

Implementing a large-scale community digital health platform in Mozambique: Lessons from upSCALE

Maria Rodrigues,¹ Edson Zandamela,¹ Jossias Machava,¹ Sonia Enosse,¹ Humberto Rodrigues²

¹ Malaria Consortium, Mozambique

² Ministry of Health, Mozambique

Introduction

From 2009 to 2016, Malaria Consortium tested several interventions to enhance the quality of care provided by community health workers, known as Agentes Polivalentes Elementares (APE). Among these interventions was an assessment of a smartphone application named inSCALE in Inhambane province. The upSCALE application, developed by Malaria Consortium, in collaboration with the Ministry of Health and UNICEF, aims to improve integration of APE data with the national health information system, thereby strengthening health systems and community health delivery.

Methods

- The study reviewed the quality of the data produced by upSCALE from 2017–2022 and evaluated system function.
- Semi-structured interviews were held with key stakeholders who consented to verbatim transcripts that could be used anonymously in the final report.
- Transcripts were reviewed and organised into four overarching categories/themes: 1) Advocacy, engagement and acceptability; 2) Data collection and uptake; 3) Technology and usability; and 4) Ownership and sustainability.
- The results were summarised as lessons learned to inform integration with Ministry of Health systems.

Results

Results emerging from the thematic analysis show:

- Establishing relationships at the beginning of the project, accompanied by close engagement during planning, contributed to successful implementation.
- Data quality and timeliness enabled effective decision-making. However, linking data uptake and use at various levels of the health system is challenging.
- The integration of data into the national health information system is important to ensure strategic and programmatic decisions are data driven.
- The provision of equipment is an important investment to improve community case management.
- Training is essential to ensure the accurate use of technology enable knowledge retention.

Conclusion

UpSCALE is a digital tool aiding community health workers in community management. For optimal use, adoption at the provincial level and integration into the Ministry of Health is essential. This includes merging data with the HMIS and local government servers. Expanded remote training for APEs is crucial, with updates on changing clinical guidelines. Ministry of Health stakeholders should be trained to access and utilize the data, aiming to scale the technology across all provinces.

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upSCALE is a digital health solution that improves disease surveillance and community-based healthcare in Mozambique.

