mHealth: Building Partnerships for Sustainable Technology Enhanced Innovation

What is the challenge?

Over the past several years, the number of mHealth pilot projects globally has grown exponentially. Yet many of these projects fail to extend beyond the pilot phase and achieve their potential for substantially improving health outcomes at the community level due to lack of planning, funding, or negotiated partnerships with the government, other NGOs and/or mobile network operators. This fragmentation has been a challenge for World Vision and many other NGOs, as well as for people in communities we serve.

The approach in Sierra Leone

The formation of strategic collaborations and partnerships has been a driving factor in determining the scale-up of pilot projects. Guided by our mHealth vision statement that our work is "ALWAYS in partnership with others," our project in Sierra Leone exemplifies this approach. Our staff have built a network of collaborations and partnerships among NGOs, the government, technology providers, funders, and mobile network operators in Sierra Leone that have made the expansion of our mHealth pilot program viable.

An mHealth project is no different than any other in needing engagement and partnership with government agencies focused on sustainability. In this case, a country's ministry of health should be highly engaged to assume a leadership role, since ultimately the government must be willing and able to sustain a national mHealth project once the scope and reach of NGOs and their donors have been fulfilled. Building on ongoing agreements and experience in Sierra Leone, the World Vision team worked with counterparts at the Sierra Leone Ministry of Health to establish mHealth as a strategic investment to be integrated into the national health system, and offer the promise of improved service delivery and community-level data in support of maternal and child health programs.

Partnering with key ministries in Sierra Leone

Together, World Vision and the Sierra Leone Ministry of Health worked closely with the Ministry of Information and Communications, which develops telecommunications policy, and the National Telecommunications Commission, which regulates and ensures policy compliance, to ensure our mobile solution was aligned with governmental strategy, policy and vision for mHealth. In addition, we shared the technical performance characteristics of the mobile solution with the Ministries of Health and Information and Communications, and hosted a field visit for several government employees to explain

MoTECH Suite

What is it?

The MoTECH Suite is an open-source software application that enables community health workers (CHW) or volunteers to facilitate health service delivery and capture key information using cell phones as they conduct household visits. They can:

- Register pregnant women or families with young children
- Track which households are scheduled to receive a visit each week
- Record key information about the health status of the pregnant women or young children being visited
- Create a referral when a pregnant woman or young child needs health services in response to an urgent need. The referral is received by the CHW or volunteer's counterpart at the health facility to help manage services they provide.

How was it deployed in Sierra Leone?

To contextualize this software for Sierra Leone, World Vision collaborated with software* developers to work in communities with groups of "users"—in this case, CHWs or volunteers—to optimize the software and improve ease of use, always in collaboration with the Sierra Leone government to ensure the program aligned with government policy.
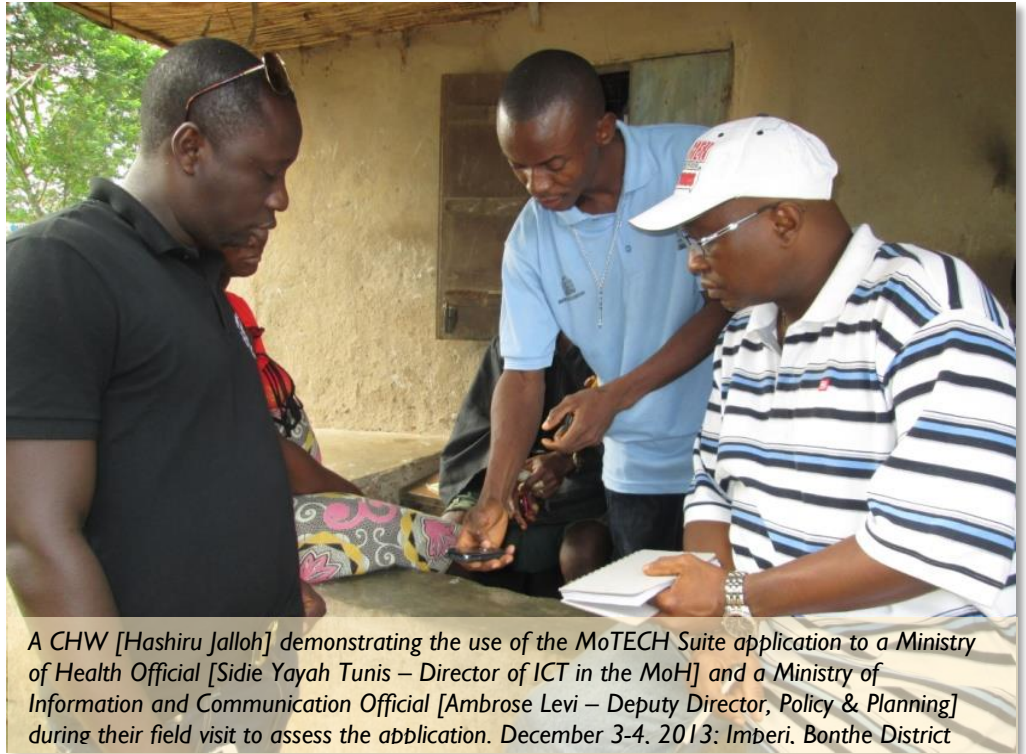
Once the mobile technology was deployed, World Vision formed additional partnerships with the University of Sierra Leone, the Centre for Global Health at Trinity College Dublin, and the Sierra Leone Ministry of Health to obtain funding to measure the results of the mobile technology in improving the effectiveness of CHWs and to highlight areas for enhancement before starting scale-up.

World Vision was also able to develop and field test a common monitoring and evaluation framework in Sierra Leone. It will be used to measure the contribution and value-add of mHealth to health programming outcomes.

The MoTECH Suite has been developed by a consortium of solution providers, most notably Dimagi, Inc. and Grameen Foundation.

the program and its potential promise for improving health outcomes. This effort culminated in a decision by the government to formally name the mHealth initiative led by World Vision as the preferred mobile solution of the Sierra Leone government at the local community level.

To enable the Ministry of Health to lead in the implementation of the mobile solution and ultimately take over the project after scale-up, World Vision is providing it with equipment, as well as helping the ministry identify gaps in policy and technical support, and working with ministry staff to fill those gaps.

A CHW [Hashiru Jalloh] demonstrating the use of the MoTECH Suite application to a Ministry of Health Official [Sidie Yayah Tunis – Director of ICT in the MoH] and a Ministry of Information and Communication Official [Ambrose Levi – Deputy Director, Policy & Planning] during their field visit to assess the application. December 3-4, 2013; Imperi, Bonthe District

Building a sustainable cost model

To create a sustainable cost scenario, World Vision supported the Ministry of Health in its negotiations with Airtel, one of the nation's main mobile network providers. During these negotiations, the Ministry of Health demonstrated to Airtel that the mHealth project is part of a government health and development project. The ministry then proposed that Airtel become partners in this project by using the firm's corporate social responsibility program to offer reduced data, voice and SMS rates for the initiative. This public-private partnership, and the resulting preferential rates, will be crucial to project expansion and will enable the government to afford the cost of the mHealth program as external funding diminishes over the next three to five years.

Bringing other partners on board

The extensive collaborations and partnerships among NGOs, funders, government ministries and telecom regulators, technology providers and mobile network operators created an environment primed for expansion in Sierra Leone:

- field-tested and contextualized mobile technology
- NGOs working together to build their collective mHealth capacity
- funding secured in the near future for scale-up
- affordable rates making expansion and sustainability economically possible
- government support for national implementation

"In recognizing the government's need to take ownership for implementing an overall long-term program, focusing on a nationally affordable, sustainable costing model and solution, the Deputy Minister of Health has led negotiations with Airtel, stressing that mHealth is a national program for Sierra Leone, with World Vision and other NGOs as key implementation partners."

-Magnus Conteh, Health Program Coordinator, East and West Africa Regions, World Vision Ireland

The creation of this network of stakeholders that are all invested in the scale-up of the mHealth pilot project has greatly increased the chance of this initiative's success and longevity.