Country: Mozambique

Donor: DFID via UNICEF

Length of project: February 2016-March 2017

Partners: Mozambique Ministry of Health, Cabo Delgado and Inhambane Provincial Health Authorities, UNICEF and Dimagi
CHWs in Mozambique

- Community health workers in Mozambique are known as *Agentes Polivalentes Elementares* (APEs)

- APEs are community members trained to provide basic healthcare to the remote areas in which they live. Including:
  - health promotion
  - integrated community case management (iCCM) (2-59months)
  - diagnose and treat all age groups for malaria and diarrhoea
  - diagnose and refer sick adults, acute malnutrition, newborns, and pregnant women with danger signs.

In 2014, the services APEs provide were expanded to include:

- family planning
- antenatal care and post-partum care
- TB and HIV patient follow-up for treatment adherence counseling.
Building on inSCALE

- BMGF funded project to Malaria Consortium 2009-2016

- RCT evaluating impact of mHealth on quality of care

- The APE CommCare intervention increased:
  - appropriate treatment of sick children
  - retention of CHWs
  - communication between CHWs and supervisors

- Implemented in 6 of 12 districts in Inhambane

- Algorithm mainly focused on the sick child

- Did not improve CHW drug supply
Objectives

• Develop mobile app with a patient centred decision tree for the whole APE curriculum.

• Implement the APE mHealth system in Inhambane and Cabo Delgado provinces (approx 540 APEs, 200 supervisors, 60 district statisticians and APE coordinators).

• Bridge the APE CommCare server with SISMA (DHIS2).

• Design a visual DHIS2 APE dashboard to be used at district, provincial and national levels for use in surveillance and programme response.

• Develop and implement an application for APE supervisors, with tools for management of APE stocks and performance.

• Train Ministry of Health staff to manage, maintain and budget for the mHealth system platform.
upSCALE implementation areas
Automated feedback, motivational messages and follow up action list

Diagnostic algorithm

Patient, health promotion, and stock inventory data

Free calls

Health promotion, treatment, and follow-up
Case Files
Household Management
Stock Management
Health Talks
Births and Deaths in the Community
Monthly Reports
Main Menu

- Case Files
- Household Management
- Stock Management
- Health Talks
- Births and Deaths in the Community
- Monthly Reports

Case File Menu

- Register New Household
- Register New Patient
- Short-Term Illness Screening
- Nutrition and Health Card
- ANC Visit
- PNC Visit
- Edit Patient Registration
- Remove Patient
- Referral Follow-Up
- Illness Follow-Up
- Malnutrition Follow-Up
- HIV Visit
- TB Visit
Still to be added

- Family planning
- Supervisor suite
- DHIS2 bridge
- Tablets with app for health facility based APE supervisors
- System provides free communication between APE peers and supervisors
Supervisor Suite

- Monthly Indicators
- Stock Levels
- Core Competencies
- Android Troubleshooting
APEs submit data directly to SIS-MA (DHIS2) using APE app in real time
- Government stakeholders able to view data in user-friendly format on APE dashboard
- System will assist data driven decision making around:
  - APE programme investments
  - Surveillance and response to infectious diseases including malaria
  - Early detection of disease outbreaks
Next steps

• Looking at expanding to other relevant countries

• Conducting robust health systems research on the cost and effectiveness of the mHealth system

• Strengthening district capacity to deliver health services using real time data for decision making