Community-level surveillance of malaria
Towards malaria elimination

Background
Zambia has created an innovative system to reach its goal of eliminating malaria in five key areas by 2015. One of the components of this system centers around Community-level malaria surveillance and leverages community health worker (CHW) networks in three main areas:

1. Finding, treating and reporting all malaria infections in the community
2. Reducing the outpatient malaria burden at the health facility by;
3. Expanding access to malaria diagnosis and treatment

The CHW role
CHWs are responsible for providing malaria management at their health posts, as well as following up 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, an expansion of nearly seven fold

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 infection, thus reducing risk of onward transmission
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.

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:

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The Community-level surveillance approach has been implemented in 11 districts in Central and Southern Zambia

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
The Community-level surveillance model

Akros technicians developed 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.

CHWs were recently provided with over 1,100 bicycles, making their difficult travel in rural areas possible.