

# **Background**

The COVID-19 pandemic has affected many malaria-endemic countries, including some of the most heavily burdened, such as Mozambique. Community health workers, known locally as agentes polivalentes elementares (APEs), are trained to provide basic healthcare and conduct health promotion activities in the remote areas in which they live. This includes providing integrated community case management (iCCM) for malaria, pneumonia and diarrhoea and, as of 2014, family planning, pregnancy tracking and antenatal and post-partum care.

While technical guidance on COVID-19 surveillance, case definitions and testing strategies has been developed to support APEs, communicating this information across a wider APE network poses a significant challenge, largely due to restrictions on travel, face-to-face meetings and training.

Other challenges include incorporating COVID-19 surveillance into existing surveillance networks and diagnosing the disease at the community level. With symptoms akin to those of malaria and pneumonia, misinformation arising from a lack of accurate and up-to-date evidence on the virus, and limited access to affordable testing (and, thus, inadequate data on caseloads), APEs' abilities to conduct routine activities and support the COVID-19 response are further hindered.

#### **Country**

Mozambique

#### **Donor**

Malaria Consortium funded

#### Length of project

April 2020 – June 2020

#### **Partners**

Dimagi

Mozambique Ministry of Health (MoH)

## Project outline and objectives

In light of these challenges, this project aims to integrate a COVID-19 diagnostic algorithm and make other technological adaptations to the existing upSCALE digital platform to support APEs' ability to respond to the pandemic.

At present, the platform supports an app that assists APEs with patient registration, diagnosis and advice on treatment and referrals, and allows supervisors to monitor APE performance and stock levels of drugs and equipment. Data entered through the app are captured in the District Health Information System at district, provincial and national level, facilitating the analysis of local disease-specific trends to improve resource allocation. The MoH began a country-wide rollout of the app in 2019, aiming to reach 8,800 APEs nationally by 2021.

The existing platform is currently being implemented in Inhambane, Cabo Delgado and Zambezia provinces and involves 1,199 APEs and 342 supervisors. With COVID-19-specific adaptations to the platform, we anticipate that these APEs will be more knowledgeable about, and better equipped to manage, COVID-19 cases.

Specifically, our project aims to:

- improve awareness and education about COVID-19
- enhance diagnosis and management of the disease
- refine stock control methods to track COVID-19 equipment, such as personal protective equipment (PPE)
- strengthen COVID-19 surveillance.

### **Activities**

In order to fulfil these objectives, Malaria Consortium will:

- add COVID-19 modules (with links to pre-developed materials) to the existing platform to help APEs predict COVID-19 in patients, thereby enhancing differential diagnoses for malaria, pneumonia and diarrhoea
- modify existing algorithms on the platform, communicating updates to APEs via the app
- deliver COVID-19-related messaging via the app

   including SMS, audio and video messages to
   communicate changes in government advice and new symptoms as they are identified. Informing APEs of local caseloads may be considered

- add COVID-19 case mapping surveys to the app, allowing APEs to monitor deaths and the secondary impact on routine health services. This will include a survey to capture APEs' experiences and identify knowledge gaps
- implement a stock management system to track levels of equipment — such as PPE — provided by the MoH
- develop a COVID-19 dashboard to report on key outcomes relating to the disease at the community level
- evaluate the intervention on an ongoing basis by monitoring the app's usage and conducting online and SMS-based questionnaires and telephone interviews to assess APEs' and caregivers' perceptions on its usability and acceptability.

## Learning

During the project, we anticipate capturing learning on:

- **Effectiveness** is the upSCALE app a more effective platform than SMS via which to improve APEs' knowledge on COVID-19?
- Awareness can caregivers' awareness of COVID-19 be enhanced via adaptations to an existing digital health platform?
- Adherence does the app affect APEs' adherence to newly-published national iCCM guidelines?

These will inform any further COVID-19-specific modifications required and future scale-up of the digital platform.

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Cover image: An APE using the upSCALE platform in Mozambique.

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