

# Let's Talk about Vaccines!

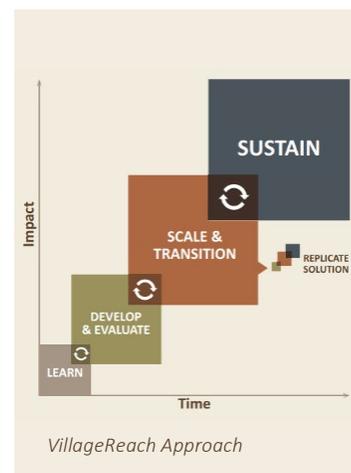
A multi-site participatory study to identify drivers and solutions to routine immunization dropouts



## Introduction

Childhood immunizations are a cost-effective public health intervention that reduce morbidity and mortality from diseases such as polio, measles and pertussis. However, full vaccination coverage in children under the age of two has stagnated over the last decade, with 23 million children missing out on immunizations in 2020 - the highest number of children not fully vaccinated since 2009.<sup>1</sup>

Many studies have identified obstacles to immunization, but entrenched barriers persist in some African communities. One reason for this may be that few research studies and programs set out to understand immunization barriers and co-design solutions by using a people-centered approach. In fact, many new solutions designed to improve vaccine coverage are primarily driven by international stakeholders and national government decision-makers. At VillageReach, one of [our organizational goals](#) is to accelerate the development of people-centered health systems to reach the most under-served populations in Africa. To achieve this goal, [our approach](#) starts with learning directly from communities and fostering their active participation in both the learning and solution development phases.



## Study Design

The *Let's Talk About Vaccines! Study* aims to understand the barriers caregivers face in fully vaccinating their children and to identify, implement and evaluate community-driven solutions to reduce routine immunization dropouts. Because caregivers and health workers know best what barriers they face and how to address them, our study seeks to amplify their voices. Our research design uses principles of community-based participatory research (CBPR) and human-centered design (HCD) to engage community members and health workers in generating new knowledge and targeted solutions that meet their needs.

We are engaging community members throughout this five-year study, funded by the Wellcome Trust, in three primary ways:

1. Local caregivers from the community are trained to conduct the research
2. Caregivers collect qualitative data and together with health workers, government and community leaders, reflect on the findings for potential solutions
3. Caregivers and health workers co-create solutions that work for them and participate in solution implementation

<sup>1</sup> <https://www.who.int/news-room/fact-sheets/detail/immunization-coverage>

## STUDY ACTIVITIES

VillageReach and government partners are conducting this study in [Mozambique](#) and [Malawi](#), countries where we have offices, strong partnerships and expertise. Reaching unvaccinated children is a priority for both the Malawi and Mozambique Ministries of Health. Particularly as COVID-19 has disrupted routine immunization, understanding how to improve full vaccination coverage is critical. In Mozambique, we are working with the Zambézia provincial health department, where currently only half of children under the age of two are fully vaccinated,<sup>2</sup> while in Malawi we are working with the national Expanded Immunization Program, where nationwide (according to the last Demographic Health Survey in 2015/16) 76% of children under two are fully immunized.<sup>3</sup> In addition to governments, we are partnering with University of the Western Cape (UWC) in Cape Town, South Africa as our evaluation partner.

The Let's Talk About Vaccines! Study has three iterative phases:



**Phase 1- Identify:** [Caregiver researchers](#) are hired and trained in participatory qualitative data collection and analysis. Researchers use participatory research methods to *identify and describe* determinants of vaccination dropout, then identify solutions to address key barriers. Applying the [WHO's Behavioral and Social Drivers of Immunization Model \(BeSD\)](#), we will identify key themes across study sites in both countries to identify common barriers and solutions that address routine immunization dropout across different contexts.



**Phase 2- Implement:** Using principles of HCD, we will co-design and implement unique community-identified solutions in each country to *reach* under-immunized children.



**Phase 3- Evaluate:** We will *monitor* and *measure* the impact of solutions through a process and outcome evaluation led by the University of Western Cape (UWC) in collaboration with the University of Cape Town (UCT). This evaluation will take a holistic approach, seeking to not only measure the impact of each solution, but to understand the contextual factors that influence the outcomes of the solution. Evaluation results will be used to *advocate* for those solutions to be adapted and replicated across diverse communities.



**EVALUATING THE PEOPLE-CENTERED APPROACH:** UWC and UCT will be addressing gaps in the existing evidence base by identifying and understanding best practices for engaging communities on childhood immunization uptake, understanding implementation processes that support solution uptake, and understanding how to replicate and scale these approaches to other contexts.

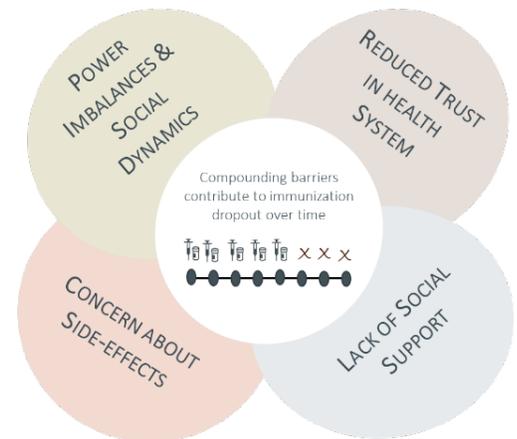
Through literature review and qualitative interviews, UWC and UCT will answer questions such as:

- *To what extent has this study approach been perceived to successfully engage local communities in identifying drivers of and potential solutions to under-two immunization?*
- *What opportunities and challenges exist in engaging communities on immunization issues?*

<sup>2</sup> DPS Zambézia. (2019). Relatório anual de 2019 do Programa Alargado de Vacinação. Direcção Provincial de Saúde de Zambézia.

# Mozambique Study Findings

We completed Phase I in Mozambique in 2021. Our findings showed that in general, caregivers of partially vaccinated children described encountering multiple, compounding barriers that eventually led to incomplete routine immunization of their children. Our analysis of caregiver experiences and photos, coupled with insights from health workers from the SMS interviews, revealed four key drivers of immunization dropouts:



1. **Power imbalances between caregivers and health workers:** Social dynamics and power imbalances between health care workers and families prevented caregivers from speaking up when health services were denied or when a vaccination opportunity was missed for their child. This situation is compounded by a caregiver’s lack of confidence or knowledge around their child’s immunization schedule.
2. **Reduced trust in the health system:** For many caregivers, barriers encountered while accessing health services (e.g. vaccine or medication stockouts, inconsistent health facility hours, poor treatment by staff) reduced their trust in the health system. This in turn reduced their motivation to spend the time and resources required to vaccinate their children.
3. **Lack of social support and “Mother’s Responsibility”:** A lack of social support and expectations that it is the mother’s duty to bring the child for vaccination made it difficult for the mother to complete the child’s vaccination schedule, even if she was motivated to do so. If she falls ill, has to prioritize other responsibilities (e.g. work, household or childcare duties) or does not have the financial resources to get to the health facility, she cannot take her child for vaccination.
4. **Concern of side effects, particularly if child has fallen out of schedule:** Many caregivers were concerned about side effects if their children fell behind schedule and had to get several vaccines in one visit. Lack of information on which vaccines can be administered simultaneously led caregivers to not vaccinate their child.

## Study Methods



### Photo-based Interviews

Caregiver researchers conduct in-depth interviews to explore and discuss the most meaningful photos documenting the caregiver’s immunization experience. Using Photovoice, photo elicitation, and photo narrative helps capture stories through visualization of subjects or ideas that might not be uncovered with traditional interviews.



### SMS Observations

Caregiver researchers use SMS text exchanges, observation, and debrief-style interviews with health workers to document their experiences administering vaccines



### HCD Workshops

Participants - including caregivers, health workers and district health leadership- review findings and co-create potential solutions that they feel are most appropriate for their community context.

## MOZAMBIQUE CO-CREATED SOLUTION

Two HCD Workshops were held with caregivers, health workers, provincial and district government officials and community leaders to discuss study findings. During the workshop participants identified 24 solution ideas that fell under four main categories:

1. Increase community engagement and outreach
2. Improve health system infrastructure
3. Improve services at the health facility
4. Apply a multi-sectoral approach such as partnering with the local education system to improve literacy

Of these categories, the Zambézia provincial health department decided on a solution to improve community engagement and outreach activities in two provincial districts, Gilé and Namarroi. The pilot aims to utilize community health workers to empower caregivers and families through:



Providing accurate information on routine immunization to caregivers for planning and problem-solving.



Facilitating coordination between communities and health facilities to conduct mobile vaccine brigades and track immunization status of children.

## Conclusion

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VillageReach will focus on several objectives as we continue this phased study approach over the next three years:

1. Our first objective is to increase co-created knowledge, with caregivers, governments and health workers, around the drivers of under-two immunization dropouts so that future programs and/or solutions can use this knowledge when designing immunization services in Africa.
2. Our second objective is to identify context-specific and scalable solutions to improve full immunization coverage.
3. Following UWC and UCT evaluation findings, our third objective is to advocate for the use of participatory research methods in research design and solution co-creation. It is our belief that community participation leads to more nuanced findings that help address barriers and create sustainable solutions.
4. A fourth objective of our study is to influence national governments to integrate CBPR and HCD to build more people-centered and resilient immunization systems.

Working towards these objectives, we aim to reduce vaccine dropouts and increase immunization coverage for children under-two in Africa, reducing morbidity and saving lives.

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*If you would like to learn more about the Let's Talk about Vaccines! Study, contact Emily Lawrence Senior Manager, Research, Evidence and Learning: [emily.lawrence@villagereach.org](mailto:emily.lawrence@villagereach.org)*

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