



MVACCINATION – BORESHA CHANJO

Grantee
AMREF HEALTH AFRICA

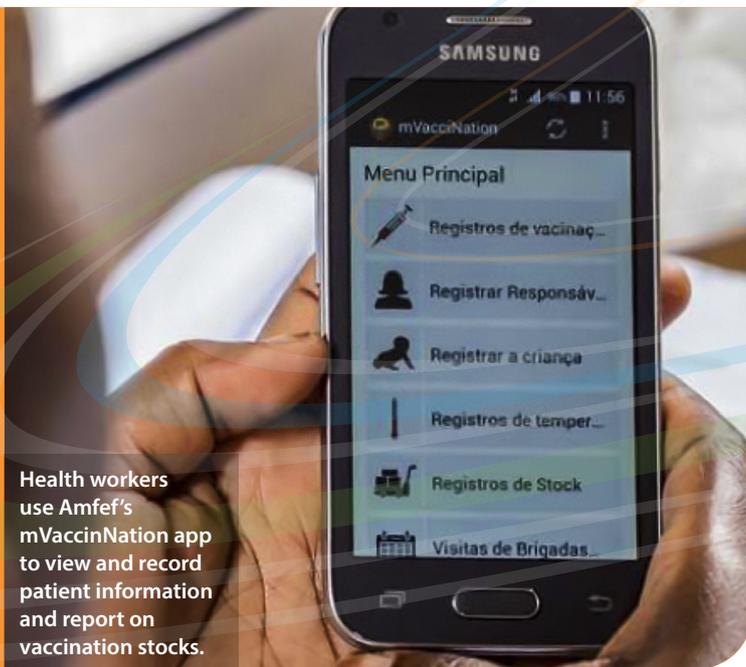
Grant amount
GBP 450,000

Project duration
November 2015–April 2018

Implementing partners
Local Government Authorities, Mezzanine, GSK and Vodafone

Beneficiaries
240,000 mothers, caregivers and children

Location
Geita and Shinyanga regions



Health workers use Amref's mVaccination app to view and record patient information and report on vaccination stocks.

PROJECT BACKGROUND

Although infant and under-5 mortality rates in Tanzania have vastly improved over the past 30 years, stock-outs in childhood vaccines and a lack of timely, accurate and complete patient information for caregivers and their infants remain a simple matter of life and death.

In response to a fragmented and inadequate paper-based vaccine inventory system, the Ministry of Health, Community Development, Gender, Elderly and Children (MoHCDGEC) introduced the Vaccine Information Management System (VIMS), a digital initiative intended to improve the recording and monitoring of vaccine supplies. The system, however, is designed specifically for central and regional stores and district-level facilities rather than for primary care health facilities where the majority of immunisations take place, and where supply-management issues have resulted in shortages, over-stocking and wastage.

To plug the gap, Vodafone and Amref Health Africa adapted and deployed a mobile health application (app) called mVaccination–Boresha Chanjo (*boresha chanjo* is a Swahili phrase that roughly translated means 'to improve vaccination coverage').

PROJECT DESCRIPTION

mVaccination complements VIMS by capturing information and delivering immunisations more consistently at the primary-care level. It enables

health-care practitioners equipped with tablets or smartphones to view and record patient vaccination histories, schedule upcoming appointments, and report on follow-up visits. Using the same app, health facilities submit regular reports on vaccination stocks in order to prompt new supply shipments when needed. mVaccination thus improved reporting between the district health facilities and the community. New mothers who register at a health facility receive automated short message service (SMS) reminders with past and future vaccination dates as well as educational health messages and alerts to disease outbreaks such as cholera.

PROJECT RESULTS

During the project, 100 health service providers were trained in the use of the mVaccination system to register over 95,068 children and caregivers, 315,660 immunisations and 17,636 stock updates, and 22,465 temperature updates were submitted.

A total of 30,543 reminder SMSs were sent prior to the due vaccination date and 34,412 SMSs were sent out after a missed vaccination appointment. The 2016/17 statistics for Geita and Shinyanga Regions showed an increase in vaccination coverage from 90 per cent to 98 per cent. Immunisation stock-outs decreased from 78 per cent in 2015 to 28 per cent in 2017, whilst data quality and accuracy increased from 78 per cent in 2015 to 93 per cent in 2017.



GENDER EQUITY AND SOCIAL INCLUSION

Men tend to be 'gatekeepers' for women's access to resources, opportunities and services via mobile technology and are often the first to receive SMSs even if they are not intended for them. In the case of mVacciNation, this had an unexpected yet positive effect on the increased uptake of vaccination services and levels of men participating in decisions regarding their children's health. In June 2017, Amref conducted a focus group discussion (FGD) with the project's beneficiaries in Kahama district. During the FGD, women reported that husbands' involvement on issues of health, and especially on matters of child health, had improved. As one woman interviewed said: *'My husband used to not allow me to go to the health facility for health-care services. However, when we started to receive the reminder messages and the sensitisation, he became more supportive and he accompanies me and the child to the health centre for the vaccination appointment.'*

PRINCIPLES FOR DIGITAL DEVELOPMENT

Design with the user: The project continuously solicited feedback from users to improve the app's usability and efficiency. The insights gathered from consultations led to changes to the registration and vaccination recording methods and the way reminder messages are relayed. For example, adaptations to the tool enabled users to enter and receive information in Swahili as well as in English.

Be collaborative: Collaboration from the beginning was critical to achieving impact. PATH's Better Immunization Data (BID) health initiative implemented an Electronic Immunisation Registry (EIR) that contained child-based immunisation and stock data at the service-delivery level in Tanzania. By sharing patient engagement methods and lessons learned, mVacciNation–Boresha Chanjo and PATH-BID worked together in ways that benefited the communities they serve. For example, by adopting the mVacciNation–Boresha Chanjo SMS reminder system, PATH-BID helped to scale up immunisation efforts and raise the number of children being vaccinated throughout Tanzania.

NEXT STEPS

Following approval from MoHCDGEC, HDIF granted the organisation a six-month project extension to begin integrating the mVacciNation platform into VIMS to ensure sustainability and replication across all other districts in Tanzania. Since the project ended, the MoHCDGEC has also approached Amref to expand the community component of mVacciNation in order to extend immunisation to hard-to-reach children, and also link communities with health facilities through community health workers. Once this has been completed, MoHCDGEC will allow Amref to scale up the application to all health facilities in Geita and Shinyanga.



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