that mobile clinics can be accessible to rural women. They are particularly useful for people whom other interventions might not be able to reach.

Ease of understanding
People do not have to be literate to understand and know about the ring, because the information will not only be provided in a written form.

Multiple uses
The clinic would cater to all regular uses; hence, the information about the ring could be spread to people who did not know/were not primarily interested in using the ring.

SUGGESTED KEYS FOR IMPLEMENTATION

Training doctors and nurses about the ring
Doctors and nurses can be trained about ring insertion and removal to help women who might not know how to do it themselves, giving ring users the knowledge and confidence to insert and remove it the right way.

FURTHER EXPLORATION

1. Mobile clinics could also act as a form of safe spaces for women who are afraid of speaking out about their use of the ring and as places for safe insertion.

2. Coordinate with community leaders to have the mobile clinic return to the same location on a scheduled day each week so villagers can anticipate the timing and location.

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Implementation Tips
Questions to ask yourself while using this guide

How to select the right intervention

Before diving deeper into interventions, it is important to understand your key audiences and which barriers they experience so you can develop the most effective intervention for them.

As seen across many research studies and programs, the most successful interventions target specific barriers at specific times. While this guide provides 12 recommended interventions, these interventions should be selected based on your knowledge of who the intended target population is, where the intervention will take place, and when it will take place.

You will also want to select an intervention that is feasible or easy enough to implement in your context. If it is something you have little control over or cannot implement easily, even if it is tweaked, you may want to select a different intervention.

The sweet spot
This is where you will want most of your interventions: Solutions that have high impact and are feasible to implement immediately.

Not ideal
Ideally, you do not pursue solutions with low impact. However, since these are low effort and will still have an impact on some people, sometimes these solutions can be useful.

The danger zone
Avoid this area at all costs. If something is difficult to implement for low return, it is time to move on.

The spot in the long-term
Eventually you will run out of high-impact, low-effort solutions. You should then move to the high-impact, high-effort solutions. Although these will require more effort, they will still provide good results.
Questions for monitoring interventions

Monitoring intervention during the implementation phase will help you determine if the interventions are on track and are making progress toward meeting the objectives. It helps quantify what has been done, when it has been done, how it has been done, and who has been reached. It can also help you identify any problems so that adjustments can be made. Monitoring basically tries to answer the question, “How much of what we planned to do did we manage to do as planned?”

1. Are interventions being implemented as planned and on schedule?
2. Is the target populations being exposed to the messages and interventions as planned?
3. How is the target populations reacting to the messages and interventions?
4. Has the target populations taken any action in response to the messages and activities?
5. What, if any, issues have come up since implementation?
   a. If issues have arisen, how can you address them?
6. What are the potential threats to successfully reaching your intended populations?
7. Explain any new opportunities to successfully reach your target populations.
8. Which components of the program are successfully reaching your target populations?
9. Are there any components of the program that are not reaching your target populations?
   a. How can these components be improved in order to better reach the target populations?
10. Develop monitoring indicators. (Refer to Possible Monitoring Indicators below.)
11. Indicate how you will monitor the progress of your program and how often.
Conclusion

Understanding of the ring, how it works, the segments of potential users, and their barriers to ring uptake
According to our analysis, there are several barriers to uptake of the ring in Eswatini, including lack of knowledge of the product, potential side effects or misconceptions, and lack of support. Tackling these problems will create a number of opportunities.

This guide uncovers these problems and brings forward evidence-based recommendations to solve them. It provides suggestions on implementation activities and inspiration on how the recommendations can be initiated. While it aims to be prescriptive, it is also designed to enable tailoring of recommendations to populations and local contexts. The implementation of a recommendation in one location, for example, can and should be different from implementation of the same recommendation in another location. The recommendations in this guide require contextualization and should be used only as a starting point.

As you continue with HIV programs and implementation of new products, if you implement one of the recommendations or simply have a question for clarification, please reach out to our team. Health programs can be effective only if we continue to collaborate, put people at the center of our solutions, measure what works, and learn from what does not.
About us

The Busara Center for Behavioural Economics is a research and consulting firm that applies and advances behavioral science to address the most challenging development problems in India and across Africa. Busara works with academics, policymakers, and organizations to evaluate and implement behavioral and social interventions. Busara has consistently improved its partners’ products and programs and has had policy impact across a number of sectors, including financial inclusion, health, agriculture, and governance.

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The International Partnership for Microbicides is dedicated to providing women with affordable and self-initiated HIV-prevention products they can use to protect their own health. Its mission is to develop HIV prevention and other sexual and reproductive health technologies for women and to make them available and accessible where they are urgently needed.

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Ulwazi is a client-focused organization that upholds a high degree of integrity and respect for humanity and all life forms. Ulwazi measures success through its contribution to sustainable and accurate research and through achieving excellence in our field of work. Our mission is to provide high-quality, cost-effective field research and analysis to our clients that allows them to make effective use of accurate, detailed, and clear information for decision-making for academic and planning purposes.

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Thank You!

For more information, please visit:

- [https://www.prepwatch.org/about-prep/dapivirine-ring/](https://www.prepwatch.org/about-prep/dapivirine-ring/)

PROMISE is made possible by the generous support of the American people through the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Agency for International Development (USAID) through the terms of cooperative agreement AID-OAA-A-15-00045. The contents are the responsibility of Envision FP and do not necessarily reflect the views of PEPFAR, USAID, or the U.S. Government.
A/B Test
A test that separates, isolates, and compares two versions of something ("A" against "B") to compare which of the two performs better.

Authority bias
Tendency to listen to the word of experts and value their opinion over others.

Behavior
Ways in which an animal or person acts or reacts to different stimuli.

Behavioral science
Behavioral science applies insights from scientific frameworks in behavioral economics, cognitive psychology, and neuroscience to deepen our understanding of how people actually behave.

Behavioral design
Behavioral design is a subcategory of design that is concerned with how design can shape, or be used to influence, human behavior. Behavioral design draws upon scientific frameworks and theories from behavioral science.

Choice architecture
The design of different ways choices can be presented to consumers and the impact of that presentation on consumer decision-making.

Cognitive bias
A cognitive bias is a systematic error that affects the way people make decisions. This type of error takes place when people are processing or interpreting information in the world around them. Cognitive biases are not necessarily all negative. They serve an adaptive purpose and allow us to reach our decisions quickly.

Cognitive drivers
Internal mindsets, perceptions, or emotions that reinforce or discourage a behavior.

Context
Context can consist of external (physical and social environment) and/or internal (thoughts, feelings) stimuli that people respond to and can help us understand behavior.

Contextual drivers
External systemic structures that reinforce or limit a behavior (e.g., economic incentives, market access, social norms).

Co-design
The process of creating solutions with stakeholders or end users of that solution, or gathering feedback on parts of products or services.

Descriptive norms
Descriptive norms are based on what people actually do, i.e., your perception of the behavior of the people around you.

Fidelity
A reference level of detail and functionality for a prototype.

Low-fidelity prototypes: Rough, scrappy prototypes usually designed at the initial stages to validate or test a function.

High-fidelity prototypes: Final version before development that includes refined imagery, messaging, visuals, and form.

Hassle factors
Situational features or details that make a behavior harder to perform.

Human-centered design
A process that starts with the people you’re designing for and ends with new solutions tailored for their needs. What distinguishes HCD from other problem-solving approaches is its focus on understanding the perspective of the person who experiences a problem, their needs, and whether the solution that has been designed for them is truly meeting their needs. At its most effective, the very people who experience a problem the most are a constant part of the design process and, when possible, become part of the design team itself.

How might we (HMW)
A positive, actionable question that frames a challenge but does not point to any one solution. HMW is often used as a device to prompt focus on a specific topic and generate ideas around it.

Main or primary HMW: Anchors the design process and activities by capturing the primary considerations laid out in the design challenge and highlighting their most salient characteristics.

Nested or supporting HMW: Captures secondary design opportunities and are important in complementing or supplementing the primary HMW.
**Ideation**
Generating a large quantity of ideas that the team can then filter and refine into the best, most practical, or most innovative ones in order to inspire new and better design solutions and products.

**Injunctive norms**
Injunctive norms reflect people’s perceptions of what behaviors are approved or disapproved of by others. They assist an individual in determining what is acceptable and unacceptable social behavior.

**In-depth interviews (IDI)**
A qualitative information gathering technique that probes respondents one-to-one to talk about their perspectives on a particular idea, program, or situation in detail.

**Intervention**
A single or multiple set of prototypes that are implemented to intervene and encourage a desirable change in human behavior.

**Journey mapping**
A framework that can help us strategize about the key moments for a stakeholder as they experience a solution.

**Messenger effect**
The weight we give to information depends greatly on the reactions we have to the source of that information as well as the perceived authority of the messenger.

**Nudge**
A concept in behavioral science that uses positive reinforcement and indirect suggestions to promote a more preferred behavior rather than obstruct it, without forbidding any options (e.g., reminders, personalization and simplification of information, commitment devices, norm framing).

**Prototype**
An early sample, model, or release of a product created to represent and/or test its concept, a prototype provides a tangible representation of the solution for end users to interact with and provide feedback as quickly as possible.

**Salience**
Tendency to focus on items or information that are more noteworthy while ignoring those that do not grab our attention.

**Social norms**
Social norms signal appropriate behavior and are classed as behavioral expectations or rules within a group of people.

**Social proof**
Social proof is both a psychological and social phenomenon where we tend to copy the actions of those around us to try and conform to a behavior that we believe to fit the situation.

**Stakeholders**
Anyone who has an interest in the product/service and can influence its success. For the ring, this includes: i) Governments, ii) Local authorities, iii) Implementers, iv) Suppliers, and v) Investors/Donors.

**Status quo bias**
An emotional preference for the current situation.

**User Journey**
A type of journey map focused specifically on representing the experience of the user. It is shown as a series of touchpoints along an existing or hypothetical scenario in which a user interacts with the product/service/program/system.
Appendix Part 2

How Might We Questions For Co-Design Workshops

**Brainstorm 1**

How might we increase knowledge and awareness of the ring?

1. What information would you need?
2. How can we keep users up-to-date data on Eswatini’s HIV response, as currently there is a lack of information?
3. What kind of side effects do women worry about? Where do these perceptions come from?
4. Why do women think they have a high likelihood of acquiring HIV and yet are not taking any measures to prevent HIV?

**Brainstorm 2**

How might we strengthen partner support?

1. Do you want men to be part of the conversation? If so, how?
2. How can women introduce the ring to their partners?
3. What does a conversation with their partners about condom use look like for women?
4. What is the general experience and awareness around intimate partner violence? What are the common causes of this type of violence and what actions do they take to prevent HIV?

**Brainstorm 3**

How might we reduce stigma and misinformation with the ring?

1. What kind of negative attitudes do women associate with ring use, e.g., mistrust between partners and infidelity? Is this the case with other prevention methods?
2. Can we leverage friends or social groups as channels for driving ring advocacy?
3. What is some of the prevailing misinformation that would hinder uptake or reception of the ring once it becomes available?
4. Based on the misinformation women receive, are there some prevailing myths that would become a barrier to uptake of the ring?

**Brainstorm 4**

What support would you need to help you continue using the ring?

1. What is the relationship between women and medical professionals like?
2. At what local locations and places would it be easy for women to access the ring while reducing the associated costs?
3. When would you want support? Who is providing the support?
4. What would it look like if that support was online, e.g., on your phone? What would it look like if it was offline?
Appendix Part 3

Additional Interventions

**Branded apparel**
The use of branded apparel is a traditional approach to communication campaigns for products and services. Particularly in and around health campaigns, branded apparel has been used consistently to raise awareness among mass populations with a bias of heavy usage in rural and periurban locations.

**Bundling the ring alongside other products such as contraceptives/pads**
In order to create a successful product bundle, we would need to identify potential partners and products that are relevant. Bundling the ring with other products such as pads or condoms could raise awareness about the ring.

Bundling the ring with products such as contraceptives could be beneficial because those using contraceptives are most likely sexually active. Additional information on combined use of the ring with other safer sex methods can be added to the bundled product to increase awareness.

**Community Events**
Tying ring and HIV prevention awareness activities to regular community events is an effective way to reach many people at once without creating stigma or singling out any individuals. Events such as reed dance festivals can be used to host ring promotion events, as most young females gather for the event yearly.

**Door-to-door community health worker visits**
In rural areas there is minimal or no stigmatization attached to door-door visits by a community health worker. Community health workers are recognizable, known, and trusted in communities. Community members think that these visits are beneficial because they are enlightened on health matters.

**Roadshows to inform those in remote areas about the ring**
Roadshows are also a great way to interact with both men and women, to spread awareness about the ring in-person and reach a massive audience. Similar to the use of branded apparel, this is a traditional yet consistently impactful approach in communication campaigns. Given the relative cost attached to this method, roadshows can be used less frequently but are likely to have a higher impact on our target segments.

The roadshow events can specifically target those in rural areas and small towns and can be done on busy days such as Fridays and weekends to reach more people.

*Appearance in a photo in this presentation does not indicate a person’s health status or likelihood of exposure to HIV or other viruses.*