



Vodafone mHealth Solutions

Access
to Medicine

power to you

SMS for Life Managing the malaria medicine supply chain



Tanzania

When it comes to treating serious diseases, getting drugs to afflicted patients quickly can be a matter of life and death. That is particularly true for conditions such as malaria which kills more than one million people a year – deaths that could be largely prevented with swift and consistent access to drugs.

However, distributing medicines in developing countries is often a huge challenge. A lack of reliable, cost-effective communication and monitoring tools makes tracking stock levels problematical, particularly in remote areas. And without real-time visibility of the supply chain, it is almost impossible to ensure the right drugs are available where they are most needed.

Vodafone provides the technical solution for 'SMS for Life', a project designed to help capture, analyse and distribute data on the stock levels of five types of artemisinin-based combination therapy (ACT) and quinine-based malaria drugs in the most remote reaches of the Tanzanian Public Health System.

In addition to Vodafone, the SMS for Life partnership includes the Novartis Foundation, the Tanzanian Ministry of Health, the Medicines for Malaria Venture, Roll-back Malaria, and the Swiss Agency for Development and Cooperation. Vodafone helped to design and implement the system at the heart of the project that provides real-time reporting of stocks using mobile phones and two-way text messaging.

SMS for Life began as a six-month pilot, covering 129 health facilities across three Tanzanian districts. After the success of the pilot in reducing stock-outs and improving access to medicine, SMS for Life was expanded to include all 5,070 public health facilities across Tanzania in 2011.



Benefits

The following benefits include data accrued from the six month pilot.

- **Reduced stock-outs**
 - ACT drugs
Stock-outs dropped from 26% to 0.8%
 - Quinine drugs
At the start of the pilot, 17% of clinics had no quinine, reduced to 3% at the end.
- **Greater access to medicine**
300,000 more people had access to ACTs at the end of the pilot than in week one. A further 612,000 were able to receive optimal medicine.
- **Improved data accuracy and visibility**
Using state-of-the-art data gathering infrastructure the average weekly response rate across all three pilot districts, over the 21 weeks, was 95%. Surveillance visits ensured an overall data accuracy rate of 94%.

With the successes achieved for improving access to malaria medicines, SMS for Life has also expanded its disease scope. A total of 200 health facilities are currently connected to report stocks of Tuberculosis and Leprosy medicine and coverage is expected to grow further.

Workflow description

Once a week text messages are sent to each health facility reminding them to count their stock and send back their data. If they respond by 5pm on Friday afternoon they receive free credit on their mobile phones – an incentive for a fast response. If no response is received, the system automatically sends a reminder text message.

All of these actions are fully automated with no manual intervention required. The aggregated data is updated in real time and logged at a web-based dashboard. As well as tabular and graphical representation, web maps display colour-coded data per district. District medical officers can access this information via a computer or on their smartphones for follow-up action.

District medical officers can interrogate aggregated data to provide early warnings about potential new malaria outbreaks and to move stocks to different parts of the region as demand requires.

Further information

For more detail on this pilot project, including a user testimonial video, and a pilot outcomes report, email us at vodafonemhealth@vodafone.com or visit mhealth.vodafone.com

“The Vodafone mHealth Solutions team has developed a system that has proven itself to be a powerful tool. Unobtrusive, simple and reliable, Vodafone has enabled the SMS for Life pilot project to make a real difference in the supply of anti-malarial drugs in Tanzania.”

Jim Barrington
Program Director, SMS For Life, Novartis

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