PrEP Communications Accelerator: a digital demand creation tool for sub-Saharan Africa

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Abstract. Background: Strategic communications are critical for successful market introduction of oral pre-exposure prophylaxis (PrEP). This paper focuses on the OPTIONS Consortium’s approach to developing the PrEP Communications Accelerator, a digital tool that provides communication strategies and tools for generating demand for PrEP across sub-Saharan Africa. Methods: The PrEP Communications Accelerator was developed through needs assessment, communications landscape and gap analysis, market research and content development and testing. Stakeholder consultations across multiple African countries and audiences were conducted to validate and refine findings at each step. Results: The PrEP Communications Accelerator provides customised communications plans that vary by target audience (adolescent girls and young women, female sex workers, serodiscordant couples, men who have sex with men, people who inject drugs and the general population) and by setting (clinic, community, subnational or national level). Users of the interactive tool receive custom-built demand creation strategy guidance, including suggested media channels and communication tactics based on available evidence about the population and setting. Discussion: The PrEP Communications Accelerator is a digital demand creation tool intended to equip those who work in resource- and time-constrained environments with the evidence-based guidance needed to jump-start local demand creation efforts. The tool provides guidance on strategic PrEP communications for target audiences most at risk of HIV infection, as well as a broad profile of the general population to cultivate support for PrEP as a new public health product.

Introduction

Nike. Apple. Coca-Cola. Consumer brands use strategic marketing and communications to create an emotional connection with consumers that drives demand and loyalty for their products and services: the story of athleticism and performance (Nike), creativity and innovation (Apple) and happiness in a bottle (Coca Cola). In each case, rather than simply communicating about a product’s functional benefits, the company’s marketing strategy offers emotional appeal that drives interest, engagement and use. Public health communications have generally struggled to generate the same level of demand for health products and services. Yet, demand creation is vital to the success of public health interventions and to achieving the Sustainable Development Goal of ending the AIDS epidemic by 2030 (http://www.unpd.org/content/undp/en/home/sustainable-development-goals/goal-3-good-health-and-well-being.html#targets; accessed 10 August 2018). In the toolbox of HIV combination prevention, there is a new biomedical product category, pre-exposure prophylaxis (PrEP), with one licenced product (tenofovir-based oral PrEP), another under regulatory review (intravaginal dapivirine ring) and several others in the development pipeline (e.g. injectable cabotegravir). Market introduction of oral PrEP is in early stages, and we have the opportunity to influence demand for PrEP products through strategic communications that appeal to the desires, hopes and dreams of potential PrEP users. This paper focuses on the development of a digital tool to provide guidance on communications strategies, tactics and channels for PrEP demand creation in sub-Saharan Africa and other resource-limited settings.

Like campaigns for many other public health interventions, PrEP demand creation efforts are likely to be publicly funded and supported by national governments, donors and implementing partners with different funding limitations and mandates.
A lesson learned from voluntary medical male circumcision (VMMC) is that demand creation communications need to frame interventions to connect emotionally with users in a context that is meaningful to them. For example, VMMC messages focused on hygiene, appearance or modernity helped drive young men’s desire for the service. Further, review of VMMC demand creation efforts in seven African countries concluded that national programs need a more coordinated, holistic approach to demand creation, one that is driven by insights, gleaned from research, that reveal the underlying needs or motivations of the target audience. A coordinated, strategic approach is similarly needed for PrEP.

Conception of the PrEP Communications Accelerator

The OPTIONS Consortium is an initiative funded by the US Agency for International Development (USAID), in partnership with the US President’s Emergency Plan for AIDS Relief (PEPFAR) that works to accelerate and sustain access to antiretroviral-based HIV prevention products (collectively referred to as PrEP). The Consortium received requests from national governments to support demand creation and development of communications that promote PrEP awareness and uptake. To date, the OPTIONS Consortium has worked with governments, implementing partners and stakeholders from South Africa, Kenya, Zimbabwe and Lesotho to support the development of PrEP communications strategies and campaign materials. Based on this experience and our understanding of the support needed, the OPTIONS Consortium collaborated closely with in-country marketing and communications experts, advocates, implementers and end-users to develop a digital tool that draws on insights gleaned from user-centred market research across multiple countries and populations. The resulting PrEP Communications Accelerator provides national governments, implementing partners and other key stakeholders with effective strategies and tools for developing communications to drive awareness, consideration, use and overall support for PrEP across Africa.

NEEDS ASSESSMENT

Assess available demand creation resources and identify communications needs and information access preferences of national stakeholders

COMMUNICATIONS LANDSCAPING AND GAP ANALYSIS

Collect available information and identify preliminary audience insights and knowledge gaps about target audiences

MARKET RESEARCH

Conduct market research to address information gaps and generate key insights and audience profiles to support development of communications strategies

CONTENT DEVELOPMENT AND TESTING

Develop audience-specific strategies, audience profiles, and demand creation resources; conduct testing with key stakeholders, across target countries and user groups

Fig. 1. Methodology used for development of the PrEP Communications Accelerator.
ensure the Accelerator content and approach were comprehensive, relevant and addressed their needs. The content and design were revised based on the feedback received.

**Step 1: Needs assessment**
From July through September 2017, the OPTIONS Consortium sought to understand the current approaches and needs for PrEP demand creation. The following questions were asked: (1) what is the current understanding of demand creation approaches and planning for strategic communications for PrEP; (2) is there a need to develop regional communications guidance that can be adapted locally and, if so, who is the audience for the tool and what content is most needed; and (3) how can Accelerator users access content most easily, in a manner that is not too extensive or time consuming?

First, PrEP TWGs in the three OPTIONS Consortium-supported countries (South Africa, Kenya and Zimbabwe) were asked for input on the concept, direction, need and content for the PrEP Communications Accelerator. Next, stakeholder consultations were conducted with ministry officials, implementing partners and USAID and CDC affiliates in Kenya, South Africa, Uganda, the US and Zambia to help shape tool content, format and structure, and to identify national communication needs. Seventeen consultations were conducted with 36 stakeholders, either in groups or one-on-one, using a series of questions that helped define the wants and needs of the potential users of the tool and the challenges of communicating about PrEP in each country. The consultations also explored ideal functionalities and resources that the tool should include, as well as preferred learning styles. What we learned from these discussions was summarised in an internal eight-page report that informed the development of both the content and the format of the Accelerator.

**Step 2: Communications landscape and gap analysis**
This activity delved into behavioural market research pertaining to HIV prevention communications in Africa across populations most at risk for HIV. The objectives of the landscape analysis were to use a strategic communications framework to gather key findings for each target population and to then identify barriers, gaps and needs for further investigation of PrEP use among young women and FSW specifically. We focused on the attitudes, beliefs, motivations, aspirations, fears, behaviours and preferences regarding HIV prevention among these women and those who influence them.

Three separate landscape analyses were conducted. The strategic communications framework that guided both the types of literature and topics included in these reviews and the analysis of their results is a global communications research process used at McCann Global Health (an OPTIONS partner) and McCann Worldgroup. This framework organises market research and insights into five areas: (1) consumer or end-user (i.e. the profile, namely attitudes, beliefs and values, of potential PrEP users); (2) culture (macrolevel forces that shape people’s lives, attitudes and behaviours); (3) connections (all the possible places, moments and conversations where PrEP could earn its way into the consumer’s life); (4) category (overall dynamics and conventions of the product, as well as key competitors); and (5) company or organisation and offering (a deep understanding of PrEP and the problems it is trying to solve).

The first of the three landscape analyses, conducted in January 2016, consisted of a desk review that focused on South Africa but included literature from other countries, primarily Kenya and Zimbabwe. An additional landscape analysis was conducted in Kenya in January 2017 in collaboration with the Kenyan PrEP TWG. This analysis was expanded beyond a desk review to include consultation with 12 key stakeholders to gain a better understanding of the insights and gaps identified through the first landscape analysis. The populations of interest in Kenya included SDC, MSM and PWID in addition to AGYW and FSW, as per the request of the national PrEP TWG. Finally, we conducted a rapid assessment of the HIV prevention landscape in Lesotho in October 2017, in collaboration with Jhpiego and the national TWG. This desk review focused on AGYW and key populations and was supplemented by relevant research from the two previous landscape analyses.

Across the three landscape analyses, 214 print and web-based materials were reviewed. Materials were drawn from available published and grey literature, including research, governmental and organisational reports, news media, blogposts, working papers, white papers, evaluations, partner literature reviews, strategy documents and qualitative interview guides (to assess the type of data collected previously).

These materials were identified using the snowball method to search for key terms, including but not limited to the attitudes and behaviours of our target audiences, PrEP, HIV prevention and demand creation. Ongoing and completed microbicide and oral PrEP studies across Africa were included, as were family planning services, given the parallels between introducing oral PrEP and contraceptives. We also consulted behavioural scientists and other researchers working on PrEP in Africa, who recommended sources to include in the reviews.

The strategic communications framework was used to summarise, analyse and refine the key findings from the landscape analyses to identify gaps in the knowledge needed to develop oral PrEP communications strategies. These gaps included the need for greater understanding of how target audiences engage in preventive behaviours, the influence of male partners and how to engage men in conversations about oral PrEP and whether target audiences consider themselves at risk or make connections between high-risk behaviour and HIV acquisition.

**Step 3: Market research**
After identifying the communications gaps from the South African and Kenyan landscape analyses, we conducted mixed-methods market research in Kenya in October and November 2017. The purpose of this activity was to inform the development of the communications strategies and other Accelerator content while simultaneously providing end-user information to partners working on the Kenyan national communications strategy for oral PrEP.

Working with the National AIDS and STI Control Program (NASCOP) and other implementing partners in Kenya, the OPTIONS Consortium developed a protocol and qualitative
and quantitative data collection instruments for the market research. Study design, sample population and priority questions were aligned with national priorities and other research planned in Kenya. The FHI 360 Protection of Human Subjects Committee and the ethics committee of Amref Health Africa in Kenya reviewed the protocol and gave it a non-research determination, primarily because the results would be used to inform the development of the Kenyan national communications strategy for PrEP as well as the Accelerator. Given this non-research determination, specific findings from the market research will not be published.

The primary goal of the market research was to better understand the attitudes, beliefs and behaviours of target audiences through qualitative and quantitative findings on HIV prevention, risk perception, cultural biases and stigma. The primary target audiences included in this research were AGYW, FSW and SDC, with PWID and MSM as secondary audiences.

Field investigators identified potential AGYW participants by inquiring at randomly selected houses in randomly selected streets of the suburbs of targeted towns. Community-based organisations working with the other target audiences assisted the field team in mapping the locations for recruitment efforts, identifying potential participants and, for SDC, PWID and MSM, facilitating introductions and in some cases conducting the interviews.

All potential participants were asked for verbal permission to conduct an interview after field investigators informed them of their rights to choose whether to participate, to withdraw their participation at any time and to protect the confidentiality and accuracy of any personal data collected. All project personnel were required to sign a data confidentiality agreement before conducting interviews or handling any project data.

In the first qualitative phase of the research, trained, experienced field workers used an open-ended discussion guide to interview the AGYW, FSW and SDC target audiences. With participants’ permission, these interviews were recorded and later transcribed for analysis. The transcripts were evaluated through rigorous content analysis to inform the development of a structured, close-ended questionnaire designed to assess each of the themes and audience insights generated during the qualitative phase. Due to budget and timing constraints, abbreviated qualitative interviews were conducted just before administering the quantitative questionnaire for MSM and PWID populations (Table 1).

Both the qualitative and quantitative data were analysed and then summarised in slide presentations that were presented in detailed briefings for partners and other stakeholders. The presentations summarising quantitative findings from AGYW, FSW and MSM are available on PrEPWatch, with presentations on SDC and PWID forthcoming.

### Step 4: Content development and testing

Drawing on the landscape analyses in three countries and the market research conducted in Kenya, we developed a communications strategy for each of the five target audiences. A strategy was also developed to build awareness of and engender support for PrEP among the general population. Key components of the PrEP communications strategy for each target population included the following:

1. **Audience (Who is the audience? What do they value? What influences them?)**
2. **Problem statement (What is the core problem I am trying to address?)**
3. **Strategic idea (What is the most powerful thought or idea that addresses this problem?)**
4. **The support (What reasons can I give the target audience to support their belief in the strategic idea?)**
5. **Considerations (Is there anything else I need to keep in mind when communicating with this audience?)**
6. **Channels (What are the best ways or places to engage with this audience?)**
7. **Tips (What recommended approaches can I keep in mind when localising my demand creation strategy for this audience?)**

Once the communications strategies for the different audiences had been developed, the OPTIONS Consortium shared them with advocates, actual or potential PrEP users from the target populations, members of the general population and staff from organisations that work directly with the populations at risk of HIV. Feedback was received from 19 stakeholders in South Africa, Zimbabwe, Kenya, Lesotho, Tanzania and Uganda. Each stakeholder commented on the following questions:

- Is the strategic idea unique, relevant, and compelling for the audience and the problem PrEP can solve for them? Does it resonate or raise any concerns?
- Does the support provide a compelling rationale for our target audiences to believe the strategic idea?
- Are any pertinent facts or points missing?

Consultations were conducted primarily by telephone but, where possible, OPTIONS Consortium country partners (Wits Reproductive Health and HIV Institute, LVCT Health and Pangaea Zimbabwe AIDS Trust) conducted in-person discussions with stakeholders. Each of the six strategies was then updated in an iterative fashion, as needed, to reflect feedback from the target groups.

Other Accelerator content, such as the guidance for media planning and full audience profiles, was reviewed by additional stakeholders to ensure that gaps identified in the needs assessment were addressed and that findings resonated

### Table 1. Sample sizes for market research in Kenya

<table>
<thead>
<tr>
<th>Target audience</th>
<th>Qualitative interviews</th>
<th>Quantitative interviews</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolescent girls (15–17 years)</td>
<td>5</td>
<td>20</td>
</tr>
<tr>
<td>Young women (18–24 years)</td>
<td>5</td>
<td>80</td>
</tr>
<tr>
<td>FSW</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>SDC</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>PWID</td>
<td>100</td>
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<tr>
<td>MSM</td>
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with those who have worked extensively with these target audiences.

Overall, we spoke with representatives from 10 non-governmental organisations (NGOs) working with AGYW, FSW, PWID, SDC and MSM across six African countries and nine oral PrEP users or potential users from those target audiences. The audience-specific strategies generated from the Fast Tracker were well received and resonated with those consulted. Based on their input, minor modifications were made before the strategies were finalised.

Finally, 13 people from seven countries tested the Accelerator (as a beta site) to assess the user experience and user interface (UX/UI), and the tool was revised based on their feedback. The testers represented organisations likely to be involved in developing oral PrEP communications.

Results

Through the four-step process described above, we produced the PrEP Communications Accelerator, a digital communications tool that equips those interested in generating demand for PrEP in sub-Saharan Africa with the resources and evidence-based guidance needed. This interactive tool was designed to meet the needs of those who work in a resource- and time-constrained environment, underscoring its role as an ‘accelerator’, saving time in research and planning to jump-start demand creation efforts.

The PrEP Communications Accelerator (http://accelerator.prepwatch.org/; accessed 8 October 2018) became available on PrEPWatch.org in July 2018. PrEPWatch.org is a global PrEP knowledge hub and clearinghouse for PrEP resources. This integration enables cross-referencing with resources on PrEPWatch.org and helps reinforce to PrEP program managers and stakeholders that communications planning is critical to program success.

A visual overview of the Accelerator website framework is shown in Fig. 2.

Digital tool content

The specific content of the tool, as shown in Fig. 2, consists of the interactive Communications Fast Tracker, comprehensive target audience profiles, expanded information on connecting with key target audiences (by setting and media channel) and Demand Creation 101.

Communications Fast Tracker

Users of this interactive tool may select an audience (FSW, AGYW, PWID, SDC, MSM and general population) and a setting (clinic, community, subnational or national level). Once selections are made, users receive the ‘output’, or custom-built demand creation strategy guidance, based on the available evidence about the audience and setting. The output generated

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Fig. 2. Content framework for the PrEP Communications Accelerator. PrEP, pre-exposure prophylaxis.
includes a communications strategy that summarises the audience insight, the problem, a strategic idea and the support for this idea, as well as key communication considerations. The resulting demand creation strategy guidance also provides recommendations on: (1) the various and most appropriate media channels used to reach target populations (e.g. print, mobile, web-based, television); (2) tips to consider when developing a communications strategy that will connect with the target audience, relevant to specific target populations and settings; and (3) communication tactics specific to that audience.

**Comprehensive Audience Profiles**

The comprehensive target audience profiles aggregate research about each target audience (except the general population), including information about their lives, challenges and values, which PrEP benefits are most important and which media channels are most appropriate.

**Audience Connections**

This section provides an overview of how communications can vary based on where they take place (at the national, sub-national, community or clinic setting) or how they are delivered (via print, mobile, social, or digital channels).

**Demand Creation 101**

Demand Creation 101 consists of written guidance, tips and recommendations across all stages of communications planning, from sourcing audience insights through research to crafting an evidence-based strategy to monitoring and evaluation. It also includes worksheets and case studies for practical guidance. The topics covered in this section are:

- Campaign inception: writing a communications problem statement and setting initial communication objectives
- Formative research: the development of market (audience) research questions and conducting desk research, stakeholder interviews and quantitative and qualitative market research
- Strategy development: how to translate research into insights, finalise the target audience profiles, refine the communications objectives and create a communications strategy
- Creative concepts: how to deploy the communications strategy to generate creative concepts (i.e. creative ideas that use text and visuals to convey key messages) that can be tested and refined, as well as access to current creative concepts and materials used in PrEP demand creation efforts worldwide
- Media plan: the creation of localised audience profiles, development of media objectives and a media channel plan (including how to engage and identify key messages for journalists) and mapping out tactics and timelines
- Monitoring and evaluation: the selection of partners to conduct monitoring and evaluation (M&E) of the campaign, creation of campaign indicators, development of a data collection plan and execution of an M&E plan.

**Using the PrEP Communications Accelerator for the AGYW target population**

We have selected one population and setting to provide an illustrative example of an output from the Communications Fast Tracker. This strategy is for users seeking guidance on national-level demand creation for PrEP for AGYW (Fig. 3).

Fig. 3 provides all components of the AGYW communications strategy: the AGYW audience snapshot (who is she?), the core problem that may prevent her from taking PrEP, the strategic idea for a young woman to take away from the communication materials and messages developed for a campaign, the reasons she should believe that strategic idea and other considerations or requirements for PrEP messaging. This Accelerator output for the AGYW target audience is not the communications material or messaging intended for the end-users (the AGYW). Rather, it is a strategy that program implementers or communications professionals can use to guide consistent, thoughtful communications planning for this population. In addition to the strategy, the Accelerator provides communications tips and tactics for each target audience.

**Discussion**

The PrEP Communications Accelerator is the first demand generation tool focused on PrEP and it can be used for any PrEP formulation. The Accelerator uses a responsive website that enables users to download sample communications strategies based on their intended audiences. It is designed to be both easy to use and information rich, providing guidance on PrEP communications from start to finish.

The strengths of the development process described in this paper include multiple rounds of engagement with stakeholders at all critical stages. Input and feedback were received from a range of stakeholders across multiple countries. To ensure that all relevant findings were uncovered, the literature searches were organised around a socioecological model that examined the factors that influence decision making for specific target populations (focused on the ‘5Cs’ of consumer, culture, connections, category and company). First-hand market research was conducted to address specific gaps in the information needed to develop a comprehensive communications strategy, and a review of several adult learning and web-based portals and formats informed the structure of the Accelerator.

One weakness of the process is the limited knowledge it provided of users’ experiences with the beta version of the site. User experience feedback was elicited through a webinar format. Face-to-face observation of the user experience would have strengthened the development process and will be considered as the tool is used and updated.

A key constraint to the development of powerful communications for PrEP, even with the Accelerator, is the lack of new ideas and perceptions emerging from the research among consumers and potential consumers of PrEP. Our landscape analysis identified few studies that would meet international standards for insight about the key motivators for users to take PrEP. Our own market research confirmed that the complexities of asking individuals about sensitive topics such as sex, risk and behaviour demand fresh
methodologies to push the field to enable truly compelling communications strategies. High-calibre studies with primary objectives focusing on diving deeper into key motivators and barriers for PrEP use would improve the communications guidance the Accelerator provides.

Another challenge in developing the Accelerator was the need for a tool that would be useful for communications planning throughout sub-Saharan Africa, although most of the relevant research has been conducted in East and Southern Africa, and the OPTIONS Consortium market research was performed only in Kenya. However, feedback from extensive consultation with potential tool users and other stakeholders suggests that the Accelerator could also be a useful tool for planning PrEP communications in West Africa and, given the wide array of resources provided in Demand Creation 101, even globally. For example, in a recent OPTIONS Consortium-sponsored learning collaborative, the Accelerator strategies and audience profiles resonated with participants from Botswana, Ghana, Eswatini, Nigeria, Lesotho and Mozambique, although, as expected, these reviewers identified some content that may need to be adapted locally.

The need for such local testing and adaptation is emphasised throughout the Accelerator. Even with the efficiencies gained through the use of this resource, programs still need to invest time and money in the development of high-quality strategic and creative communications materials that drive demand for health products and services. These investments are critical to ensure that strategies, materials and creative concepts based on the Accelerator’s recommendations are relevant and effective.

The PrEP Communications Accelerator will be promoted within the HIV prevention community via webinars, conferences and stakeholder engagement. To assess whether the Accelerator is achieving its objectives, stakeholder consultations will be held 6 months following its launch to explore user satisfaction and content implementation. Traffic to and downloads from the PrEP Communications Accelerator will also be used as metrics for measuring success. Monitoring and iteration, including the addition of available resources and evidence-based research,
will be critical to the ongoing utility of the Accelerator as demand creation resources and materials for PrEP continue to evolve.

Conflicts of interest
The authors declare that they have no conflicts of interest.

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