

Bate-Papo Vacina Project: Midline Evaluation Brief

Background

This brief presents a summary of the midline evaluation conducted in June 2023 by the University of the Western Cape and the University of Cape Town for VillageReach's Let's Talk About Vaccines (Bate-Papo Vacina in Portuguese) pilot project. The project started in 2020 as a [community-based participatory research and human-centered design project](#) in Gile and Namarroi districts, Zambézia province. In September 2022, VillageReach implemented the co-created Bate-Papo solution in collaboration with health workers, Agentes Polivalentes Elementares (APEs - Mozambique's community health workers), caregivers of children under two years old, and district and provincial health authorities. At the time of the midline evaluation, the Bate-Papo pilot solution had been in operation for 7 months across 11 health facilities and their respective catchment areas in Gile and Namarroi.

Talk About Vaccines (Bate-papo Vacina!) Solution Components	1	Joint training of APEs, HCWs and Community representatives on solution components and interpersonal communication
	2	Immunization education to improve caregiver knowledge & agency
	3	Mobile brigade prioritization to improve immunization access to the hardest to reach
	4	Monthly collaborative immunization planning to improve coordination & communication between health facilities & communities

The Bate-Papo Vacina pilot solution collaborates with community stakeholders, health workers, and community health workers to empower caregivers and their families with knowledge and agency, enabling them to demand immunization resources for their children and improving access to routine immunization for children under two in the most challenging-to-reach areas. Central to this solution is community engagement, supported by monthly collaborative planning meetings for under-two Routine Immunization (RI) Mobile Brigades (MB), joint MB prioritization of target communities, routine immunization education, and mobilization of community actors and caregivers.

Methods

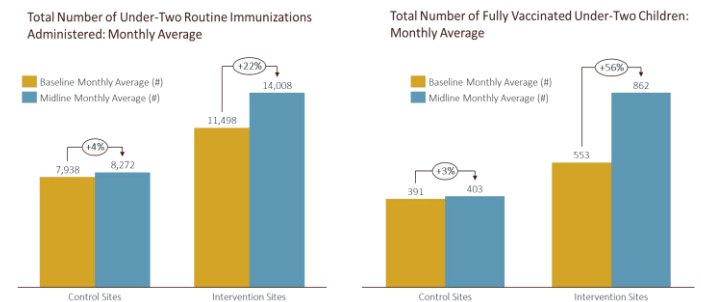
This evaluation employed a cross-sectional, mixed-methods approach to assess processes and outcomes. For qualitative data, we purposively selected 15 participants for in-depth interviews, including VillageReach staff, health facility workers (HFWs), APEs, and Expanded Immunization Programme (EPI) officials in both intervention and control sites. Quantitative data were extracted from SIS-MA and the Zambézia Provincial database. To assess outcomes, we conducted descriptive and inferential analyses of four key

indicators: (1) DPT1-DPT3 immunization dropout rate, (2) the number of vaccinations recorded by the mobile brigades, (3) the proportion of vaccinations administered by the mobile brigades, and (4) the number of planned and executed mobile brigades.

Midline Evaluation Objectives	Understand the impact of solution on under two immunization and solution related outcomes (comparison with baseline)
	Identify mechanisms that explain process and outcome results of the Bate Papo solution and opportunities to improve implementation
	Explore contextual factors linked to observed trends in intervention and control districts
	Capture key learnings to inform community responsive programming and scalability to similar contexts

Key Findings

To date, there has been a high level of fidelity in implementing the components of the Bate-Papo solution in all implementation sites. Qualitative and quantitative results indicate significant improvements from baseline to midline in routine immunization outcomes within intervention sites, with a 22% increase in the average number of total antigens delivered and a 56% increase in the average number of fully vaccinated children per month.



However, it remains unclear to what extent these improvements can be solely attributed to the intervention. Interrupted time series analysis comparing intervention and control sites pre- and post-implementation showed no statistical difference in outcomes. Within the intervention sites, a positive trend in monthly antigens delivered and the average number of fully vaccinated children began several months prior to implementation. Further investigation is needed to understand these trends, but one possibility is that improvements began during the human-centered design and training phases.

According to key informant interviews the following have improved as a result of the Bate-papo Vacina solution.

- ✓ **Increased role and scope of APEs**, who are now equipped with knowledge and support tools to collaborate closely with HCWs and community actors in providing immunization education and supporting routine immunization mobile brigades.

“Of course, it [awareness on immunization] got better...This is felt through the massive adherence at our vaccination posts, which demonstrates that our services have improved....”

Health Care Worker involved in the Bate-Papo Vacina Project

- ✓ **Improved community trust in EPI and health services**, leading to improved social norms regarding caregivers seeking health services instead of alternative treatments for children's side effects.
- ✓ **Increased family involvement in RI**, with more family members taking children for vaccination services, thus reducing the burden on mothers.
- ✓ **Enhanced caregiver knowledge and awareness** of the importance of immunization and the immunization schedule.
- ✓ **Better-equipped APEs** with knowledge and supporting tools to work closely with health providers and community actors, which is critical to improving immunization mobilization and education among caregivers.
- ✓ **Increased attendance at mobile brigades**, with HCWs reporting higher attendance due to APE and other community actor support in planning and notifying community members in advance.

“The prioritization matrix is filled in by the HFs ...and with Bate Papo we are involving others... So, there in the matrix we fill in the total number of children in the community and how many have not been vaccinated yet and need the service, this is a very important point. In addition to this information, we anticipate all pregnant women who will also need to be assisted. We also assess the level of prioritization or severity of each situation... This is a very important process for us as a program because, in addition to informing them as a community, it helps us to plan the amount of inputs (materials and vaccines) needed”. (EPI)

Challenges

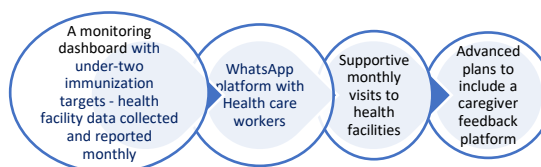
Despite these significant successes, ongoing system and context challenges continue to hinder transformational change. These challenges include:

- ✓ **Resource constraints** at the district and health facility levels, including insufficient funds to conduct all mobile brigades and transportation-related issues.
- ✓ **Environmental impacts** such as seasonal weather patterns, including rain and flooding, and natural disasters that hinder access to particularly hard-to-reach areas.

- ✓ **Recognition and incentives for APEs**, who often have to travel long distances to attend monthly planning meetings and lack transportation support and recognition for their contributions to the solution.

Discussion

At the midline evaluation, the Bate-Papo solution has gained high adoption among key stakeholders and is promising to improve key immunization outcomes. It aligns with national and provincial initiatives, such as the Reach Every District/Reach Every Community (RED/REC) strategy. The solution is perceived to have a relative advantage in strengthening health performance, community capacity, and community involvement compared to other interventions in the district due to its training, integration with existing local structures, and provision of supporting tools such as pictorial cards and prioritization matrices. VillageReach has also established an inclusive and comprehensive monitoring system for continuous solution improvement.



However, it is worth noting that while the Bate-Papo solution positively increases demand, it does not directly finance EPI activities, and the team will have to consider innovate approaches to ensure sustainability of the logistics incentives p, which could potentially impact motivation levels if not sustained

Recommendations

Although the midline implementation outcomes of the pilot project are positive, sustainability planning should be a primary focus for the remaining period of the pilot solution's implementation. This includes:

- Supporting and strengthening the capacity of local structures.
- Regularly communicating progress at all levels to garner commitment to immunization access and uptake.
- Considering applying lessons learned and solution components to other childhood and EPI priorities, such as nutrition.
- Exploring other mechanisms used in VillageReach's work to address context barriers, including transportation solutions to support equitable supply chain reach.
- Using available evidence to advocate for system changes and address resource constraints.
- Engaging other partners in sustainability planning, including developing a joint funding strategy.