

## Experience in the development and pilot of Health application for acute malnutrition programming

### The problem

Community-based Management of Acute Malnutrition (CMAM) is a proven approach in the treatment of acute malnutrition. However, the effectiveness of CMAM programmes is undermined by a variety of factors, including poor adherence to CMAM clinical protocols, inaccurate record keeping and weak supervision systems. Currently, paper-based systems are most widely used for patient records, summary reporting and stock management.

### Addressing the need: CMAM mHealth application

In response to these challenges, World Vision initiated the development of a mobile application for CMAM in 2013. The application was contextualized and launched in Afghanistan, Chad, Mali, Niger and Kenya in collaboration with International Medical Corps and Save the Children.

The application is an open-source mobile solution, built on the CommCare platform. It is designed to provide health workers with an easy to use case management information resource and provide simple and practical decision making and patient tracking tools.

### Preliminary feedback from users

Health workers reported that the application has improved adherence to clinical protocols, assisted with defaulter/absentee tracing through automated alerts/reports, and improved communication with beneficiaries. Caregivers appreciated the counselling and education messages that were provided through the application in their local language.

### Key Lessons Learned from application development and deployment

In-country contextualization was labour intensive and complex. Partnering with a technology provider who is experienced in working in low resource, insecure environments would be helpful. Both in-country support for deployment and on-going responsive support for bug fixes and responding to user needs is essential. In addition, sensitization and involvement of the Ministry of Health is both important and time consuming. Discussions regarding data migration and sustainability are essential.

### Next Steps

Opportunities for future deployment should be considered in the following contexts: 1- national deployment in line with the national digital health strategy, linked to the government HMIS system, 2- humanitarian settings where there is no national HMIS or digital health platform available, deployment may be primarily led by NGOs supporting CMAM implementation.

Several future priorities have been identified for the application: expanded use in current countries linked to HMIS system and national mhealth platform; development of monitoring and reporting standards based on use of individual child data; capacity building to support uptake and use of application; use of application for CMAM Surge work; development of multiple child health focused apps on an integrated platform; linking application to other platforms (CMAM report, WV CMAM database).