

Community surveillance of malaria

Towards malaria elimination

Background

The Government of the Republic of Zambia (GRZ) has created an innovative system to reach its goal of eliminating malaria country wide by 2020. One of the components of this system centers around community-level malaria surveillance and leverages community health worker (CHW) networks in two main areas:

1. Finding, treating and reporting all malaria infections in the community
2. Reducing the burden of outpatient care and staff work load at the health facility through expanding access to malaria diagnosis and treatment by CHWs at community level.

The CHW role

CHWs are responsible for providing malaria management at their health posts, as well as following up on malaria cases within the community to find and treat any additional malaria infections.

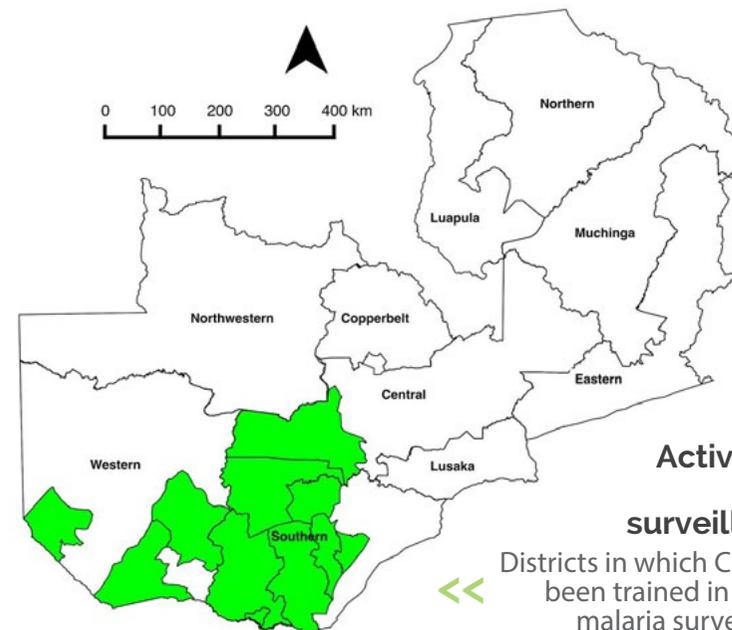




Health System Expansion

The community-level malaria surveillance system provides a means to sensitively detect malaria infections through community health worker networks and report malaria data by mobile phone. CHW activities have expanded the health system to the community in two ways:

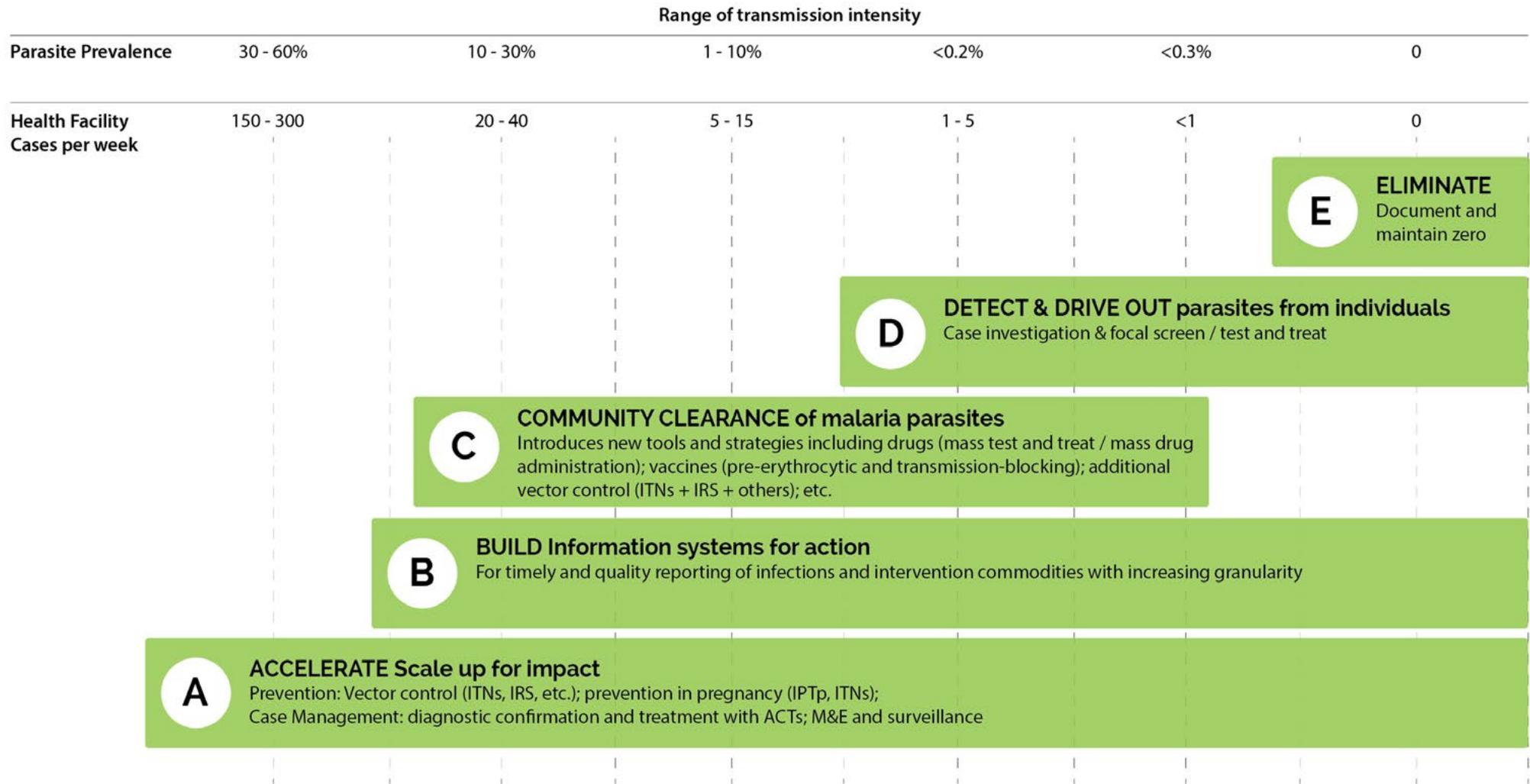
1. By training CHWs posted within their communities to test and treat for malaria, expanding malaria management from ~260 health facilities to a total of more than 1,800 health facilities and CHW posts.
2. By following up malaria cases diagnosed at health facility or health post: CHWs visit the household and neighbors of malaria patients to find and treat any additional malaria infections, thus reducing risk of onward transmission.



Active community-level malaria surveillance districts

Disticts in which CHWs have already been trained in Community-level malaria surveillance follow-up, treatment, and reporting protocols.

Steps to Accelerate Elimination



Steps A through E

The Government of the Republic of Zambia (GRZ) has created a stepped system to reach its near and long-term goals of eliminating malaria. **Step A** focuses on Accelerating scale up for impact (SUFI) -- ensuring prevention and intervention measures are in place; **Step B** targets the Building of information systems for action including addition of rapid reporting from health facilities; **Step C** is Community Clearance of malaria parasites through introduction of new tools and strategies. **Step D** focuses on Detecting and Driving out parasites from individuals through leveraging community health worker networks for malaria surveillance. And **Step E** is Elimination, documenting progress, continuous alert and response surveillance and maintaining a zero level of transmission.

Success

Great success has already been observed through this community-level malaria surveillance approach. Implementing CHW case management of malaria through community surveillance is associated with the following success indicators:

11

The community-level surveillance approach has been implemented in 11 districts in Zambia's Central and Southern, and Western Provinces

8.2%

reduction of outpatient attendance at overburdened clinics (as patients are instead managed by CHWs)

1,500

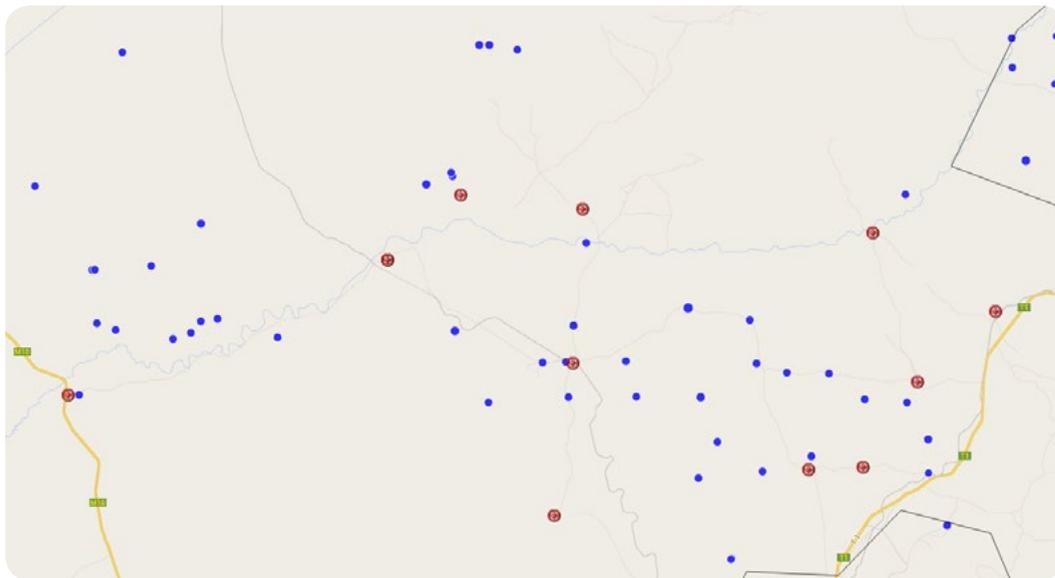
CHWs have been trained in the proper follow-up, treatment, and reporting protocols

45.5%

increase in the number of malaria cases identified and treated

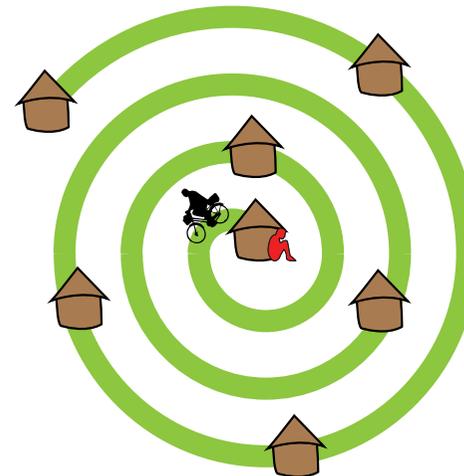


CHWs send data from the community level using simple mobile phones, greatly reducing the required aggregation and subsequent time delay in seeing data at the national level.



Increased access to care

Previously, patients had to go to one of the clinics in the area (red crosses) which were often far away and difficult to reach. Now, patients can also go to their nearest CHW health post (blue dots) to receive testing and treatment.



The community-level surveillance model

Akros technicians worked with the government of Zambia to develop a reactive case detection (RCD) protocol whereby health facilities and health posts, upon receiving a malaria infected patient, alert community health workers near the household of the patient. These community health workers conduct a case investigation, testing surrounding households for malaria infections, and provide treatment as necessary.

