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Assessment of the VIVA Campaign

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Evaluation

USAID FROM THE AMERICAN PEOPLE

DATA FOR impact

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Evaluation

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Abstract

The United States Agency for International Development's Integrated Health Program (USAID IHP) aims to increase adoption of healthy behaviors and utilization of health services in targeted provinces in the Democratic Republic of the Congo. Following a human-centered design and principles promoted by behavioral scientists, a social and behavior change campaign was developed to reduce barriers to care seeking in health structures and application of key health-related practices. The design relied on voluntary community relays to lead interventions. A Data for Impact (D4I) team conducted an evaluation to describe the campaign and assess changes in targeted behaviors. From October 2022 to October 2023, the team administered interviews with 15 key informants involved in campaign development and implementation. The quantitative component used District Health Information Software 2 (DHIS2) data to compare changes in health indicators between health zones receiving and not receiving interventions. Findings showed that a set of innovative, contextually relevant interventions were developed to address barriers to adoption of healthy behaviors. Community members enjoyed the interactive, game-like approach. Over time, disinterest and attrition of voluntary community actors appeared to negatively affect the quality and frequency of interventions. The campaign had a negative impact on diarrhea treatment (IRR=0.89, $p<0.10$) and a positive impact on pentavalent (IRR=1.01; $p<0.10$) and measles vaccination (IRR=1.02; $p<0.05$) in children under five. No other significant associations between campaign interventions and outcomes were detected. The design failed to consider critical aspects of scalability essential to ensure that interventions impact positive change once campaign support is withdrawn. Findings raise questions regarding the sustainability of relying on volunteer community actors to lead time-intensive interventions.

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Cover:

Initial versions of the savings boxes. Photo credit: Breakthrough ACTION.

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Tables and Figures

Abbreviations

AC	*Animateur Communautaire*
BA	Breakthrough ACTION
BCZS	*Bureau Centrale de Zone de Santé*
CAC	*Cellules d'Animation Communitaire*
CHW	Community health worker
CPN	*Consultations prénatales*
CPS	*Consultations pré-scolaires*
CODESA	*Comité de Développement de l'Aire de Santé*
DHIS2	Data Health Information Software 2
DPS	*Direction provincial de la sante*
DRC	Democratic Republic of the Congo
DGOSS	*Générale des Organes de Gestion de Prestation de Santé*
EHHP	Essential household health practices
FEAST	Fun, easy, social, attractive and timely
FY	Fiscal year
HA	Health area
HCD	Human centered design
ISSP	*Infirmière Superviseur de Soin de Santé Primaire*
IT	*Infirmiere Titulaire*
MCZ	*Medicin Chef de Zone*
MOH	Ministry of Health
PNCPS	*Programme National de Communication pour la Promotion de la Santé*
PNLP	*Programme National de Lutte Contre le Paludisme*
PRONANUT	*Programme National de Nutrition*
PSR	*Programme de Santé Reproductive*
RECO	*Relais Communautaire*
SBC	Social and behavior change
USAID IHP	United States Agency for International Development Integrated Health Program
USAID	United States for International Development
WASH	Water, sanitation and hygiene

Executive Summary

A primary objective of the USAID's Integrated Health Program (USAID IHP) is to increase healthy behaviors and utilization of health services in the nine USAID IHP targeted provinces in the Eastern, Katanga, and Kasai regions of the Democratic Republic of the Congo (DRC). Breakthrough ACTION (BA) developed a social and behavior change (SBC) approach to reduce barriers to care seeking in formal facilities and to motivate the adoption of essential household healthy practices (EHHP), particularly related to maternal and child health. Campaign development followed a human-centered design approach and principles promoted by behavioral economists and psychologists, with the goal to ensure that the package of campaign interventions reflected local needs, encouraged social interactions, and triggered emotions to stimulate behavioral change. To our knowledge, this is the first time that an approach using emotional and psychosocial triggers to motivate behavioral change has been employed on a widespread basis in the DRC.

Starting in 2020, BA piloted the campaign called VIVA over a period of 18-months in eight health zones located across three provinces, Sud Kivu, Kasai Oriental, and Haut Katanga, targeted by USAID IHP. In FY22, VIVA 2.0 was transferred to USAID IHP for scale up in all nine of the project target provinces.

A Data for Impact (D4I) team used a mixed methods approach to carry out a performance evaluation of the VIVA campaign. The purpose of the evaluation was to describe the development and implementation of the VIVA community interventions and to assess changes in targeted behaviors. Study findings are intended to inform recommendations regarding modifications in the VIVA approach and scale up.

The evaluation team carried out key informant interviews from October 2022 to October 2023 with representatives of BA, government officials working on SBC, USAID IHP, USAID, and implementing partners. The quantitative component used the DHIS2 data to compare changes in health service utilization and key health indicators related to maternal and child and reproductive health between health zones receiving and not receiving VIVA activities. Controlled interrupted time series (CITS) analysis was carried out to assess the impact of VIVA interventions above and beyond regular USAID IHP activities.

Evaluation findings showed that community perceptions and contextual realities guided the campaign development, which involved a rigorous and lengthy process entailing formative research and an iterative process of application and refinement. BA and its partners developed a set of innovative interventions comprised of social events, competitions, savings schemes, and community engagement to convey messages on health themes aligned with USAID IHP performance indicators to address multifaceted barriers to behavioral change targeting diverse audiences. A range of stakeholders participated in the design, which appeared to enhance community and government adoption of the campaign approach. Designed to be integrated into the national community health structure and utilizing voluntary community health workers to deliver interventions, the campaign has the potential to strengthen community outreach and provide structure to the work of community actors.

Study results illuminated that the participative, game like approach used during interventions was initially well received by community members, but that enthusiasm decreased over time. Key informants cited the dedication and capacity of the community relays to engage audiences and make activities entertaining as central to the delivery of quality interventions. However, they reported that insufficient numbers of community relays were trained to implement interventions as planned. High turnover of community actors further reduced the numbers of community relays trained on campaign activities. Key informants also

stated that the work required to lead interventions involved extensive time, which was beyond the routine activities of community actors, and that some did not have the interpersonal skills to ensure that interventions were as lively as originally intended. There is also evidence that the adaptive design, which requires regular assessments to inform adjustments in the approach, is difficult to implement, which could lead to repetition of the same messages and community disinterest. Correspondingly, BA data showed a gradual reduction in the frequency of interventions and community retention of messages.

The initiation of VIVA appeared to have an immediate negative impact on treatment of simple diarrhea (IRR=0.89, $p<0.10$) and a long-term positive impact on pentavalent (IRR=1.01; $p<0.10$) and measles vaccination (IRR=1.02; $p<0.05$) in children under five. No other significant associations between VIVA and outcomes were detected, which may be associated with the relatively small number of people participating in the campaign.

Scale up of VIVA activities has undergone major modifications to decrease the human and material resources and costs required for implementation. These changes represent a dramatic shift from the original design which involved intensive oversight. Changes include stronger reliance on community actors; at the same time training and incentives provided to community actors have been reduced. Many key informants reported decreased willingness of community relays to carry out interventions. While the long-term goal is for the government to appropriate implementation of VIVA, at the time of the evaluation there was little sign of government investment and ownership.

While novel to the DRC context, the original campaign design involved intensive oversight and high costs, failing to consider critical aspects of scalability and sustainability essential to ensure that interventions impact positive change once campaign support is withdrawn. If volunteer community actors continue to be central to VIVA implementation, our findings highlight the need for training more community relays and regular coaching and adequate support of their work, as well as monetary incentives to ensure ongoing application of interventions and retention of community actors. Such an approach may be more feasible in smaller intervention areas where focused support is feasible. In the future, it will be important to assess how community interest in the interventions is changing over time. It is also important to examine whether health area personnel have the capacity and interest to adjust messaging to local needs. Data collected through quantitative surveys and most significant change assessments should be improved to determine the adaptations needed to maintain community engagement and improve interventions.

Evaluation Purpose and Questions

Although the DRC has a formal community health strategy, and community outreach is considered critical to the success of the national health plan, little research has examined the way in which community activities influence the adoption of healthy behaviors and utilization of formal health services. Research is needed to understand the potential impact of new community interventions, particularly those using more innovative approaches, on behavior change. To our knowledge, this is the first time that emotional and psychosocial triggers to behavioral change have been employed on a widespread basis in the DRC.

A mixed methods approach was used to describe the development and implementation of the VIVA community interventions and assess changes in targeted behaviors in health zones implementing VIVA community activities compared to health zones not implementing activities. Study findings are intended to inform recommendations regarding modifications in the VIVA approach and scale up. The objectives of the evaluation are as follows:

- Assess the quality, relevance, and efficacy of the VIVA design, taking into account whether the activities are contextually appropriate, target critical health needs, and maintain standards that can sustainably impact positive change.
- Examine the degree to which the strategy was implemented as planned, with a focus on whether interventions followed a human centered approach, involved key social and behavioral change stakeholders, and executed a mix of activities at the field level to reach a range of audiences.
- Evaluate community intervention impact by comparing key indicators in health zones receiving the VIVA family campaign compared to health zones not receiving VIVA and examine how the changes relate to progress toward USAID IHP project objectives.

Background

A primary objective of the United States Agency for International Development's Integrated Health Program (USAID IHP) program is to increase adoption of healthy behaviors and utilization of health services in the nine USAID IHP targeted provinces in the Eastern, Katanga, and Kasai regions of the Democratic Republic of the Congo (DRC). To achieve this objective, a social and behavior change campaign has been developed to raise awareness about services offered in government health facilities, reduce barriers to care seeking in formal facilities, and motivate application of key health-related behaviors at the community and household level. Developed by USAID's Breakthrough Action (BA) under the Johns Hopkins Center for Communications Programs, VIVA uses a human centered design (HCD) to promote 16 health behaviors central to USAID IHP activities that focus on facility-based care seeking and the adoption of essential household healthy practices (EHHP) primarily related to maternal and child health, reproductive health, and family planning (1,2). The campaign was piloted by BA starting in 2020 in eight health zones located across three provinces, Sud Kivu, Kasai Oriental, and Haut Katanga, over a period of about 18-months. In FY22, implementation and scaling up of VIVA 2.0 was transferred to USAID IHP.

Informed by formative research and an iterative process of application and refinement, VIVA entails a package of interventions comprised of social events, competitions, savings schemes, and community engagement used to convey messages to address multifaceted barriers identified as critical to the uptake of healthy behaviors. Following strategies developed by behavioral economists and psychologists, VIVA activities are designed to involve social interactions, be fun, and trigger emotions to stimulate behavioral change at the individual and community level (3–5). Activities also attempt to alleviate cost barriers to the utilization of formal health services by promoting family savings for health care and elicit community feedback to improve the quality of health services. The strategy relies on the involvement of community health agents, including *relais communautaires* (RECOs) and *comité de développement de l'aire de santé* (CODESA) members, *Cellules d'Animation Communitaire* (CACs), and other community-based groups, to mobilize events and generate community participation, guide activities, and disseminate messages. Packages of activities and messages are designed to be tailored to the specific health needs and context of health zones and areas.

Methods and Limitations

The evaluation involved a combination of a desk review of project documents, qualitative data collection, and analysis of secondary quantitative data. The qualitative component provided an in-depth description of the development and implementation of the campaign in the eight health zones where BA piloted VIVA. The team drew on quantitative data available through the DRC's national health information system (DHIS2) and reviewed documents that were provided by BA to answer the research questions related to the scale up of VIVA activities, participation by community members, and changes in key indicators attributed to VIVA activities.

Qualitative Study Design, Sampling, and Methods

We conducted qualitative research utilizing key informant interviews from October 2022 to October 2023. We used purposive and snowball sampling approaches to identify stakeholders based in the United States and at the national and provincial level of the DRC who were involved in the design and execution of the VIVA campaign. Qualitative data collection was iterative, with ongoing sampling and data collection guided by findings that emerged during the evaluation. Involving a range of stakeholders allowed us to identify factors that appear to enhance or constrain progress towards the desired project objectives and longer-term sustainability, as well as the effectiveness of coordination, collaboration, and sharing of learning experiences to achieve project goals and purposes.

Key informants included representatives of BA, government officials working on social and behavior change (SBC), USAID IHP, USAID, and implementing partners. Interviews focused on the design and development of VIVA project activities, preparations prior to implementation including the selection of health zones, implementation of VIVA activities at the provincial and zonal levels, contextual factors that have influenced implementation, adaptations in activities based on regular monitoring, and coordination and collaboration with SBC actors and partners. Through data collection, we assessed the roles, training, and specific work responsibilities of key actors involved in the VIVA campaign, supervision and monitoring of interventions, perceived strengths and weaknesses of the activities, and the involvement of women and youth in activities. We also examined perspectives regarding which activities are more important and effective in motivating adoption of healthy behaviors, as well as positive and negative unintended consequences.

A lead female researcher with an advanced university degree conducted all the key informant interviews remotely. Following a semi structured guide, interviews were carried out in French or English, depending on the preference of the informants. Interviews lasted between 39 minutes and 2 hours 7 minutes, lasting on average 1 hour 10 minutes. Longer interviews generally occurred with informants involved in multiple components (development, implementation, scale up) of the campaign. Six informants were interviewed on more than one occasion. All interviews were audio recorded.

Qualitative Data Analysis

Key informant interviews were transcribed in French or English. A coding scheme derived from the initial research themes and questions, as well as from key concepts that emerged based on reviews of the key informant transcripts, was developed. Coding of the interview transcripts was conducted using ATLAS.ti (Version 9.0), a text-organizing software. Content analysis was used to identify trends of concepts in and across individual codes and informants. We used data triangulation of information collected through our

review of project documents and data analyzed across and between informants to enhance data validation and interpretation.

Quantitative Study Design and Methods

The quantitative component used the DHIS2 data to compare changes in health service utilization and key health indicators related to maternal and child and reproductive health between health zones receiving and not receiving VIVA activities. The DHIS2 is the country's routine health information system that tracks facility-level health service statistics, typically on a monthly basis. DHIS2 data is used to track key behaviors that the VIVA campaign aims to target.

Data were pulled from the DHIS2 spanning the period from January 2018 to September 2021 for health areas that were supported by USAID IHP and where the VIVA strategy was implemented. The study period includes a period prior to the implementation of USAID IHP (January 2018 to May 2019), a period in which USAID IHP was implemented prior to the introduction of the VIVA strategy (June 2019 to July 2020) and a period in which the VIVA strategy was implemented in addition to other strategies implemented as part of USAID IHP (August 2020 to July 2021). Data for the analysis consisted of the following nine DHIS2 elements:

- Overall number of clinic visits per month
- Exclusively breastfeeding per 1,000 children under six months of age
- Attendance at the fourth ANC visit per 1,000 women of reproductive age
- Live births per 1,000 women of reproductive age
- Pre-school consultations per 1,000 population of children 6-59 months
- Treatment of simple malaria per 1,000 children under five years of age
- Treatment of simple diarrhea per 1,000 children under five years of age
- Pentavalent vaccination per 1,000 children under 5 years
- Measles vaccination per 1,000 children under 5 years

Data for August and September 2021 were dropped from the analysis due to issues with reporting during the nurses' strike, which lasted from August 2021 to January 2022.

Controlled interrupted time series (CITS) analysis was carried out to assess the impact of VIVA activities above and beyond regular USAID IHP activities, based on a generalized linear random effects model with a negative binomial specification. The USAID IHP non-VIVA facilities during the period June 2019 to July 2020 serve as the control against the USAID IHP+VIVA facilities for the period August 2020 to July 2021. Covariates that were controlled in the analysis include the following:

- Urban health zone (ref category: rural health zone)
- Non-hospital facility (ref category: hospital)
- Proportion of live births delivered at a health facility
- VIIRS nighttime lights $nW/cm^2/sr$ [normalized]
- Travel time to nearest large city of at least 50K inhabitants [normalized]

- Prevalence of improved housing

Quantitative Data Analysis

The analysis of all quantitative data was carried out with the statistical data analysis software, Stata (Version 16). A nested random effect (i.e., health facility nested within health zone) was incorporated into the model to adjust for clustering of observations and for health facilities across the time series. A first-order auto-regressive term was included in the model for temporal dependencies or autocorrelation in the data. Additionally, a first-order autoregressive term was incorporated to account for temporal autocorrelation which may have been attributable, in part, to communication across communities regarding the messages and information communicated to community members as part of the VIVA strategy. A generalized Variance Inflation Factor (GVIF) was used as the criterion to detect and address multicollinearity (GVIF>4). The analysis was stratified at both the village level and the health zone level. At the health zone level, the analysis of the routine data was further stratified by the degree of VIVA program penetration in the health zone (groups based on the percentage of villages that participated in the VIVA program).

Ethical Approval

Ethical approval was granted by the Institutional Review Boards of Tulane University and the Kinshasa School of Public Health. We obtained informed consent from all study participants prior to data collection.

Limitations

The evaluation faced several limitations. First, due to budget constraints, the team was unable to carry out field research to gather perspectives of the approach directly from health workers and community actors central to implementation, assess participation and acceptability of community participants, and observe conduct of the interventions firsthand. Second, in early 2023, BA leadership questioned the purpose of the VIVA evaluation and for several weeks delayed agreeing to participate in the key informant interviews. Setting up key informant interviews was sometimes time-consuming, involving several attempts. At least one BA staff member central to VIVA oversight did not respond to requests for an interview. In addition, BA often took time to share requested materials, and in several instances promised documents were never shared with the research team. Most interviews were carried out with BA personnel, which may have biased the results.

The use of DHIS2 for the quantitative analysis may also have limitations. While the research team could not independently verify its accuracy, there is no reason to believe that data quality would systematically differ between USAID IHP-supported facilities that received VIVA versus those that did not. Another limitation is that, because the intervention and comparison groups were present in the same health zones, there may be spillover effects for which the analysis cannot account. This would likely understate VIVA's impact on health outcomes. Data for August and September 2021 were dropped from the analysis due to issues with reporting during the nurses' strike, which lasted from August 2021 to January 2022, meaning that impacts that occurred during that time period were not measured. Lastly, while VIVA may have been a meaningful experience for people who participated in the activities, the relatively small number of participants may not have been enough to detect a population-level change.

Results

Qualitative Component

Background

We conducted interviews with 15 key informants including four informants based in the United States, four informants in the DRC capital city Kinshasa, and seven informants at the provincial level in the DRC. All informants had backgrounds in public health and nutrition, and most had experience in health communication and behavior change. Key informants included 10 men and 5 women representing the following organizations: BA (8), the Ministry of Health (MOH) (3), USAID IHP (1), USAID (1), Thinkplace (1), and Save the Children (1). Thinkplace led the human centered design process of VIVA, while Save the Children participated as an implementing partner in Kasai Oriental; both groups are part of the BA consortium.

Key informants based in the US were technical experts involved in the conception, development, and monitoring and evaluation of the VIVA campaign. Those based at the central level of the DRC supported coordination, general oversight of implementation, and evaluation of the VIVA interventions, with one of these informants leading the development of essential tools and instruments. At the provincial level, we interviewed three BA representatives involved in training, planning, supervision, and monitoring and evaluation of VIVA interventions; one representative of a partner organization providing coordination and administrative support, and three government communication experts participating in training, coordination, and monitoring of VIVA activities. All but two provincial level informants participated in the development of the initial VIVA prototypes.

Description of Campaign

Key informants described VIVA as an integrated health campaign designed to influence a set of thematic health areas (maternal and child health, water, sanitation and hygiene (WASH), family planning, nutrition, tuberculosis, and malaria) aligned with the 16 USAID IHP performance indicators through social and behavior change. Key informants described three main campaign objectives, as follows:

- Uptake of adoption of essential health household practices such as breastfeeding and handwashing.
- Timely treatment seeking for children with symptoms of fever, diarrhea, and cough.
- Increased participation in preventive health services such as antenatal care, maternal health care, and family planning.

The campaign also targeted intermediate outcome behaviors such as increased couples' communication and self-efficacy critical to the adoption of behaviors and practices.

The team used a human centered design to identify barriers to EHHPs and health care seeking and, to develop innovative community level interventions which aimed to raise awareness and motivate people to adopt priority health behaviors and create a demand for health services. The approach was designed to be interactive and to make health information interesting, understandable, and memorable. Experts leading the development of the campaign stated that they followed the FEAST conceptual framework (Zulfiqar

2021), which emphasizes fun, easy, attractive, social, and timely when designing behavioral change interventions. Some of the interventions had previously been tested and implemented in West African countries but were adapted to the DRC context. The aim was to develop an approach which could be tailored to local circumstances and needs.

Development of Campaign

Thinkplace led the participatory HCD process which guided the campaign development. The conceptual team members followed an SBC flowchart which encompassed three phases: "define", "design", and "test" (see Figure 1). These were applied to develop VIVA prototypes through an iterative process. Key informants maintained that the HCD, which positioned human problems and perceptions at the center of each step, guided all aspects of the development of VIVA prototypes and complementary materials. One informant mentioned that the HCD process focused on leading with empathy and bringing lightness into lives, adding that this was particularly important in a resource poor context like the DRC. Informants contended that the human focus and participatory engagement of stakeholders ensured greater acceptability of behavior change and government ownership. The process used to develop the portfolio of interventions involved many steps and was described as long and intensive, taking about a year to turn prototypes into interventions.

Figure 1. SBC flow chart

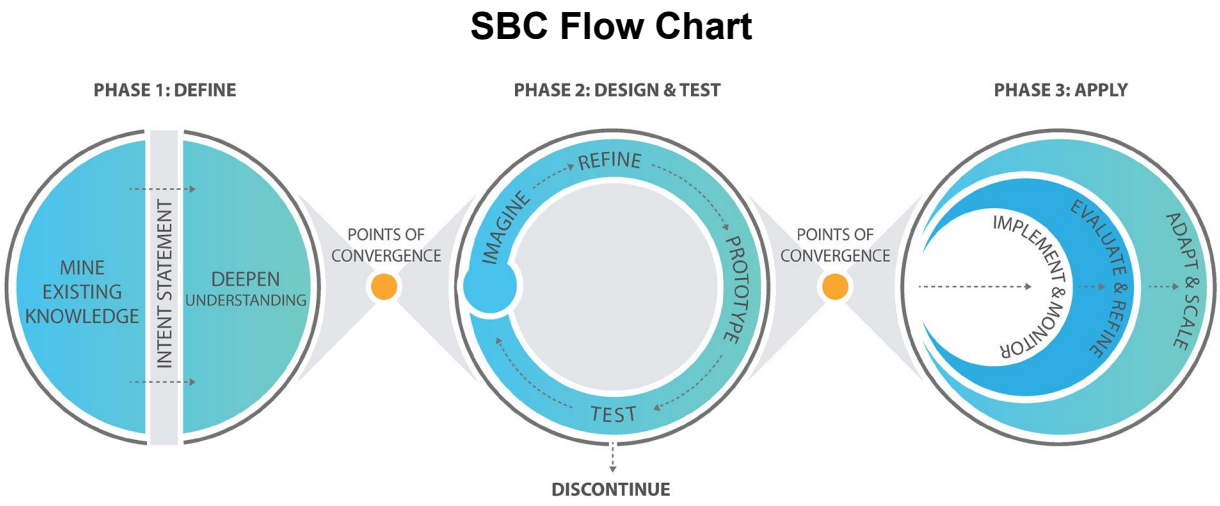

Figure credit: USAID's Breakthrough Action and the Johns Hopkins Center for Communications Programs

Define Phase

The define phase started with a literature review to assess information available on disease burden and health practices in the initial pilot provinces, Haut Katanga and Kasai Oriental, and theories of change to guide the design. In April 2019, a range of BA partners including representatives of USAID IHP and different MOH programs such as the *Program National de Communication pour la Promotion de la Santé (PNCPS), Programme National de Nutrition (PRONANUT). Programme National de Lutte Contre le Paludisme (PNLP),*

and Programme de Santé Reproductive (PSR) participated in a 10-day workshop in Kinshasa. The aim was to build capacity among a core design team so that participants could engage in the discovery research and design process. One of the first steps during the workshop was to develop an intent statement spelling out major goals, team composition, and timelines.

Subsequently, two teams comprised of 20 people, including participants in the Kinshasa workshop and local stakeholders, convened in Kasai Oriental and Haut Katanga provinces to embark on discovery research in peri-urban and rural health zones focused on health behaviors identified in the intent statement. Over a two-week period, teams employed a range of qualitative methods to collect information from a range of community representatives including facility-based and community health workers, mothers, fathers, and other primary household caregivers, traditional healers, and influential leaders, to examine key factors affecting EHHP and timely care seeking to health facilities. One of the core design team members said,

> *And so, I think the development of the insights and using all of these community representatives to be part of the data collection was a really rich source to have a better, deeper understanding of the lived reality, of the challenges, of the opportunities, and to be able to synthesize their insights to design new approaches was really critical.*

Following a two-week period, members of the research teams returned to Kinshasa to compile the core findings that emerged during data collection related to behavior change. In May 2019, a team of 20 people involved in the discovery process participated in a 2–3-day insight generation workshop to identify provincial specific and overlapping findings, with a focus on novel opportunities to address key challenges associated with priority EHHP and care seeking practices that would be acceptable and potentially improve the way people manage their health. Subsequently, the international design team validated the relevance of the insights across the two research locations and developed a report describing the discovery process, key barriers affecting priority behaviors, and potential opportunities for behavior change.

Design and Test Phase

The second phase started in June 2019 with separate ideation workshops held in Mbuji Mayi and Lubumbashi, the capital cities of Kasai Oriental and Haut Katanga provinces. Workshops involved stakeholders who had participated in the discovery research, as well as local community members such as parents, facility-based and community health workers, and religious leaders, to generate ideas on “how might we” address some of the challenges identified during the discovery phase. Subsequently, a core design team worked on creating prototypes or interventions to deliver key messages, with 10 prototypes developed for Kasai Oriental and nine developed for Haut Katanga.

Next steps included two phases of testing and refinement. The first phase, low fidelity testing, focused on the acceptability and desirability of prototypes from the perspective of community members. Key informants reported that testing generated key learnings and recommendations for refinement, including the elimination of certain prototypes, based on alignment with the FEAST principles. After refinement of promising prototypes, a second round of medium prototype testing of eight prototypes was held in September 2019 to assess feasibility from a programmatic and resource perspective. Based on this second round of testing, the core team identified the seven most promising prototypes for piloting, but later two prototypes got dropped due to concerns about the resources needed and COVID-19 transmission. While

the SBC flowchart includes a third phase to validate scalability, due to time and funding, USAID decided to have USAID IHP assess scalability.

The core set of prototypes, which key informants described as novel and innovative, included couples' parties, market quizzes, quality health centers, cost comparisons, and savings boxes (see Appendix A for descriptions of these interventions). Key informants emphasized that the HCD was central to ensuring that interventions were designed to reflect local realities by taking into account culture, social norms, and language. Another workshop was held in December 2019 to adapt the prototypes to the Sud Kivu context.

Decisions Regarding Main Themes and Interventions

Decisions around the principal themes were guided by the campaign objectives, with the aim to expose families to an integrated package of interventions designed to encourage adoption of EHHPs and health care seeking across USAID IHP's six programs (malaria, WASH, nutrition, maternal and child health, tuberculosis, family planning, and reproductive health) and boost indicators. Several informants added that the campaign aimed to address challenges communities commonly face that impede adoption of EHHP, health care seeking to formal services, and preventive care identified during the formative research. Examples included poor couple communication related to health care, lack of savings to cover health care costs, perceptions that formal health care is unaffordable, perceptions around poor quality of care in health facilities, limited male involvement in childcare seeking, and limited social support. Solutions or opportunities to address the challenges identified during co-creation workshops developed into prototypes, which after an iterative process of testing, refinement, and elimination, became interventions for implementation.

The team designed each intervention to improve adoption of EHHPs or health care seeking or both, while at the same time ensuring feasibility of routine application. One informant mentioned that the focus was to reach community members who do not have regular exposure to health information. Messages related to the 16 USAID IHP priority indicators are conveyed during interventions, with one key informant mentioning that there are about three priority messages for each thematic area. The formative research and subsequent testing informed message content, with a focus on relevance and acceptability by community members, as well as self-efficacy of families to be able to adopt promoted behaviors.

Key informants comprising the core design team mentioned that they aimed to make interventions lively, entertaining, and social, so that people learning through participation would continue to attend. Some interventions included prizes, music, refreshments, and certificates, as well as the occasional participation of local leaders or an *infirmière titulaire* (IT) to talk about health topics. Some interventions, such as the couples meeting or market quiz, were carried out independently, while the savings box and cost comparison are generally presented during other interventions.

Key stakeholders validated the final set of interventions and messages at the national level.

Integration in Community Strategy

Key informants emphasized that VIVA is designed to be integrated into the DRC community health approach, which focuses on community engagement, and to utilize existing community structures such as CACs and actors including RECO and CODESA committees to execute interventions under the supervision of ITs. Some noted that the interventions create outreach to a wider range of community members, thus strengthening the effectiveness of existing community approaches. Several claimed that the new,

innovative methodologies used by VIVA serve to motivate key community actors to increase demand for utilization of health services. One BA informant at the national level said,

> *The national community health strategy seeks innovative approaches. VIVA has strengthened the national strategy because it brings innovative interventions which respond to national needs. Not only that, VIVA contributes to achieving the national community health strategy objectives, which include creation of demand at the community level, as well as social behavior change. I think that VIVA has strengthened the national health system.*

Many key informants noted that government officials at the central, provincial, and zonal levels participated in the conception and validation of the interventions, thus assuring adherence to national policy norms and improving government appropriation. It was also noted that provincial and zonal level health professionals are central to implementation. At the time of the evaluation, efforts were being made to formally incorporate VIVA into the national community strategy.

Contradictions to the national community strategy mentioned by key informants included the creation of parallel systems in the design, such as VIVA-specific data collection and coordination structures. Ongoing challenges included CACs not functioning in all health areas, and a lack of motivation of RECOs and CODESA members (see section on motivation below).

Aligning the Strategy to Local Needs

BA encouraged health area personnel to use the community action cycle, a process of collective dialogue and action based on the current health situation, to determine priority health topics that need to be addressed. Most informants reported that monthly action plans and messaging were primarily guided by the analysis of monthly health area indicators. When a health problem was detected, messages conveyed through the VIVA interventions were supposed to focus on that problem, with the goal to see improvements in related health indicators. One BA headquarters informant said,

> *The community action cycle was our kind of compass in each health catchment area to determine health priorities. Those topics identified as critical and needing attention would be the focus during the couple's party or market quiz. And so, the idea was to make the approach adaptable to the local health context. I don't want to say it's unique to the DRC, but I think the identification of priorities and then use of community engagement activities was novel.*

Another BA key informant based in Kinshasa said,

> *At the health area level, they used the community action cycle to assess monthly data to decide how to prioritize future activities. Every month they analyze, they review the data they have, then analyze the problems they have, and then plan the activities. When they plan activities, they first make a recovery plan, which is the methodology we have recommended. Based on the recovery or remediation plan, they determine activities for the next month. That's the methodology. Their monthly plan is included in the quarterly plan for community activities at the health area level.*

Several key informants mentioned that some ITs are not capable of determining the most critical health priorities.

The approach encouraged CODESA Presidents to share focal monthly messages with the CAC members,

including the RECOs, who are primarily in charge of leading sessions in communities. For the approach to work, communication between ITs, CODESA Presidents, CAC leaders, and RECOs must function systematically, with CODESA and CAC members responsible for ensuring that messages are transmitted. Some informants mentioned challenges ensuring that RECOs consistently conveyed the priority messages.

Comparisons to other Communication Strategies

While BA follows the HCD and SBC flowchart to develop activities in other contexts, BA informants emphasized that VIVA is uniquely designed for the DRC context. Some of the VIVA interventions and approaches, such as the market quiz, quality health centers, and redeemer tickets, as well as reliance on the community action cycle, have been implemented in other settings with similar health challenges.

Several key informants mentioned that certain conditions, particularly the extreme level of poverty, made the DRC setting different from other contexts. Some informants noted that the development phase was unusual due to the direct participation of so many key stakeholders, particularly government officials, who provided critical contextual information throughout the development phase. One key informant involved in the conception said,

> *One thing that made this project unique was the fact that we were able to work so closely with members from the MOH, with IHP, and with Save [the Children], and I think that bringing together multiple perspectives to examine challenges related to the interventions we were testing reduced the risks during implementation because we had that previous sense check coming from multiple perspectives involved throughout the process… And that's very challenging to do in other countries or in other projects. We haven't been lucky to have the MOH as involved as they were with this project.*

Key informants leading the campaign development considered capacity strengthening and practical learning related to the HCD process as an important intermediate result of the project.

Congolese participants noted that the HCD approach allowed the team to focus on village level realities, which some considered unusual, mentioning that communication strategies are often imposed on communities. They also noted that the high level of community and stakeholder engagement during the development phase better assured appropriation at the community level and by government officials. At least one informant considered the lengthy process to develop the interventions as a draw back.

Preparations Prior to Implementation

Introduction, Training, and Logistics

Prior to implementation, a national level workshop was held to validate the VIVA prototypes, which subsequent to validation, were referred to as interventions. In addition, BA helped to establish a central level steering committee under the direction of the MOH comprised of key national stakeholders involved in communication and behavior change, as well as BA and USAID IHP representatives, to oversee and coordinate the campaign. BA supported the establishment of several other oversight structures at the provincial and zonal levels. BA informants described the PNCPS, the communication unit of the MOH, as their primary partner in the MOH.

A campaign launch occurred in Lubumbashi in March 2020. The ceremony was attended by high level officials including a delegation from the *Direction Générale des Organes de Gestion de Prestation de Sante* (DGOSS), the Secretary General of the MOH, the provincial level health minister, national technical experts

representing collaborating programs, and other national and provincial level partners. One BA informant mentioned that the provincial launch was held too far in advance of implementation, suggesting that the timing, which coincided with the onset of COVID-19, failed to facilitate the subsequent engagement of government officials as originally planned.

Initial preparations involved advocacy with local authorities, with efforts made to introduce the campaign goals to government administrators and key leaders at the provincial, territorial, commune, zonal, and community levels, from the governor to influential community leaders, to garner their backing and support.

BA utilized a cascade training approach, which was initiated in Lubumbashi with DPS staff critical to implementation in the target provinces and led by BA and national government authorities involved in the campaign conception. Those trained returned to their respective provinces to lead a training of trainers of DPS officials, including communication focal points and representatives of the six thematic program areas, with support from BA. Subsequently, trained DPS staff, again with support from BA, led a three-day training of the zonal core team including the *Medicin Chef de Zone (MCZ), Infirmière superviseur de soins de santé primaire (ISSP*), the person in charge of data entry, and the *Animateur Communautaire* (AC). ITs representing health areas (HAs) were either trained at the same time or in their HAs. One informant from Haut Katanga mentioned that several ITs did not attend the training. Subsequently, ITs trained two to three RECOs in each health area over a two-day period. Trained RECOs were responsible for briefing other RECOs on the campaign, with the goal of having at least 10 RECOs informed about the campaign approach in each HA. Briefed RECOs were requested to inform other CAC members about the campaign. Some key informants mentioned that prior to training in health areas, work was done to reinforce the capacity of CACs and ensure that enough active RECOs were available to participate in targeted health areas.

Key informants underlined that the quality of the training of the RECOs, who are central to the execution of interventions, was fundamental to the successful conduct of the interventions. Several key informants reported that, due to budget constraints, insufficient numbers of RECO were trained to meet the needs of the campaign, with one informant from Haut Katanga stating,

> *It wasn't enough, the ideal is for the majority of RECOs to be trained, that's the ideal. But also, there was another problem, even if they received a briefing from the trained RECOs, they started calling the others (formally trained RECOs) RECO VIVA so that in the community people understood that this RECO was trained as a RECO VIVA, but others were not. If we had had enough resources, it would have been better to train everyone. You risk finding, where you have trained three RECOs, that you will only have one who is trained at the end of a year or two, the others have only been briefed. This can reduce the effectiveness of the work. But if several are trained, even if some move, if we trained for example seven or 10 RECOs in a health area, it would be better, we could maintain the activities in all the health areas.*

Campaign field partners also identified and trained a team of multisectoral community mobilizers comprised of government administrators representing various sectors such as agriculture, finance, and education at the territorial and zonal level to assist with planning, supporting community actors in mobilizing community members, and addressing operational challenges.

Other preparations included finalization of key messages to be conveyed through the interventions, as well as the procurement, printing, and distribution of support materials such as props, intervention

implementation guides, and data collection forms.

One provincial level informant described a kickoff ceremony involving prominent local government authorities. In two provinces, administrative authorities, zonal health team members, ITs, community and religious leaders, and civil society representatives, participated in zonal level launches where participants discussed their roles and responsibilities, and VIVA interventions were demonstrated.

Decisions Regarding Where to Implement

Criteria for the selection of target provinces included the following: USAID IHP target provinces representing each of the three regions, provinces where BA had regional offices, and locations where the consortium partner Save the Children had operations. Initially, six provinces and 16 health zones were selected, but later USAID requested that fewer provinces be included in the demonstration. BA worked with USAID IHP and DPS officials to identify health zones where USAID IHP was actively working to strengthen health systems, but which needed support to boost health indicators. Other considerations included accessibility and the security situation. Another aim was to include a mix of urban and rural health zones (this varied across provinces) with active RECOs and functioning CACs.

Key Actors

Principal actors based in the US included three BA headquarters staff involved in the VIVA design, monitoring, and evaluation, and to some extent implementation, and representatives from Thinkplace. In the DRC, BA had a team of international and national staff overseeing coordination, training, monitoring and evaluation, and the development of campaign tools and support materials. At the provincial level, BA had a coordinator and program assistant supervising ongoing campaign activities in each of the three target provinces.

In the DPS, the director chaired the VIVA steering committee. The PNCPS coordinator of communications was responsible for interfacing with zonal health teams, with other DPS staff (e,g, the health information office manager, program representatives) involved in campaign supervision. At the zonal level, the MCZ led the managerial team responsible for oversight, with the AC acting as the focal point for daily campaign coordination, supervision, and monitoring. Principal actors at the health area level included the IT and CODESA members, with the CODESA president in charge of overseeing implementation and monitoring of interventions. Key informants agreed that RECOs, who are primarily responsible for mobilizing community members and leading interventions, are central to the campaign. One BA national informant said,

> *The RECO are the real plate tournante (key element) because they are the ones mobilizing or getting the people to get to the fete de couple (couple's party), quiz au marché (market quiz)… It is the RECO that really gets all the ducks in a row for the implementation to take place.*

Other actors included government administrators based at the territorial and commune level responsible for supporting the zonal team with campaign coordination and monitoring. The campaign also implicated local community and religious leaders, as well heads of local organizations, in the organization of interventions and dissemination of messages.

Health Zone Activities

A standard set of interventions focused on interpersonal communication including the couple party, market quiz, quality health center, cost comparisons, and savings boxes were fine-tuned prior to introduction in the eight demonstration health zones. Some informants reported minor adaptations needed to be made according to the local context. For instance, because "party" conveys that food and alcohol will be served, in Sud Kivu the couple party name was changed to couple meeting (later the name couple meeting was uniformly used). In another Sud Kivu zone, some modifications had to be made due to an environmental emergency. It should be noted that listening clubs were later added as an intervention.

Primary VIVA target audiences included pregnant and lactating women, children under 5 years of age, fathers of young children, and other child caregivers in the family unit, with several informants noting that couples of reproductive health age constituted a primary target. Key informants mentioned influential leaders, such as religious representatives, heads of associations, and government administrators, as secondary audiences.

Some key informants mentioned that the campaign also involved dissemination of health messages on community radio. Zonal managerial teams led radio messages, with ITs sometimes invited to share their experiences.

Implementation

While the official launch occurred in March 2020, the onset of COVID-19 impeded immediate start of the campaign interventions. Starting in July and August 2020, stakeholders progressively introduced activities in target provinces.

As indicated, BA initially prepared to implement VIVA in six USAID IHP provinces. However, after conducting training and establishing oversight committees in all target provinces, BA was instructed to reduce the number of pilot provinces. One BA key informant at the national level explained,

> *We had trained the providers and the RECOs in all six provinces, we had started with a series of training courses, and when activities were being launched, we were informed (by USAID) that the implementation of community activities is not our job, that we were involved in the design and what we should do is demonstrate the activity in a few provinces, and then leave the rest of implementation to USAID IHP, because USAID IHP also has an objective focused on community activities. That is why we targeted three provinces and left the other provinces to USAID IHP.*

A plan was made for USAID IHP to simultaneously replicate the BA approach in some health zones in the other target provinces, such as Lualaba, during the demonstration period. However, shortly after, USAID IHP experienced budget cuts, preventing the program from replicating VIVA as planned. Around this time, a D4I evaluation team collected data in Lualaba province, where VIVA training had already been conducted and a coordination committee set up. Trained DPS representatives indicated that all VIVA activities had stopped, and that they were uninformed about next steps.

A first step in the implementation of VIVA by BA was to integrate interventions into zonal and HA action plans. BA provided support to HA monitoring teams including the IT, CODESA members representing CACs, RECOs, and community leaders to elaborate VIVA operational plans. The evaluation team was told that plans were developed every 3-6 months and evaluated at the end of the planning period to see whether

objectives had been achieved. In addition, HA teams received training from BA to follow the communication action cycle involving monthly analysis of health indicators and information gathered from community actors to develop monthly recovery plans to remediate priority problems. Recovery plans included the health problem to be addressed and possible solutions, who would be involved, when interventions would be carried out, and the resources needed, with CODESA responsible for ensuring interventions were conducted. Key informants mentioned that VIVA engaged community members with social clout, especially religious leaders, to inform community members about when interventions would take place and to encourage participation. ITs and CODESA members sent health area action recovery plans to the health zone, which were compiled in a database to assure that oversight and support was provided by the health zone, especially the AC. We were told that the approach also included separate plans for CACs and CODESA committees.

Most key informants reported that each intervention was scheduled monthly, although one informant indicated that HAs conducted four couple meetings per month. Interventions involving cost comparisons and savings boxes, which were often integrated into couple meetings and market quizzes, could be conducted more often. BA designed couple meetings to change locations regularly.

Informants reported variations in focal message themes, reflecting health problems identified during HA monthly monitoring meetings. Sessions also concentrated on social aspects of life affecting health, such as ways to improve household gender dynamics, couple communications and male involvement, to positively influence EHHP and care seeking for children. Activities included competition and testimonials to make sessions entertaining and maintain interest. One BA provincial level informant said,

> *The one delivering the message, who is supposed to know everything, doesn't talk much, here is the difference. We involve people, we ask questions, people tell us what they know, and at the end we summarize. Especially during the couple's meeting, people have fun, they laugh, all of that, but in the end but they learn, so it is an innovative activity in that way.*

Small gifts such as soap were given to people who responded well to questions, or materials such as savings boxes were distributed. Informants indicated that interventions initially drew a lot of interest, which some associated with the gifts, but that the enthusiasm gradually decreased over time as gifts were removed. One provincial level government communications expert said,

> *Initially interventions such as the market quiz was a craze. But there was an important element, when we started with BA there were little gifts, little gifts to give. When you even give a piece of soap to the person who answered the question correctly, there was enthusiasm. Everyone wanted to have a gift even if it is a small soap. Nowhere were the VIVA activities rejected.*

As part of the approach, RECOS were also supposed to share information on priority themes during routine household visits.

Several key informants mentioned that execution varied according to the engagement of the zonal health team, but particularly the involvement of health area teams and community actors. One BA key informant mentioned that the conduct of interventions and delivery of messages reflected the leadership of the IT and capacity of facilitators to engage audiences and make interventions fun. He said,

It's just individual, you know, individual. Some ITs are just as motivated as can be. They do their work as best they can and produce results. It's a personal initiative. They feel proud that the health area is conducting these kinds of activities and that they receive support to implement interventions. Even if there is no funding, they continue because the aim is to create demand and change behavior. And the healthier the community is, the better. So, the slogan for VIVA is famille en bonne santé (family in good health), famille epanouie (a well-informed family).

Gender and Youth

Key informants reported that most of the health professional staff at the DPS zonal and health area level were men. While the campaign aimed to include equal numbers of male and female community actors, more male community health workers participated. Some health zones mandated that CODESA members include a youth representative, and some informants mentioned collaborating with local youth associations. Regarding participants, monitoring data shows higher female participation in interventions. None of the 16 IHP indicators specifically target youth, which was also less of a focus for VIVA. However, informants noted that listening clubs are well attended by youth, and many young couples attend couple meetings.

Materials

BA developed many support materials including documents delineating VIVA standard operating procedures, training modules, implementation guides designed to standardize and maintain the quality of the interventions, supervision guides, and communication aids such as memory aids delineating procedures involved in the preparation and conduct of interventions and flip charts for the delivery of messages. Several key informants indicated that the communication aids, especially the flip charts, provided critical visuals to improve message comprehension. Some interventions required specific props such as boards to carry out comparisons between health service fees and costs for non-essential goods, megaphones to lead the market quiz, wooden boxes for the savings box, or a box for the quality health center intervention. Materials such as cost comparison boards and flipcharts were kept in health centers and collected from the RECOs when they carried out an intervention. Some reported difficulties maintaining supplies, such as batteries for the megaphones. BA also developed and distributed promotional materials such as t-shirts, caps, and posters to raise the visibility of the campaign, as well as motivational materials such as invitations or certificates for participants in couple meetings.

Many materials had to be produced and transported from Kinshasa, causing delays. At the start of implementation, some communication materials arrived six months after the training of health workers, forcing BA to carry out refresher training on how to use the materials. Key informants reported that materials produced by local vendors were also often not delivered on time. Over time, some of the motivational materials were dropped due to concerns about sustainability.

BA also developed a set of data collection and management tools, including a 25-page monthly data collection form. Key informants reported that it was difficult to maintain a regular supply of the tools in HAs. One DPS communication representative said, “There were problems with the data collection forms. We do not have machines to print, and we do not have paper.”

Motivation of Community Actors

At the outset, BA anticipated challenges in sustaining engagement of the community actors, who are volunteers, without some sort of motivation. Key informants underscored the fact that RECOs often had to travel to intervention sites and the fact that leading interventions takes time. One BA provincial level key informant said,

> *Another challenge is that the activities require preparation, they require time. When we talk about couple meetings or market quizzes, you must prepare the questionnaires, what key message will be given, there really needs to be good preparation beforehand. The challenge is that these community relays, are not paid, and the more time we take from them, the more difficult. Some did not lead the interventions regularly because they took a lot of their time.*

BA decided to provide monthly transport money in the sum of US$20-30 to RECOs leading interventions. BA also gave CODESA committees US$100 monthly for oversight of VIVA interventions, particularly to cover costs for communication with CAC members and RECOs, and for the collection and delivery of monthly campaign data and reports. A BA national level informant stated,

> *How do you not reimburse the RECOs for transport and expect them to perform?... We gave 100 USD to CODESA committees, about 20 USD per person as motivation to ensure the activities move forward. But when you remove that, you still want results. It becomes very difficult.*

When talking about the RECOs, a provincial level government key informant said,

> *RECOs were given regular motivation. For that reason, it worked well, they were really dynamic, they felt well motivated. This is why the project worked very well.*

Some mentioned that promotional materials such as t-shirts and caps also served to motivate the RECOs, as did the different work materials they received.

BA also provided US$10 per month to support the HA monitoring meetings and transport so that ITs could participate in interventions such as the couples meeting.

Coordination and Collaboration

BA supported VIVA coordination structures at the national and provincial levels involved in planning and overseeing campaign activities. The national coordination committee, a platform under the direction of the DGOSS, was comprised of MOH collaborating partners, many of whom had participated in the campaign development, as well as representatives of BA and USAID IHP. The secretariat was entrusted to the PNCPS. The committee was supposed to convene quarterly to review ongoing campaign activities and respond to technical requests. In addition, committee members were expected to carry out supervisory visits to provinces and health zones to evaluate interventions, provide coaching to key actors, and make recommendations for improvements.

The head of the DPS chaired the provincial coordination committee, with the PNCPS communication coordinator as the vice president. The committee included representatives from the six focal programs of USAID IHP, a representative of the health statistics office, civil society members, other partners involved in implementation such as a representative of the radio consortium or local associations, as well as BA staff and USAID IHP representatives. Committee members, who met quarterly, led formative training of key

actors, monitoring, and campaign coordination following an action plan. During meetings, members reviewed health indicators in VIVA health zones and discussed needed adaptations to improve the campaign impact on demand for health services. The committee mandate included quarterly formative supervision of VIVA activities implemented in target health zones to identify and address problems. We were also told that VIVA activities were discussed during DPS led meetings with USAID funded IPs to ensure coordination and minimize overlap of SBC activities.

At the health zone level, the AC was primarily responsible for follow up and supervision of interventions. Monthly monitoring meetings provided a framework to discuss campaign activities, review timelines, assess changes in health indictors, assess lessons learned and challenges, and try to resolve problems. Some key informants mentioned that BA supported additional time (some mentioned an additional day) dedicated to VIVA, but it was unclear how extensive this was or how long it lasted. In some health zones, efforts were made to include CODESA presidents responsible for HA campaign coordination, in monthly zonal meetings. Meetings also provided an opportunity for BA staff to provide coaching or technical assistance as needed. Community mobilisers, who worked with *Bureau Centrale de Zone de Santé* (BCZS) representatives to monitor and coordinate campaign interventions, also participated in monthly meetings.

Health area monthly reviews served as a structure to plan for campaign activities. Subsequent to meetings, CODESA members conveyed decisions made to CAC members and RECOs.

Key informants reported that BA also worked to strengthen other existing structures, such as the provincial level communication task force and a multisectoral zonal committee comprised of government administrators and community organizations, to ensure campaign coordination and oversight. There was also mention of zonal level meetings involving village and religious leaders, CAC presidents, and school leaders implicated in the campaign.

Key informants described productive collaboration between BA and Abt headquarters staff overseeing the projects. In the DRC, collaboration between the two organizations faced some challenges. Key informants reported that USAID IHP staff had limited involvement in the design phase and sometimes appeared to lack interest in the campaign, raising concerns about campaign ownership and scale up. Some key informants described miscomprehensions about the respective roles of the organizations, particularly at the time that BA and USAID IHP were simultaneously implementing campaign activities. At one point, USAID IHP staff maintained that BA had overstepped their role, which they claimed should focus primarily on the campaign design.

In response, USAID called a meeting during which a memorandum of collaboration or technical agreement outlining expectations and the roles of each organization was developed. One BA key informant said,

> *The issue that we had during that time was that the two projects didn't have the same objective of SBC. IHP had an objective dedicated to SBC and Breakthrough Action is a standalone SBC project. I think that was the issue because in the design of IHP, I think that they didn't have a contract (with BA). So, they were not prepared to work with Breakthrough Action and to endorse the activities designed by Breakthrough Action.*

Another national level informant describing the meeting called by USAID said,

> *We said that we are one team, and that USAID is investing in IHP and in Breakthrough Action. So IHP will do its best to endorse activities or approaches designed by Breakthrough Action as recommended by USAID. The organizations sat together, discussed and came up with a memorandum of collaboration that defined the provinces and zones where they were going to work…. And IHP, as they did not have a big enough budget, they said that we are going to take over that responsibility, but we are not going to implement the package, the five interventions of VIVA. So, we will contextualize the implementation.*

Monitoring and Evaluation

BA had RECOs collect routine monitoring data on the interventions and community participation following a 25-page instrument. RECOs shared monthly data with CODESA members who transported the data to health area centers for the monthly review.

ITs presented VIVA data during monthly zonal monitoring meetings including the frequency of interventions, number of participants, changes in health indictors, and challenges. Key informants mentioned that it was useful for ITs to share and learn from other IT experiences. Problems related to VIVA implementation that were identified during the monitoring meeting guided scheduling of monthly formative supervision. Data validation occurred during the zonal meetings and before VIVA data were transmitted to the DPS and to BA.

One provincial level key informant mentioned that BA convened a separate meeting attended by all HA ITs and CODESA presidents every six months during which VIVA data reports were presented to determine strengths and weaknesses and recommendations were made to improve implementation and results.

Other approaches used to monitor and evaluate VIVA interventions included quarterly surveys, qualitative most significant change assessments[1], and use of redeemer tickets distributed to intervention participants to assess the association between health service utilization and participation in VIVA interventions.

BA scheduled quantitative surveys involving rapid assessments targeting 100 men and women 15-49 years of age in one or two health zones in a province. The target province rotated each survey. Quantitative assessments generated basic information related to respondent demographics, recognition of the campaign name and logo, participation in activities and exposure to messages according to thematic areas, information retained, and health related actions taken. Informants explained that the findings suggested that most respondents who had participated in interventions in the past three months considered campaign activities relevant to their health needs. Other findings included that most respondents participating in activities sought treatment in a health facility for diarrhea and fever for sick children under five years, initiated discussions on family planning with partners, or saved money for health needs during the three months before the survey, although comparisons with non-participants were minimal or did not occur.

[1] The significant change approach is a method used for the monitoring and evaluating of complex development interventions. The approach involves generating and analyzing personal accounts of change and deciding which accounts are the most significant and why.

BA also led qualitative studies to gather narratives from 300-400 respondents regarding participation in the campaign. Zonal and provincial level MOH officials carried out individual interviews using semi-structured guides. Researchers employed convenience sampling to identify community members who had recently participated in VIVA interventions; some health workers and community leaders were also included in the assessments. Using the most significant change approach, interviews elicited examples of social and behavioral changes, supported by quotes from male and female respondents, associated with participation in VIVA interventions and exposure to messages. Examples of findings included:

- Decreased spending by men on non-essential goods and activities, allowing fathers to save money for the health care of their children
- Improved male involvement in the reproductive and maternal health care of their partners
- The gradual abandonment of the use of traditional practitioners and other informal health providers
- The increased perception that formal facilities provide quality care
- The adoption of new initiatives such as savings for family needs, including health care and children's education
- Gradual changes in the perception that costs in formal structures are expensive, resulting in improved utilization of formal health services

It was not clear how the findings, which were uniformly very positive, could contribute to the improvement of VIVA interventions, except if they are intended to be used for promotion and advocacy. The use of government data collectors and the fact that respondents were identified at the intervention sites directly after having participated in VIVA activities raises concerns about respondent social desirability bias. Some key informants agreed that social desirability bias may have affected responses collected during the qualitative assessments.

During the demonstration period, USAID expressed interest in learning more about the uptake of health services according to the six USAID IHP program areas. In response, BA adopted redeemer tickets, an approach used in West African contexts to assess how participation in interventions motivated community members to utilize curative and preventive health care services. Community members who received tickets while participating in interventions were asked to carry the ticket to the health facilities when seeking care, and the quantitative data collected on the tickets was analyzed by BA's monitoring team every two weeks. While informants noted some imperfections with the redeemer approach, such as the inability to assess participation in multiple interventions and determine which intervention primarily motivated health service utilization, they reported that it provided useful information regarding the level of participation in interventions across provinces, types of services sought in the health centers, and gender differences in service utilization.

BA key informants stated that they used the combination of evaluation results to assess campaign achievements and challenges and improve strategies. BA shared evaluation results with the health zones to inform subsequent "recovery" or action plans. It was also mentioned that the involvement of DPS staff in survey and qualitative data collection assured capacity to lead future campaign monitoring.

Key informants responsible for campaign monitoring and evaluation shared challenges designing approaches to measure health outcomes and intermediate results targeted through an integrated health approach, particularly since adaptations regularly occurred according to HA priorities. Because BA did not have funds to carry out a community-based survey, they integrated questions to assess knowledge, attitudes, and perceptions into the USAID IHP baseline household surveys, although the baseline results were only available after the campaign formative research and when the VIVA interventions were being tested. Due to budget cuts, the USAID IHP midline survey was not conducted. Informants reported that uncertainty about the scale up of VIVA and the level of exposure to campaign interventions to affect behavioral change also affected the development of monitoring systems. One BA headquarters informant stated,

> *We've been limited in the amount we can do. We cannot conduct further research related to VIVA not knowing whether or not implementation will continue. We've had to use a somewhat lighter touch, I would say, in terms of follow up research. And our mandate, I think, had always been more to assess feasibility and acceptability, given that the understanding had been that some of the impact research would come with scale up.*

At the time of this evaluation, BA shared two surveys and two qualitative reports with D4I, although two additional quantitative and at least one additional qualitative assessment had been conducted during the pilot phase.

Supervision

BA provincial level staff followed an intensive supervision schedule involving visits of up to six HAs monthly in conjunction with zonal staff, with some BA informants mentioning that they spent about two weeks monthly supervising VIVA related activities, particularly in HAs experiencing problems. BA provided US$200 monthly to health zones for transport, or about US$50 for each zonal staff involved in supervision. The purpose of the visits was to coach and mentor health area staff and community actors, review action plans, provide technical oversight of activities, and help develop solutions to address weaknesses in the application of the campaign. One key informant stated that the overall aim was to ensure that interventions maintained a high quality. One BA staff reported that monitoring data was also collected during monthly supervision visits. Supervisors observed interventions to assess whether they were carried out as planned.

National level BA staff carried out quarterly field visits in each of the three target provinces sometimes in conjunction with DPS personnel participating in the VIVA coordination committee. During supervision visits, BA technical personnel assessed application of the interventions, provided mentoring and technical assistance to address problems at the zonal and HA levels, and recommended modifications to maintain quality in the approach. While the national level coordination committee members were supposed to conduct quarterly supervisions of provincial coordination committee members and targeted health zones, budget constraints allowed them to only conduct one visit. DPS coordination committee members were also tasked with quarterly supervisory visits, and sometimes DPS personnel carried out more frequent supervision to respond to zonal needs. At the zonal level, the AC was primarily in charge of supervision, and in HAs, ITs provided oversight of community actors.

BA developed detailed supervision guides to assess the planning of VIVA activities, the focus on gender and

youth in activity implementation, whether appropriate systems (coordination structures, materials, community actors) were in place, implementation of activities (frequency of interventions, delivery of intervention reports, etc.), community actor capacity, and the quality of interventions at the provincial, zonal, and HA levels. Following visits, supervisors shared reports with health zone teams and DPS staff delineating strengths and weaknesses of field activities, opportunities to improve activities and potential threats, and recommendations to address identified challenges in implementation of the approach.

The intensive supervision schedule of BA staff and the support provided to government counterparts, which included fuel and per diem, was expensive, with one informant mentioning it consumed 60% of the BA budget.

Health Zone Performance

The redeemer ticket approach revealed substantial variation in provincial level results, with the best results in Haut Katanga and poorest results in Kasai Oriental. Potential reasons for these differences provided by key informants included discrepancies in campaign implementation by local partners or the distribution and tallying of the redeemer tickets. Another possible explanation was that both health zones in Kasai Oriental were in urban settings where it may be more difficult to engage residents in community activities (see Figure 2).

Figure 2. Health zone performance

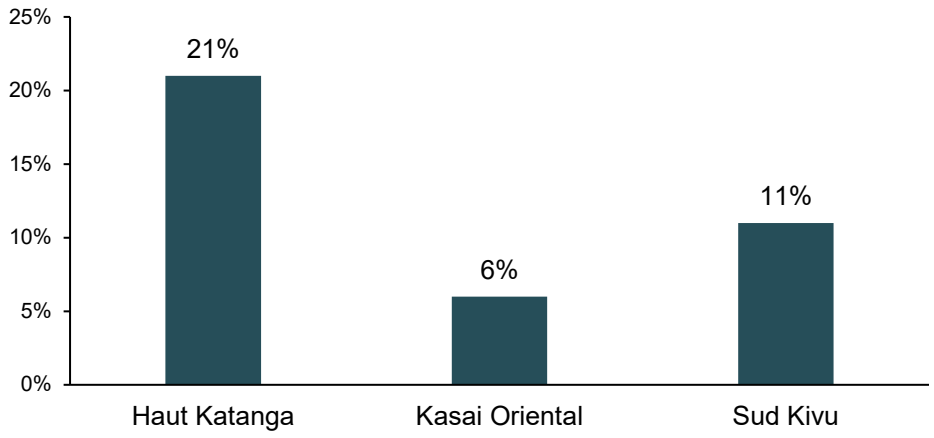

Figure credit: USAID's Breakthrough Action and the Johns Hopkins Center for Communications Programs

Explanations for differentiation in health zone campaign performance were mostly related to the leadership, human and technical resources, and appropriation of the campaign by the zonal managerial team, particularly the MCZ. Other explanations included the security situation, environmental and political context, the number of HAs and their accessibility, and available transport, all of which impacted on oversight of the interventions and regular coaching of key community actors, which informants underlined is essential to ensure the ongoing conduct of and quality of interventions. Key informants also highlighted variations in the commitment and skills of community actors who led interventions. One provincial level

BA informant said,

> *There are health zones where there are actors who are there, but we really do not feel that their level is at 100%, their level of carrying out the campaign, we find that they are involved in the campaign, but they are not making a solid effort. That also contributes to the performance.*

There were other challenges mentioned that could impede performance such as a poor relationship between the IT and CODESA, the initial training included few RECOs, RECOs are responsible for multiple community activities and overworked, a high turnover of RECOs, and active RECOs are older and do not have the capacity to lead interventions effectively. Another BA provincial level informant stated,

> *The work of community relays in the Congolese system is voluntary. You find that in certain health areas the person is engaged, but when another activity presents itself, they tend to jump to that activity. We also see poor collaboration between the IT and CODESA, and this reduces performance of activities because the IT has difficulty supervising the CODESA, who can do whatever they want. Another factor is that at the beginning we had trained few actors, sometimes we realized that in a health zone, all the actors formally trained have been replaced. There can be a change in the CODESA members, or some travel, and we realize that only new ones are there who do not yet have a good mastery of the campaign as in other health areas which have the old actors. This is what contributes to the difference.*

Informants considered high turnover of the MCZ and zonal managerial team and community actors as a major challenge to maintain the quality of campaign interventions, which requires training to ensure good mastery of the approach.

Changes in Implementation

Key informants reported that several deviations occurred during implementation. The first major change involved piloting in three rather than six target provinces as originally planned. During the initial demonstration period, BA targeted all HAs in target zones, but due to challenges related to accessibility and costs, a few HAs were later dropped, causing disappointment among the trained health workers. While BA staff had envisioned that health zone staff would ensure that those health areas that were dropped would continue to implement VIVA, key informants reported that the zonal teams complained that the health areas were no longer receiving support and failed to provide adequate input to maintain implementation of the interventions.

In regard to monitoring and evaluation, only one supervisory visit was conducted by national steering committee members before oversight of VIVA was transferred to USAID IHP. BA conducted fewer quantitative and qualitative assessments than originally planned.

Contextual factors, such as the onset of COVID-19 and a nursing strike lasting over six months, also affected implementation. One key informant reported that the pilot did not have as many qualified RECOs as expected. As a result, the campaign had to rely on a relatively small number of formally trained RECOs to lead interventions.

Several informants cited involvement of local religious groups and community associations to support and lead interventions, which was a strategy encouraged by BA and consortium partners, as a positive development that occurred gradually during campaign piloting.

Perceptions of the Campaign

Key informants agreed that VIVA employed an innovative, novel approach to engage and share health information with community members. Many considered the combination of interventions to be an effective way to reach different target audiences with an integrated packet of information in a variety of settings. One key informant added that VIVA interventions added levity and entertainment in a context fraught with poverty and conflict.

Several key informants claimed that the campaign is meeting expectations, reporting that service utilization is improving in zones where BA led implementation, with some citing exponential changes. While many key informants promised to share routine monitoring data confirming their claims, none did. Key informants also shared anecdotal information driving behavior change related to improvements in male involvement in family health care, couple communication, perceptions that health services are affordable, and decreased spending on non-essential items (beer consumption, beauty care, etc.) and increased family savings, which they claimed had an impact on health care utilization. One BA key informant noted that while the campaign reached millions of villagers, including people rarely reached through community level messaging, behavioral change can be a long process to reach the desired outcome.

BA leadership reported that costs incurred were quite high, making VIVA a very expensive model. In addition to supervision, other costs that proved to be expensive included transport money for RECOs and ITs to attend interventions, CODESA committee monthly stipends, and money for zonal and DPS officials to carry out supervisory visits. One informant mentioned that when covering many HAs the costs increased dramatically.

Strengths

Key informants underlined that the interventions are founded on real experiences and needs. Informants noted that involving community members and influential leaders in the development of creative solutions to health problems, produced messages that were acceptable to community members and approaches to behavioral change that community workers were willing to adopt. One informant underlined that community actors enjoy the interactive methodology used. In addition, several of the interventions had previously been validated in other African contexts, increasing the likelihood of their success. One key informant emphasized that the interventions are social, fun, and interactive, while at the same time transmitting critical health messages, with another informant underlining the effectiveness of interpersonal communication. One national level informant stated,

> *When it comes to community members, they have made the campaign their problem, interventions have pushed the population to become thoughtful about health expenses. For example, today children are surviving because families are saving through a family health fund…The design has a playful aspect, they (community members) discuss in the format of a small party, they ask each other questions in a game format and then they answer. It brings a bit of entertainment, but during the entertainment there is the message that slips through, those messages are accepted and create a change in the community. The approach brings innovation, it is not unidirectional where people come with a message, and others are forced to accept the message, but here we make contact between the one who brings and receives the message, and the one receiving the message can ask questions in the format of a game. For me it's the innovative aspect-that's been very important, and which makes the activities readily accepted.*

Some lauded the introduction of a health area action plan, which involves local actors in the identification of health priorities and better ensures application of interventions.

Several key informants noted that the campaign has been embraced by influential community leaders, community organizations, and CODESA members, thus assuring local appropriation. Another strength related to the engagement (starting during the initial conception) of government officials and workers at all levels, which has propelled the MOH to endorse the approach and better ensures the likelihood of sustainability. One informant noted that the ongoing capacity building of government workers also enhanced MOH ownership. A couple of informants highlighted the flexibility of the approach, which can be adapted to any setting, audience, and health problem.

Weaknesses

The most cited weakness concerned dependence on the community actors, particularly the RECOs, who key informants agreed are critical to the success of the campaign. But, RECOs can have varying levels of skill sets and interest in carrying out quality work and may experience high attrition. Key informants reported several constraints, primarily that the RECOs lack remuneration and must therefore engage in livelihood activities, with some noting that motivation in the form of vests or badges will not support family needs. In addition, RECOs are expected to simultaneously maintain routine activities and engage in other community interventions, all of which prevent them from devoting adequate time to VIVA activities. Limitations specific to VIVA included that there are often not enough qualified community actors to lead interventions as planned, forcing HAs to involve RECOs with a limited understanding of the approach and capacity to guide sessions.

Some noted that the work involved in leading interventions and collecting data was very time consuming, leading to a recent rise in discontent among community workers and impacting the frequency of the interventions. It was also mentioned that support materials are inadequate to cover all community actors. A couple of key informants agreed that it may be challenging to maintain the quality needed to keep the activities entertaining and sustain interest over time.

Another major challenge reported included the turnover of HA and zonal health workers trained on and participating in the campaign implementation. One informant mentioned that when CODESA members complete their term mandate, there is no mechanism to train newly elected members. Some noted that VIVA also increased the workload of the ITs, who already must respond to many demands.

Several key informants reported that BA did not adequately factor in the high costs and extensive human and material resources needed to implement, raising concerns about continuation once outside support is withdrawn. One informant noted that BA created various parallel systems specific to VIVA, including coordination committees, monitoring and evaluation systems, and supervision structures, making the campaign expensive and unsustainable. A BA informant added that they have not adequately advocated for more financial support, stating,

The resources and the kind of financial support needed to be able to continue the activities hasn't been something that we've been as active in advocating for. And so, we're starting to find that that's a little bit of a challenge, that once we started only to provide technical assistance and support for others to implement, some of the activities aren't as easy to continue because the support for transport and the materials needed for the activities aren't necessarily budgeted. And so, I think that's something we're finding now that is really important when thinking about the future of VIVA in the places where we've been implementing, and as we move forward and IHP starts to scale up.

Some informants reported that USAID failed to clarify from the outset the roles of BA and USAID IHP, leading to several unexpected course changes.

Activities Most Effective in Motivating Change

BA personnel made reference to results from the "redeemer tickets" which showed that community members carrying a ticket to a health facility had most frequently participated in couple meetings (25%), listening clubs (23%), or market quizzes (21%), with cost comparison as the intervention least often found to motivate use of health services (see Figure 3). However, informants noted that cost comparison (and savings box) activities are frequently integrated into other interventions, raising questions about this result. Key informants reported that anecdotal evidence based on observations and discussions with community members suggested couple meetings to be the most effective activity to trigger behavior change, with some informants underlining that the fun, participative format involves competition, captures the attention of participants, and encourages couples to open up about family planning and health service utilization. Some noted that it is rare for men to be exposed to health information, which informants suggested can lead to important household dialogue about reproductive health and male involvement in health care. When talking about the couple meetings, one BA provincial level informant said,

Women in particular liked it because it gave them the opportunity to be with their spouses and listen to health messages together. Here, we have very low participation in family planning methods because, while women are exposed to messages, often, when asked to bring their husbands, men generally say they have no time, and rarely go…. So, it was a great opportunity for them, that they could listen to the messages together sitting next to each other.

Informants also mentioned that during couple meetings participants can be exposed to multiple interventions and receive family planning counselling.

The second most frequently cited intervention for effectiveness was the cost comparison intervention, which informants stated employed an interactive, game like approach to illustrate that facility service costs can be affordable if families decrease non-essential spending and emphasized the importance of saving money for health care.

Figure 3. Activities most effective in motivating change

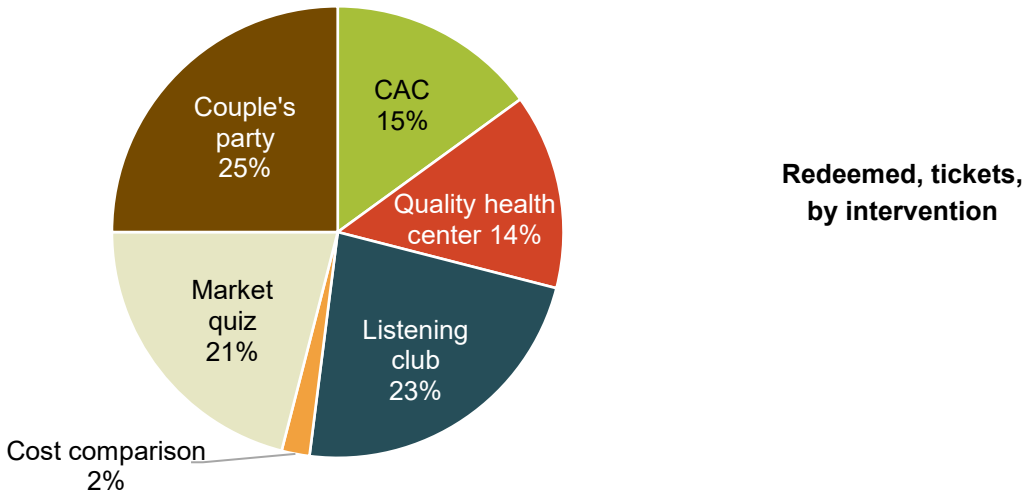

Figure credit: USAID's Breakthrough Action and the Johns Hopkins Center for Communications Programs

Activities Least Effective in Motivating Change

Key informants considered the intervention focused on quality of health center services difficult to implement due to the time needed to collect and compile data, involvement of CACs and opinion leaders, and limited IT acceptance. The market quiz was also perceived to be less effective because of the chaotic market setting, making it difficult to lead sessions. It was also mentioned that RECOs need a functioning microphone to garner shopper's attention, and there is little continuity in information sharing with the same people.

VIVA 2.0

In early 2022, USAID decided that BA would focus on the development and implementation of a mass media package designed to complement VIVA community interventions, while USAID IHP would concentrate on scaling up community activities in all nine target USAID IHP provinces. BA was awarded a three-year extension to work on the mass media approach, provide technical support to community activities at the zonal level, and continue capacity strengthening of key institutions to ensure government ownership of the approach. USAID IHP was tasked with working with the MOH to execute community interventions in select health zones and in areas where USAID IHP is providing support and where health services are functioning, but health indicators related to service utilization remain poor. USAID IHP aimed to reduce the number of VIVA interventions implemented so that they are better aligned with specific health zone needs.

Informants explained that the decision to focus on mass media was guided by the USAID desire to increase the coverage of VIVA messaging. One BA key informant at the national level reported,

> *Some of the folks at USAID were very disappointed, they asked us how are you going to reach critical masses if you are just targeting small groups of people through the fete de couple (couple party) or quiz au marché (market quiz), when are you going to reach the critical masses? So, it was really a frustration among some of our USAID colleagues. And in the extension, it was clear that they wanted us to do a mass campaign.*

In February 2022, BA pivoted roles to focus on the development of a mass media campaign and provide technical assistance to USAID IHP on implementation of the community interventions. At the time of this evaluation, BA was assessing coverage of television and local radio stations and developing and testing videos conveying messages focused on the six USAID IHP program areas. The aim is to broadcast messages on television and community radio stations with high frequency and coverage, as well as popular social media sites such as WhatsApp, to ensure widespread reach. One key informant mentioned that another primary goal is to design an approach that could be appropriated by the MOH after the conclusion of the USAID IHP and BA contracts. One BA informant stated,

> *We led the first phase until January 2022 or December 2021, from that time the budget was reduced and we shifted to another mode of implementation, because during the first phase we were leading the demonstration, our presence was intense at the health area level, even at the community level we supported the actors, but from the moment February arrived it changed, we left the health zones and health areas and supported the campaign remotely, so they (community actors) are doing the work themselves. They continue to use the same materials, the same messages, and we only give advice during monthly reviews at the zonal level without going to the health areas or communities.*

BA is also working to involve civil society organizations and religious groups to appropriate VIVA community interventions and convey messages through other venues.

Several informants reported that in the summer of 2022 a 5-day workshop involving the two IPs was held to evaluate the status of the VIVA strategy and plan for next steps. During the meeting, BA provided detailed information to USAID IHP about community interventions and shared the tools and documents needed for scale up. It was decided that the word "campaign," which in DRC signifies a mass activity involving per diem, would be replaced with "approach." Subsequently, USAID IHP informed the DPS and other MOH officials about the changes in the IP roles.

During the transfer of roles, it became clear that USAID IHP would be unable to absorb the high financial costs and other resources needed to replicate the demonstration campaign in target provinces context of limited resources. BA and USAID IHP representatives worked together to reduce the operational costs and time required to implement interventions, with the goal to develop a "lighter," more efficient and sustainable approach, that could be integrated into the government health system routine activities and supported by the government. National level informants underlined the challenges in transforming the original BA approach that required large investments in human and other resources to a routine approach without negatively impacting the results. One national level key informant said,

> *The challenge is firstly related to the resources, the resources to carry out the VIVA campaign, we tried to get around that by lightening this campaign for it to be routine. As designed by BA, it required huge resources in a context of limited resources in the DRC, which in the absence of a support program, could not be sustained.*

Mentioned alterations to decrease costs included reductions in the motivation provided to CODESA members from US$100 to US$30, removal of transport for RECOs to travel to intervention sites, elimination of VIVA-specific supervisory visits and reductions in monitoring visits, increased coaching of community workers rather than formal training, decreases or elimination of support materials, and the discontinuation of incentives such as certificates for both participants and community actors.

Of particular concern was how to continue motivation of the RECOs, who are central to the application. Following the HCD and SBC flowchart steps, BA devised an alternative approach involving non-monetary ways to incentivize RECOs, which focused on distinguishing them from other village members and recognizing their community service. RECOs were given identification badges signed by the MCZ and vests, and public ceremonies were held when RECOs were presented certificates for their work, all of which aimed to boost morale. In addition, a system was developed whereby experienced RECOs provided regular coaching to new RECOs.

Several key informants noted a reduction in enthusiasm, engagement, and general work ethic by the RECOs and CODESA members after the monetary motivation was reduced or replaced, with some mentioning that the frequency of interventions decreased, monthly reports were submitted late, and there was a general sense of lethargy. When talking about the CODESA members, one BA provincial level informant said,

> *The reality is that they are under-motivated, the motivation is not big, it's not in relation to their expectations, it's not in relation to their needs, the amount we give is not enough. We must tell ourselves the truth.*

Another BA key informant in a different province reported,

> *A big and negative change is the removal of transport money which served as a motivation and got community actors to different locations to carry out activities. Now the budget is very much reduced, now the small amount given does not allow many people (community actors) to go to the activities or take care of essential needs such as printing documents.*

Some key informants expressed particular concern about RECO participation, underlining continued problems with turnover. One national level key informant said,

> *We have problems motivating RECOs, of 100 trained RECOs, perhaps you find 40 who are active. The RECOs are not paid, they are volunteers, but they must survive. So, they have their farming and other livelihood activities.*

The same informant noted that certificates and badges cannot help the RECOs support their families.

When USAID IHP assumed oversight of scale up, to reduce costs and increase government ownership, they discontinued coordination frameworks at the zonal level established specifically for VIVA and integrated coordination mechanisms into existing structures, although it was decided that the national and provincial levels VIVA coordination committees would be maintained with support from BA. Some key informants raised concerns about whether the BCZ, and specifically the AC, had the capacity and resources to maintain adequate coordination.

Monitoring of VIVA interventions is also being integrated into routine government data collection, with

parallel systems devoted specifically to VIVA removed. One key informant reported that the community action cycle approach has been dropped because USAID IHP already has a system to prioritize health problems. BA staff attend zonal monitoring meetings to review health indicator data and provide technical support to identify solutions to problems related to implementation, but no longer give assistance at the HA level. Since February 2022, BA started to fund some health zone monitoring meetings. BA will continue to track the number of zones and HAs where VIVA is implemented and lead quantitative surveys and qualitative inquiries to assess activities. Regular meetings will be held with BA and USAID IHP to share ongoing progress.

Monthly supervision visits devoted specifically to VIVA have also been eliminated. The new approach involves supervision of HA health providers and community actors led by the AC and other zonal team members trained on VIVA during routine integrated supervision, which prioritizes lower performing HAs. Due to the changes, key informants reported that supervisions are irregular, forcing a stronger reliance on the CODESA presidents to work regularly with the CACs and RECOs to ensure implementation of action plans. One BA provincial staff member reported that health zones have been divided into four axes comprised of three to four health areas to facilitate oversight of action plans and interventions by CODESA members and decrease reliance on the health zone team to carry out supervision.

Several provincial level key informants mentioned that USAID IHP is not maintaining the intensity in implementation needed to assure good results, with some noting signs of discontent in health providers due to decreases in financial and other support. Results from quarterly surveys conducted by BA showed a decrease in respondent retention of health-related messages between 2020 and 2023 which was attributed to a gradual decline in the frequency of interventions and changes in oversight associated with the less intensive, zonal approach. One government provincial coordinator noted that USAID IHP needs to recognize that VIVA requires investments if it is to be carried out properly.

One government official claimed that the transfer to USAID IHP was abrupt, noting that under BA beneficiaries and community actors had become accustomed to the receipt of incentives, and that communities were ill prepared for the change which led to demotivation and stagnation of activities. Some government officials mentioned that community members had the impression that BA, which they considered an NGO, would continue providing intense support over the long term. Government officials reported lack of clarity regarding the number of health zones and areas where USAID IHP would implement, and the type of financial support USAID IHP would provide.

While the long-term goal is for the government to appropriate implementation of VIVA, at the time of the evaluation there was little sign of government investment and ownership. A recent sustainability analysis examining government ownership and integration at the zonal level showed that many health zones are not providing adequate support for the integration of VIVA in routine activities as planned. One national level key informant said,

So, the idea was actually to establish a community grounded campaign, community led campaign that can be integrated in the current health strategy. How can they take the ownership and continue? And that's where the problem is. Ownership of these activities is really dependent on each one of the health zone executive teams. I've been in more than one health zone recently. I would say that in most of the health zones, the chief medical officer always says, "I can tell you my statistics are improving. Yes." But if they are improving, then can you take the ownership of the VIVA campaign, integrate it in your strategy and then fund it yourself so that you can continue to improve your health statistics? Unfortunately, it hasn't been happening.

Scale Up

USAID IHP has one specialist in charge of community activities working on VIVA scale up in each of the nine target provinces. In the Q1 of 2024, USAID IHP had implemented VIVA in 490 health areas, with the plan to expand activities to 950 of 6000 target health areas by the end of the project in 2025. Key informants confirmed that the number of VIVA interventions implemented in each health zone has been reduced and is based on performance indicators at the zonal and HA level, with lower performing zones and areas prioritized.

At the time of this evaluation, key stakeholders were negotiating with central level MOH officials regarding integration of VIVA into the new national community strategy. One BA key informant mentioned that they are hoping that VIVA will be considered a flagship SBC activity incorporated in all USAID health programs.

Recommendations

Key informants provided the following recommendations regarding ways to improve the VIVA activity going forward:

- Advocate for the adoption of VIVA in the national community strategy, which would encourage other IPs to incorporate interventions into their activities and thus decrease operational costs and facilitate widespread application.
- Ensure adequate communication between BA and USAID IHP to ensure understanding regarding respective roles in the future. Some informants reported inadequate collaboration and poor synergy between the two implementing partners during the demonstration period, underlining that USAID IHP was not adequately engaged to be able to appropriate and maintain a quality approach.
- Include routine monitoring data in the community DHIS2.
- Standardize operational plans and approaches and harmonize the use of instruments including data collection tools during scale up so that a standard approach is being applied across provinces. Decrease routine data collection which informants described as extremely arduous, demotivating community workers.
- Modify support materials so that they are easy to use, with one informant underlining the importance of having a standard set of implementation guides. Ensure that materials are widely available and used by community actors. Several key informants noted that some interventions involve demonstrations that would benefit from more visual aids to increase participant comprehension. Develop visual aids such as videos for health care workers, providing instructions

on all aspects of implementation of the interventions.

- Increase the numbers of trained health workers and community actors to avoid negative impact when turnover occurs, or when community workers move or become inactive. Reinforce the capacity of community actors presently leading interventions.
- Provide some sort of financial compensation for community actors.
- Better integrate interventions, such as cost comparison and savings box, into routine health services such as prenatal consultations *consultations prénatales* (CPN) and pre-school consultations *consultations pré-scolaires* (CPS).
- Provide adequate funding to allow USAID IHP to implement the campaign as originally designed and maintain high quality.
- Establish platforms to exchange experiences across provinces.

Quantitative Component

Results from the CITS regressions are shown in Table 1. This analysis compared facilities that received IHP support and VIVA with facilities in the same health zones that did not receive VIVA. The initiation of VIVA appeared to have an immediate and negative impact on treatment of simple diarrhea (IRR=0.89, $p<0.10$). A long-term positive impact on pentavalent (IRR=1.01; $p<0.10$) and measles vaccination (IRR=1.02; $p<0.05$) in children under five was observed. No other significant associations between VIVA and outcomes were detected.

Table 1. Results from the Controlled Interrupted Time Series analysis

	IHP activity period (June 2019 to July 2020)		IHP + VIVA activity period (August 2020 to July 2021)	
	Difference in the immediate effect of IHP activities	Difference in the longer-term effect of IHP activities	Difference in the immediate effect of IHP activities	Difference in the longer-term effect of IHP activities
Overall clinic visits	1.03 [0.97, 1.10]	1.01 [0.99, 1.02]	0.99 [0.93, 1.06]	1.00 [0.98, 1.01]
Exclusive breastfeeding for six months post-delivery	1.00 [0.89, 1.13]	0.99 [0.97, 1.02]	0.99 [0.88, 1.12]	1.00 [0.98, 1.03]
ANC-4 clinic visits	0.98 [0.91, 1.06]	1.00 [0.98, 1.01]	0.95 [0.88, 1.02]	1.01 [0.99, 1.02]
Live births at facility	1.04 [0.99, 1.10]	1 [0.99, 1.01]	0.96 [0.91, 1.02]	1.01 [0.99, 1.02]
Pre-school consultations	1.03 [0.95, 1.12]	1.00 [0.98, 1.01]	0.99 [0.91, 1.07]	1.00 [0.99, 1.02]
Treatment for simple malaria (children under five)	0.97 [0.86, 1.08]	***0.98** [0.96, 1.00]	0.94 [0.83, 1.05]	1.00 [0.98, 1.03]
Treatment for simple diarrhea (children under five)	0.93 [0.83, 1.04]	1.00 [0.98, 1.02]	***0.89** [0.79, 1.00]	1.02 [1.00, 1.04]
Pentavalent vaccination (children under five)	***1.06** [1.00, 1.13]	****0.98** [0.98, 0.99]	0.97 [0.91, 1.02]	***1.01** [1.00, 1.02]
Measles vaccinations (children under five)	1.05 [0.98, 1.12]	***0.99** [0.98, 1.00]	0.94 [0.88, 1.01]	****1.02** [1.01, 1.03]

Notes: Significance is considered at *p<0.10, **p<0.05, ***p<0.01. Models controlled for continuous count of months, urban/rural setting, facility type, proportion of live births delivered at facility, VIIRS nighttime lights nW/cm2/sr (normalized), and prevalence of improved housing in health zone.

Discussion

VIVA is a community-based campaign which uses an approach novel to the DRC context to trigger the adoption of essential household healthy practices and create demand for facility-based health services. During an 18-month pilot phase, BA implemented a package of interventions in eight health zones. Intensive and costly oversight systems were set up at the national, provincial, and zonal levels, with community actors central to the application of interventions. Quantitative data analysis showed limited impact on several outcome indicators. The VIVA approach, now referred to as VIVA 2.0, is presently being scaled up by USAID IHP following a less intensive approach.

Following a human centered design, community perceptions and contextual realities related to health care guided the campaign development, which involved a rigorous and lengthy process entailing formative research and an iterative process of application and refinement. Participation of a range of stakeholders in the design appeared to enhance community and government adoption, while at the same time strengthening local capacity in the conceptualization of SBC strategies. Aspects of the FEAST conceptual framework which informed the approach, such as emphasizing “fun” and “social” during the interventions, are highly relevant in the DRC context, although interventions are not “easy” to implement. The mix of complementary interventions used to convey critical health themes and behaviors, which align with USAID IHP performance indicators, targeted a range of audiences, many of whom are not generally reached during routine community interventions. Integration of VIVA into the national community health strategy has the potential to strengthen community outreach and engagement and provide structure to the work of community actors, all of which is critical to the success of the national health plan. Another strength is the built-in flexibility to tailor messages to contextual health needs.

Key informants consistently cited the dedication and capacity of RECOs to engage audiences and make activities entertaining as central to the delivery of quality interventions. While the project systematically trained professionals working at different levels of the health system, insufficient numbers of community relays were formally trained. Instead, the project employed cascade training, an indirect training approach shown to negatively impact the quality of information sharing (USAID, 2023). Unfortunately, the evaluation team was unable to assess how the indirect training approach affected the capacity of RECOs to lead interventions as planned. Key informants reported that some RECOs complained that the work required to lead interventions involved extensive time beyond their routine activities. High turnover of community actors further reduced the numbers of RECOs who received training on campaign activities. Key informants also reported that high attrition of zonal health team members who had a critical role in in the supervision of VIVA activities negatively impacted the campaign.

Research carried out in the DRC has illuminated that community health workers (CHWs), who must simultaneously participate in livelihood activities to meet family needs, become dissatisfied with their work due to limited remuneration and support, leading to high attrition (Hotchkiss D. R. et al, n.d.; Hotchkiss D. et al., 2023). One study highlighted that in-depth and continued training boosts CHW confidence and satisfaction, empowering characteristics shown to influence CHWs interest and ability to carry out their roles (Data for Impact, 2021; Kane et al., 2016). Studies conducted in fragile states highlight that CHWs require extra support to compensate for the special challenges they face carrying out their work (Raven et al., 2020). Our findings raise questions regarding the appropriateness and sustainability of relying

on volunteer CHWs to lead VIVA interventions, as well as the feasibility of retaining voluntary CHWs.

Key informants reported that the participative, game like approach used during interventions was initially liked by community members, but that enthusiasm decreased over time, which some informants associated with the phasing out of gifts for participants. Others revealed that some community health workers did not have the interpersonal skills to lead lively intervention participants as planned, which could impact on community interest and participation. There is also evidence that the adaptive design, which requires regular assessments to inform adjustments in the approach, is difficult for health area workers to implement; failure to adjust messaging as planned in the original design could affect the perceived relevancy of the interventions as community health needs evolve. Quantitative data collected by BA shows a gradual reduction in the frequency of interventions and community retention of messages since the start of the campaign (Breakthrough Action, 2023). It is unclear how quantitative surveys and data collected through the most significant change assessments are being used to identify problems and make adjustments to improve exposure to messaging and behavior change approaches.

Our analysis of the DHIS2 data shows limited impact on outcome indicators, which may be associated with the relatively small number of people participating in VIVA. It could be that exposure to interventions had a significant impact on the behaviors of community members who participated, but this did not show up as population-level impacts. The negative impact in treatment of diarrhea could mean that exposure to messaging has helped community members gain the confidence and skills needed to prevent or treat diarrhea at home, as there is no plausible mechanism by which VIVA would make facility level treatment for diarrhea worse. The long-term impact on vaccinations, which was associated with both vaccines examined, is encouraging. It makes sense that vaccines are indicators where impact was significant, as they apply to every child under five, and thus affect larger numbers of the population.

Scale up of activities in the nine USAID IHP provinces has undergone major modifications to decrease resources and costs required to implement VIVA. These changes represent a dramatic change from the original design and will likely reduce the quality and effectiveness of interventions which were initially designed to receive intensive oversight. Changes include:

- Reductions in the number of interventions implemented in health zones
- Reductions in coordination and supervision systems dedicated to VIVA
- Increased government involvement and oversight of interventions
- Reductions in or discontinuation of support and motivational materials
- Reduced formal training of community actors
- Removal or reduction of monetary and other incentives for community actors

Many of these changes are resulting in stronger reliance on community actors, who with less motivation and logistical support are showing signs of discontent and a reduced willingness to carry out interventions. While the long-term goal is for the government to appropriate implementation of VIVA, at the time of the evaluation there was little sign of government investment and ownership. This was confirmed through a recent sustainability analysis examining government appropriation and integration at the health zone level. The analysis showed that many health zones are not providing adequate support for the integration

of VIVA in routine activities as planned.

Next Steps

If reliance on volunteer CHWs continues to be central to VIVA implementation, our findings highlight the need for the training of more RECOs and regular coaching and adequate support of their work, as well as monetary incentives to ensure ongoing application of interventions and retention of community actors. Such an approach may be more feasible in smaller intervention areas where focused support is available. In the future, it will be important to assess how community interest in the VIVA interventions is changing over time. It is also important to examine whether health area personnel have the capacity and interest to adjust messaging to local needs. Data collected through quantitative surveys and most significant change assessments should be improved to determine adaptations needed to maintain community engagement and improve interventions.

Conclusion

The introduction of innovative community approaches designed to bolster the national community health strategy is vital in fragile states like the DRC where distances to health facilities are long and infrastructure is poor. Strengthening linkages between community health activities and formal health services is essential to the success of the DRC national health plan.

While innovative and novel to the DRC context, the original VIVA design failed to consider critical aspects of scalability and sustainability essential to ensure that interventions impact positive change once campaign support is withdrawn. Introduction of the mass media campaign is an important step to increase coverage of campaign messages. However, mass media messaging represents a substantial divergence from the original VIVA design, which focused on social interactions and included one-on-one counselling. To maintain the integrity of the original design and objectives, the campaign must continue to maintain a strong field-based approach to complement the mass media messaging.

It is paramount that donor agencies and implementing partners recognize the limitations of a community health strategy based on volunteerism and receiving limited assistance. While the MOH has recently acknowledged some of the constraints in relying on volunteers to implement community health activities, solutions are unclear. The situation is particularly complex in a context where the vast majority of trained facility-based health workers do not receive a government salary and do not have the logistical and technical support needed for quality oversight of community health activities.

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Appendix A. Description of Key VIVA Interventions[2]

Market Quiz

In the markets throughout the BA intervention areas, community health workers organize lively, short quizzes with sellers and shoppers on health topics like malaria, antenatal care, WASH, family planning, exclusive breastfeeding, etc. where everyone can hear the questions, responses, and correct answers. The Savings Boxes are presented during the contest as well. At the end of each quiz, reminder tickets are distributed to participants to remind them to attend the health facility.

Couples Parties

Small events where married couples (parents of children under 5 years old) are led through games and discussions by a community facilitator or RECO. Couples are invited to participate in a quiz about their knowledge of health topics like malaria, ANC, WASH, EBF, and FP. The cost comparison game is played and savings boxes are also presented, discussed and offered to the couples. The event is open to other couples who want to observe and learn. During the event, couples who are interested in family planning or learning about different methods can consult in private with a professional counselor. At the end of the event, reminder tickets are distributed to everyone to encourage them to use the health services.

Cost Comparisons

This interactive game challenges participants to identify costs of non-essential household items that cost the same as of health services such as antenatal care, facility-based delivery, family planning or malaria treatment at the health center. The community quickly understands that the health services are no more expensive than commonly consumed items like sugar, phone credits, flip flops, coffee, or cigarettes.

The Essential Household Health Practices are also discussed during the debriefing about the cost comparison game, and participants are offered soap in order to highlight the importance of handwashing, which is especially important for people who spend the day at the market handling food and vegetables.

Savings Boxes

The savings banks are presented with lessons about how couples can set savings goals and differentiate between emergency and planned expenses. The goal of the savings boxes is to overcome financial difficulties and reluctance to use health services by offering information sessions on financial education, soliciting pledges for individual saving, and providing two savings boxes, one exclusively for health services and one for other planned family expenses.

Quality Health Center

The Quality Health Center is a system for evaluating health centers that allows the community to anonymously evaluate their local health center. The evaluation is based on three criteria: politeness/respectfulness of providers, the availability of personnel, and the cleanliness of the facility. These three criteria are represented by three compartments of a small, portable box that is accompanied by green, orange, and red cards that the community uses to vote and thus provide their feedback on their most recent visit to the health center. The box is managed and maintained by the RECOs and are opened at the end of

[2] VIVA! Campaign: An Important Step in Improving Congolese Lives. Kinshasa, Democratic Republic of the Congo: Breakthrough Action

each month during monthly health zone meetings in order to analyze the feedback and take corrective action at the health center level.

Appendix B. Evaluation Statement of Work

USAID INTEGRATED HEALTH PROGRAM RESEARCH AND LEARNING CONCEPT NOTE

Title of study:
Assessment of the USAID IHP VIVA Campaign

Investigators:
Lauren Blum, David Hotchkiss, Janna Wisniewski, Matt Worges

BACKGROUND

Objective 3 of the USAID IHP aims to increase adoption of healthy behaviors and utilization of health services in the nine USAID IHP targeted provinces. To achieve this objective, community interventions have been developed by a consortium of USAID IHP partners led by Matchboxology and Breakthrough Action to raise awareness about services offered in government health facilities, reduce barriers to care seeking in formal facilities, and motivate application of key health-related behaviors at the community and household level. At the core of the community interventions is a healthy family campaign referred to as VIVA (1). Developed by USAID's Breakthrough Action and implemented by Johns Hopkins Center for Communications Programs, VIVA uses a human centered design to promote the adoption of healthy behaviors primarily related to family planning, reproductive health, and maternal and child health (2,3). Key behaviors targeted through the VIVA strategy include exclusive breastfeeding, duration of breastfeeding, utilization of contraceptive methods, and malaria prevention and treatment.

Informed by formative research and an iterative process of application and refinement, VIVA entails a package of innovative approaches comprised of social events, competitions, savings schemes, and community engagement to address a set of multifaceted barriers identified as critical to the uptake of healthy behaviors. Following strategies developed by behavioral economists and psychologists, VIVA activities are designed to trigger emotions and use social pressure to stimulate behavioral change at the individual and community level (4–6). Activities are also designed to alleviate cost barriers through credit programs that promote family savings for health care and facilitate community feedback related to the performance of health care providers and the quality of health services. The strategy relies on the involvement of community health agents, including *relais communautaires* (RECOs) and *comité de développement de l'aire de santé* (CODESA) members, and community-based groups, to mobilize events and generate community participation, guide activities, and disseminate messages. Messages will also be transmitted through community radio, billboards, and text messaging. To our knowledge, this is the first time that emotional and psychosocial triggers designed to motivate behavioral change have been employed on a widespread basis in the Democratic Republic of the Congo (DRC).

Initiated in nine health zones located across three provinces, Sud Kivu, Kasai Oriental, and Haut Katanga, the aim is to introduce VIVA in 40 health zones across the nine USAID IHP target provinces. VIVA activities will primarily be introduced in Sud Kivu, Kasai Oriental and Haut Katanga, with fewer health zones

targeted in the other six USAID IHP provinces. Packages of activities can be tailored to the specific health needs and context of health zones.

As part of the overall goal of health systems strengthening and capacity building, the development and implementation of VIVA community interventions require close collaboration and coordination with government institutions, implementing agencies, and other stakeholders working on social and behavioral (SBC) change at the central, provincial and zonal level, and with other USAID staff and funded organizations. A critical first step involves the development of provincial and zonal level Operational Action Plans to ensure that activities and messaging align with health goals and local needs. Coordination of VIVA approaches should be carried out in conjunction with the health zone office and key stakeholders in health area communities where interventions are implemented such as CODESA groups and RECOs, health personnel, *Cellules d'Animation Communitaire*, and other active community organizations. The design of activities should also address USAID IHP goals related to gender and youth, as stipulated in the IHP project design and DRC country strategy.

Although the DRC has a formal community health strategy, and community outreach is considered critical to the success of the national health plan, little research has examined the way in which community activities influence the adoption of healthy behaviors and utilization of formal health services. Research is needed to understand the potential impact of new community interventions on the adoption of healthy behaviors and utilization of formal health services.

A mixed methods approach will be used to describe the VIVA community interventions and assess changes in targeted behaviors in health zones receiving VIVA community activities compared to health zones not receiving activities. Study findings will inform recommendations regarding modifications in the VIVA approach and scale up. Results will be disseminated during presentations via internet platforms or in-person workshops in the DRC, international conferences, and a peer reviewed scientific publication. We anticipate that a publication evaluating the VIVA campaign, an innovative package of activities aimed to trigger adoption of healthy behaviors in a conflict and fragile-state context, will be an important contribution to the broader literature examining social and behavior change.

OBJECTIVES

- Assess changes in key indicators (positive and negative, intended and unintended) associated with project activities in health zones receiving the VIVA family campaign.
- Assess the quality, relevance, and efficacy of the VIVA design, taking into account whether the activities and messages are contextually appropriate, target critical health needs, and maintain standards that can impact positive change.
- Examine the degree to which the strategy was implemented as planned, with a focus on whether interventions followed a human centered approach, involved key social and behavioral change stakeholders, and executed a mix of activities at the field level to reach a range of audiences.
- Evaluate community intervention impact by comparing key indicators in health zones receiving the VIVA family campaign compared to health zones not receiving VIVA and examine how the changes relate to progress toward USAID IHP project objectives.

- Assess the degree to which females and youth are involved in community interventions and whether efforts are being made to improve female and youth decision making related to community activities.

RESEARCH QUESTIONS

- What activities are being implemented and what is the campaign coverage in target health zones?
- What is the level of community participation in different VIVA activities and exposure to messages designed to change behavior according to different target audiences?
- How do community participants and field agents involved in implementation perceive the activities in regard to relevance and priority needs?
- What aspects of the VIVA design and implementation, including tailoring interventions to the local context, interfere or enhance execution of VIVA activities?
- How has the participation of key actors in VIVA activities affected their capacity to plan, implement, and oversee community interventions?
- To what extent can changes in key behaviors be attributable to the VIVA activities?
- Which activities appear to be more effective in motivating adoption of healthy behaviors?
- How are women and youth involved in the VIVA activities?

A list of secondary research questions is provided in Appendix A.

IRB

The study protocol will be submitted for ethical approval to the Institutional Review Boards of Tulane University and the University of Kinshasa. Informed consent will be obtained from all study participants prior to data collection. All efforts will be made to interview informants in a private setting and to keep responses confidential. Confidentiality procedures will be detailed in a full data security plan.

This is a minimal risk study. The main risk to participants is breach of privacy or confidentiality during data collection. Participants will have the choice not to answer questions if they choose not to and to withdraw from the study at any time without penalty.

METHODOLOGY

The methodology will include a combination of quantitative and qualitative data. The team will draw on quantitative data available through a variety of sources including the DHIS2, USAID IHP ongoing monitoring data and quarterly and annual reporting data, USAID IHP midline and endline household surveys, and D41 midline and endline evaluation data to answer the research questions related to scale up of VIVA activities, participation by community members, and changes in key indictors attributed to VIVA activities. The qualitative component will provide an in-depth description of the VIVA approach and activities related to coordination and implementation, quality, relevance, and acceptability of the VIVA community interventions in two health zones where the VIVA strategy is being implemented.

<u>Quantitative data</u>

The quantitative component will use the DHIS2 data, USAID IHP monitoring data, USAID IHP midline and endline household survey data, and D4I midline and endline data to compare changes in health service utilization and key health indicators related to maternal and child and reproductive health between health zones receiving and not receiving VIVA activities. DHIS2 data is used to track key behaviors that the VIVA campaign aims to target. The routine monitoring system for the VIVA strategy includes indicators related to the campaign implementation and coverage, community exposure to information/messages, distribution of materials, etc. We will use USAID IHP monitoring data to evaluate uptake of community activities in health zones where VIVA is implemented. Data collected through surveys administered to CODESA members and RECO during the D4I midline and endline will be used to assess the involvement of community-based organizations and community health workers in the VIVA interventions. We will also use D4I data collected at the facility and health zone level to assess attributes and activities that might influence outcomes.

Qualitative data

A mix of qualitative methods including key informant interviews, in-depth interviews, observations, focus group discussions, and cognitive mapping procedures such as freelisting will be carried out in each of the project sites. We will begin by carrying out key informant interviews at the central and provincial level with USAID IHP staff, USAID personnel, government officials working on SBC, and implementing partners to get an overview of the design and development of VIVA project activities, selection of health zones receiving interventions, implementation of VIVA activities at the provincial and zonal levels, contextual factors that have influenced implementation, ongoing adaptations in activities based on regular monitoring, and coordination and collaboration with SBC actors and partners

Subsequently, we will collect data in two health zones located in different provinces implementing VIVA activities. In-depth interviews will be carried out with informants at the health zone and community level to examine the operational plans and implementation of the VIVA package, including the type and frequency of activities offered, the extent to which approaches follow a human centered design, community participation in activities, and coordination with other health actors and services. We will also assess the roles, training, and specific work responsibilities of key actors involved in the VIVA campaign, perceived strengths and weaknesses of the activities, and the involvement of women and youth in activities. In-depth interview informants will include chief medical officers and AC at the zonal level, and health facility nurses, influential village leaders, and CHWs (CODESA and RECO) involved directly or indirectly in the implementation, supervision, and monitoring of VIVA activities. In-depth interviews, group discussions, and cognitive mapping procedures will be administered with male and female community members participating in VIVA activities. From the community perspective, we will collect information on perceptions of the range and quality of activities being offered. We will inquire about their experiences participating in activities, access to other channels of information used by VIVA such as radio and text messages, acceptability of activities and messages, perceptions of and knowledge related to key behaviors targeted through the VIVA campaign, perspectives on which activities are more important and effective in motivating adoption of healthy behaviors, and positive and negative unintended consequences. We aim to schedule the community data collection so that we can carry out direct observations of as many VIVA activities as possible.

The combination of data collection techniques employed with a range of stakeholders at the national, provincial and community levels will allow us to identify factors that appear to enhance or constrain progress towards the desired project objectives and longer-term sustainability, as well as the effectiveness of coordination, collaboration and sharing of learning experiences to achieve project goals and purposes. The qualitative research process will be iterative, with ongoing sampling and data collection guided by findings identified during the evaluation.

Data Collection Tool	**Data Type**	**Source**
Facility, health zone, RECO and CODESA data collection tools *Government facility data collection tools* *Facility and household data collection tools* *Routine monitoring collection tools*	*Quantitative*	*D4I midline and endline surveys* *DHIS2* *IHP midline and endline surveys* *IHP community intervention routine monitoring*
Key informant data collection guide *IDI data collection guide* *Focus group discussion guide* *Observation form* *Cognitive mapping forms*	*Qualitative*	*D4I community assessment*

Analysis

<u>Quantitative</u>

To investigate the research questions regarding the variability in the implementation of the VIVA strategy, whether the strategy was carried out as planned, and community participation, data from the IHP project's monitoring system will be combined with data from health zone office surveys, CODESA surveys,

and RECO surveys (midline and endline). The data will be transformed into a comprehensive village-level time series, consisting of the indicators described above.

To investigate the research questions regarding the impact of the VIVA strategy on health behaviors, changes in health zones where the VIVA strategy was implemented will be compared to changes in matched IHP-supported health zones where the strategy was not implemented, using DHIS2 data, and if possible, population-based household survey data.

The analysis of all quantitative data will be carried out with the statistical data analysis software, Stata (Version 16). The analysis will be stratified at both the village level and the health zone level. At the health zone level, the analysis of the routine data will be further stratified by the degree of VIVA program penetration in the health zone (groups based on the percentage of villages that participated in the VIVA program).

Qualitative

Data from key informant and in-depth interviews and focus group discussions will be audio recorded, translated from local language into French when needed, and transcribed in French or English. Observational data and information collected through cognitive mapping procedures will be handwritten on a structured form and transcribed in French. Anthropac (Version 4.9) will be used to analyze the cognitive mapping data. Based on reviews of key informant, in-depth interview and focus group discussion data transcripts, researchers will work together to develop a coding system. Coding categories will be derived from the initial research themes and questions, as well as from key concepts that emerged during data collection. Coding of the interview transcripts will be done on ATLAS.ti (Version 8), a text-organizing software. Content analysis will be used to identify trends of concepts in and across individual codes. Photographs of the sites where activities take place and activities being conducted will complement the data. The combination of data, environmental and methodological triangulation will allow us to analyze data across different research methods and health zones and across and between respondents and enhance data validation and interpretation.

Assumptions

Due to the challenging context of the DRC, we have diversified the sources of data on which this research relies. Our ability to carry out the assessment in its entirety assumes the availability of DHIS2 data, D41 evaluation data, and IHP survey and routine monitoring data, as well as safe access and secure conditions in project areas during the qualitative data collection. The completion date for the final report is dependent upon timely response by the reviewers.

Potential Risks

The main challenges to completing the work would be COVID-19 restrictions, political unrest, and security concerns that would prevent us from collecting the qualitative data collection on schedule. Some of these challenges could be mitigated by conducting interviews, particularly key informant interviews, virtually. Data collectors will follow local regulations regarding travel and COVID-19 precautions and will be provided with training on preventive measures and materials (masks and sanitizer) to mitigate risk.

MANAGEMENT

ROLE/RESPONSIBILITY	INDIVDIUAL
Principal Investigator	*Lauren Blum*
Co-PI overseeing quantitative data analysis	*David Hotchkiss*
Data analysis and interpretation	*Janna Wisniewski*
Quantitative data analysis	*Matt Worges*

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Appendix C. Data Collection and Analysis Tools

Questions for key informants

How would you describe the VIVA! campaign? What were the main goals and objectives? What was your involvement in VIVA!?

How would you describe the human centered design followed by VIVA!?

What can you tell us about the development of VIVA! activities? Who was involved in the development of VIVA! and what were their roles? How were the main themes determined and activities designed? What was the rationale behind the combination of themes and activities? What were the main messages and how were they developed?

For Breakthrough Action staff, has Breakthrough Action developed and implemented similar approaches in other contexts? If so, where? How have previous approaches differed, or were they the same? What have been the outcomes of these efforts?

What preparations took place at the national level prior to implementation? What about preparations at the provincial level? What were Breakthrough Action staff roles at the national and provincial levels? Who were the other key stakeholders involved in preparations and what were their roles? Probe for national and provincial level preparations, such as:

- Validation of activities (national level)
- Training, establishment of steering committees, development of operational action plans (provincial level)

How were decisions made regarding where to implement VIVA! activities at the provincial and health zone level? To what extent were VIVA! activities and messaging adjusted to align with health goals and local needs at the provincial and health zone level? Who was involved in this process?

For provincial level informants, what VIVA! activities were implemented in the health zones in your province? To what extent did activities vary across health zones and why? How many health areas were targeted in each health zone? Who were the target audiences? What was your perception of the mix of activities and their ability to reach target audiences?

When did implementation of activities at the zonal level begin? Who were the key players involved in implementation? What steps were involved in preparation and implementation in the field sites? Probe for:

  - introduction to local officials
  - development of operational action plans
  - procurement of materials
  - launching ceremonies
  - promotion activities
  - selection and training of field staff

Was mass media used as part of the intervention? If so, how was mass media used to complement VIVA! field activities and contribute to behavioral change?

During implementation, how often did you observe VIVA! activities? From your perspective, how would you describe acceptability of activities by participants and why?

To what extent was the VIVA! strategy integrated into the formal community health strategy? How were community actors involved in the VIVA! strategy? Were there any aspects of VIVA! approaches that contradicted or interfered with the national community health strategy? What about ways that VIVA! strengthened the national community health strategy?

What mechanisms were set up to ensure coordination of VIVA approaches at the provincial and health zone level? Who was involved and how did coordination function?

How were VIVA activities supervised? Who was involved and what was the frequency of these efforts?

How were VIVA activities monitored and evaluated? What type of information was collected and how was the information gathered from monitoring and evaluation used?

Did some health zones perform better than others? If so, what is the evidence and why do you think that certain health zones performed better?

To what extent did VIVA activities attempt to address USAID IHP goals related to gender and youth, as stipulated in the USAID IHP project design and DRC country strategy?

To what extent was the VIVA! strategy implemented as planned? Why was or why wasn't VIVA! implemented as planned? In your view, did the interventions follow a human centered approach?

What is your overall perspective of VIVA! activities and whether they met the campaign goals? What activities appeared to be most effective in motivating behavior change and why? Which activities appeared to be the least effective in motivating behavior change and why?

How would you describe VIVA compared to other community strategies in terms of innovation? Acceptability? Behavioral change? What are the strengths and weaknesses of the approach? How feasible do you think it will be to scale up VIVA! activities and why? What might be some of the challenges confronted during scale up and why? (Probe for the effect of scale up on the quality of interventions)

What changes can you recommend to improve future design and implementation of VIVA!?

What are the activities planned for this fiscal year? How were decisions made about which activities to implement and where to implement activities?

Questions pour les informateurs clés

Comment décririez-vous le programme VIVA !? Quels étaient les principaux buts et objectifs ? Quelle a été votre implication dans VIVA !?

Comment décririez-vous la conception centré sur l'humain de VIVA !?

Que pouvez-vous nous dire sur le développement des Activités VIVA !? Qui a participé au développement de VIVA ! Et quels étaient leurs rôles ? Comment les principaux thèmes ont-ils été déterminés et les activités conçues ? Quelle était la raison d'être de la combinaison des thèmes et des activités ? Quels ont été les principaux messages et comment ont-ils été élaborés ?

En ce qui concerne le personnel de Breakthrough Action, Breakthrough Action a-t-elle élaboré et mis en œuvre des approches similaires dans d'autres contextes ? Si oui, où ? En quoi les approches précédentes diffèrent-elles ou étaient-elles les mêmes ? Quels ont été les résultats de ces efforts ?

Quels préparatifs ont eu lieu au niveau national avant la mise en œuvre ? Qu'en est-il des préparatifs au niveau provincial ? Quels étaient les rôles du personnel de Breakthrough Action à l'échelle nationale et provinciale ? Qui étaient les autres parties prenantes clés impliquées dans les préparatifs et quels étaient leurs rôles ? Recherchez des préparations aux niveaux national et provincial, telles que :

- Validation des activités (niveau national)
- Formation, mise en place de comités de pilotage, élaboration de plans d'action opérationnels (niveau provincial)

Comment les décisions ont-elles été prises quant à l'endroit où mettre en œuvre des activités VIVA ! à l'échelle provinciale et des zones de santé ? Dans quelle mesure les activités VIVA ! et les messages sont-ils ajustés pour s'aligner sur les objectifs de santé et les besoins locaux à l'échelle provinciale et des zones de santé ? Qui a participé à ce processus ?

Pour les informateurs provinciaux, quelles activités de VIVA ! qui ont été mises en œuvre dans les zones de santé de votre province ? Dans quelle mesure les activités varient-elles d'une zone de santé à l'autre et pourquoi ? Combien d'aires sanitaires ont été ciblées dans chaque zone de santé ? Quels étaient les publics cibles ? Quelle était votre perception de la combinaison d'activités et de leur capacité à atteindre les publics cibles ?

Quand la mise en œuvre des activités au niveau zonal a-t-elle commencé ? Qui ont été les principaux acteurs impliqués dans la mise en œuvre ? Quelles ont été les étapes de la préparation et de la mise en œuvre sur le terrain ? Sondez pour :

- Introduction aux responsables locaux
- Élaboration de plans d'action opérationnels
- Acquisition de matériel
- Cérémonies de lancement
- Activités de promotion
- Sélection et formation du personnel de terrain

Les médias ont-ils été utilisés dans le cadre de l'intervention ? Si oui, comment les médias de masse ont-ils été utilisés pour compléter les activités de VIVA ! sur le terrain et contribuer au changement de comportement ?

Lors de la mise en œuvre, à quelle fréquence avez-vous observé les activités de VIVA !? De votre point de vue, comment décririez-vous l'acceptabilité des activités par les participants et pourquoi ?

Dans quelle mesure la Stratégie VIVA ! était-elle intégrée à la stratégie officielle de santé communautaire ? Comment les acteurs communautaires ont-ils été impliqués dans le programme de stratégie VIVA !? Y avait-il des aspects de VIVA ! des approches qui contredisent ou interfèrent avec la Stratégie nationale de santé communautaire ? Qu'en est-il des façons dont VIVA ! renforcé la Stratégie nationale de santé communautaire ?

Quels mécanismes ont été mis en place pour assurer la coordination des approches VIVA au niveau provincial et des zones de santé ? Qui a participé et comment la coordination a-t-elle fonctionné ?

Comment les activités de VIVA ont-elles été supervisées ? Qui a participé et quelle a été la fréquence de ces efforts ?

Comment les activités de VIVA ont-elles été suivi et évaluées ? Quel type d'information a été recueilli et comment l'information recueillie dans le cadre du suivi et de l'évaluation a-t-elle été utilisée ?

Certaines zones de santé ont-elles obtenu de meilleurs résultats que d'autres ? Si oui, quelles sont les preuves et pourquoi pensez-vous que certaines zones de santé ont mieux fonctionné ?

Dans quelle mesure les activités de VIVA ont-elles tenté d'atteindre les objectifs du IHP de l'USAID liés au genre et à la jeunesse, comme stipulé dans la conception du projet du IHP de l'USAID et la stratégie de pays de la RDC ?

Dans quelle mesure la Stratégie VIVA ! était mise en œuvre comme prévu ? Pourquoi était ou pourquoi n'était pas VIVA ! mis en œuvre comme prévu ? À votre avis, les interventions ont-elles suivi une approche centrée sur l'humain ?

Quelle est votre perspective globale sur les activités de VIVA ! et s'ils ont atteint les objectifs de la campagne ? Quelles activités semblaient être les plus efficaces pour motiver le changement de comportement et pourquoi ? Quelles activités semblaient être les moins efficaces pour motiver le changement de comportement et pourquoi ?

Comment décririez-vous VIVA par rapport à d'autres stratégies communautaires en termes d'innovation ? Acceptabilité ? Changement de comportement ? Quelles sont les forces et les faiblesses de l'approche ? Dans quelle mesure pensez-vous qu'il sera possible d'étendre les Activités VIVA ! et pourquoi ? Quels pourraient être certains des défis rencontrés lors de la mise à l'échelle et pourquoi ? (Rechercher l'effet de la mise à l'échelle sur la qualité des interventions)

Quels changements pouvez-vous recommander pour améliorer la conception et la mise en œuvre futures de VIVA !?

Appendix D. Disclosure of Conflict of Interest for USAID Evaluation Team Members

Name	Lauren Blum
Title	Click or tap here to enter text.
Organization	Click or tap here to enter text.
Evaluation Position	☐ Team Leader ☐ Team Member
Evaluation Award Number (contract or other instrument)	Associate award 7200AA18LA00008
USAID Project(s) Evaluated (Include project name(s), implementer name(s), and award number(s), if applicable)	VIVA Campaign
I have real or potential conflicts of interest to disclose.	☐ Yes ☐ No
If yes answered above, I disclose the following facts: Real or potential conflicts of interest may include, but are not limited to: 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	Click or tap here to enter text.
I certify (1) that I have completed this disclosure form fully and to the best of my ability and (2) that I will update this disclosure form promptly if relevant circumstances change. If I gain access to proprietary information of other companies, then I agree to protect their information from unauthorized use or disclosure for as long as it remains proprietary and refrain from using the information for any purpose other than that for which it was furnished.	
Signature and Date	Click or tap here to enter text.

Name	Matt Worges
Title	Click or tap here to enter text.
Organization	Click or tap here to enter text.
Evaluation Position	☐ Team Leader ☐ Team Member
Evaluation Award Number (contract or other instrument)	Associate award 7200AA18LA00008
USAID Project(s) Evaluated (Include project name(s), implementer name(s), and award number(s), if applicable)	VIVA Campaign
I have real or potential conflicts of interest to disclose.	☐ Yes ☐ No
If yes answered above, I disclose the following facts: Real or potential conflicts of interest may include, but are not limited to: 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	Click or tap here to enter text.
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Signature and Date	Click or tap here to enter text.

Name	Janna Wisniewski
Title	Assistant Professor
Organization	D4I / Tulane University
Evaluation Position	☐ Team Leader ☒ Team Member
Evaluation Award Number (contract or other instrument)	Associate award 7200AA18LA00008
USAID Project(s) Evaluated (Include project name(s), implementer name(s), and award number(s), if applicable)	VIVA Campaign
I have real or potential conflicts of interest to disclose.	☐ Yes ☒ No
If yes answered above, I disclose the following facts: Real or potential conflicts of interest may include, but are not limited to: 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	Click or tap here to enter text.
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Signature and Date	Janna Wisniewski, April 5, 2024

Name	David Hotchkiss
Title	Click or tap here to enter text.
Organization	Click or tap here to enter text.
Evaluation Position	☐ Team Leader ☐ Team Member
Evaluation Award Number (contract or other instrument)	Associate award 7200AA18LA00008
USAID Project(s) Evaluated (Include project name(s), implementer name(s), and award number(s), if applicable)	VIVA Campaign
I have real or potential conflicts of interest to disclose.	☐ Yes ☐ No
If yes answered above, I disclose the following facts: Real or potential conflicts of interest may include, but are not limited to: 1. Close family member who is an employee of the USAID operating unit managing the project(s) being evaluated or the implementing organization(s) whose project(s) are being evaluated. 2. Financial interest that is direct, or is significant though indirect, in the implementing organization(s) whose projects are being evaluated or in the outcome of the evaluation. 3. Current or previous direct or significant though indirect experience with the project(s) being evaluated, including involvement in the project design or previous iterations of the project. 4. Current or previous work experience or seeking employment with the USAID operating unit managing the evaluation or the implementing organization(s) whose project(s) are being evaluated. 5. Current or previous work experience with an organization that may be seen as an industry competitor with the implementing organization(s) whose project(s) are being evaluated. 6. Preconceived ideas toward individuals, groups, organizations, or objectives of the particular projects and organizations being evaluated that could bias the evaluation.	Click or tap here to enter text.
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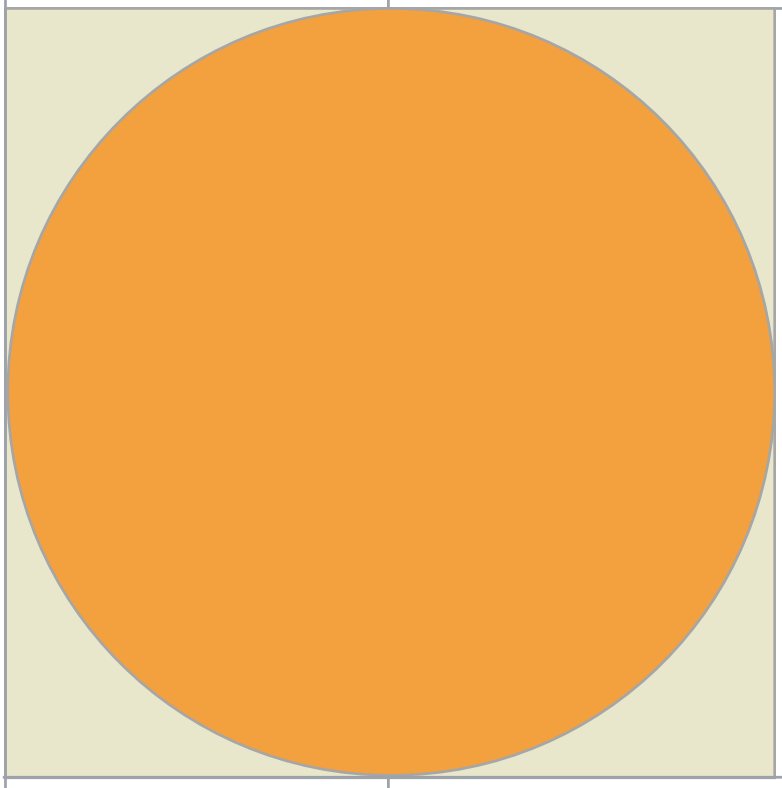
Signature and Date	Click or tap here to enter text.



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