

Texting the way to better child health

A UNICEF-assisted project uses mobile phone technologies to bring faster treatment to Malawi's children



A health worker measures the upper arm of a baby boy to detect malnutrition. The green of the band indicates that he is within a healthy range.

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HEALTH AUTHORITIES IN MALAWI HAVE A NEW ALLY

in combating child malnutrition: the mobile phone. RapidSMS technology, implemented by the Malawian government with assistance from UNICEF and its donors, uses ordinary text messaging to link local doctors with district and national health services.

The new system is already helping the country's children—like Brenda Jumbe—to live longer, healthier lives.

Brenda's mother, Anna, could not understand why her daughter, 14 months old at the time, always seemed to be sick. Anna had administered all sorts of treatments, but without success. At a loss, she walked the 10 kilometres to Chiwamba Health Center in search of help.

After conducting tests, health workers at Chiwamba used RapidSMS to submit the data directly to the Ministry of Health. The results came back promptly, and Brenda was immediately diagnosed with acute malnutrition and admitted into a nutritional rehabilitation program.

In collaboration with Columbia University, UNICEF has been helping the Malawian government to implement a nutrition monitoring pilot project in the country's Dedza, Salima and Kasungu districts.

RapidSMS was first introduced in Malawi in 2009. The technology links health workers' mobile phones to a national health computer programmed using open source data management software. The computer conducts basic

health data analysis and graphing, and monitors the nutritional status of individual children.

In the past, children like Brenda could go without diagnosis or treatment for weeks, or even months. Doctors and health workers sometimes travelled 30 kilometres or more to submit health data manually, and then waited days or weeks while the results were processed—sometimes receiving no feedback at all.

Today, using RapidSMS to submit such data takes mere seconds and has quick response times. As a result, doctors and healthcare workers at the country's 200 health centres are more closely connected with regional and national health institutions.

SMS, or Short Message System, is the technical name for text messaging. With some 2.4 billion active users, text messaging is the world's most popular data application, accounting for nearly three-quarters of the world's mobile phone subscribers.

The mobile phone is the communication technology of choice in the developing world, as strained national budgets put the "grid"-style telephone system out of reach. RapidSMS works well in places like Malawi precisely because it takes advantage of the cell phone's long reach.

A recent Columbia University study reports promising results from the pilot project: so far, RapidSMS has greatly improved nutrition reporting and reduced errors to 3 percent.

Anna Jumbe would not disagree. Now three years old, Brenda has fully recovered. "My baby is able to eat and play," says Anna. "She is now okay and thriving."

Did you know?

Childhood undernutrition remains a major health problem in resource-poor settings. In developing countries, approximately one-third of children less than five years of age are stunted (low height for age).