

SIERRA LEONE



DIGITAL HEALTH QUICK FACTS

Characteristic	PROJECTS	
	Access to Infant and Maternal Health Plus Project (AIM Health Plus)	Ebola Vaccine Deployment Acceptance and Compliance (EBODAC)
Timing	2017–2022	2015–2020
Phase	Scaling up	Hand over or Complete
Programmatic approaches	Timed and Targeted Counselling	Community Health Committees, CHW Training
COVID-19 response	Yes	Yes
Software	CommCare	MOTECH
User Profile	Extension workers (CHW, volunteer or home visitor)	Extension workers (CHW, volunteer or home visitor) and peripheral health unit in-charges
Number of users	326	1,040 for vaccine trial 6,000 CHWs for COVID-19 response
Number of collaborating health facilities:	20	94
Number of beneficiaries reached	12,332 children aged 0–5 10,032 children 6–11 11,100 children 12–18 4,029 pregnant/lactating mothers 6,206 other adult females 4,100 adult males	6,646 children aged 0–18 8,352 adult females 7,311 adult males

Overview

World Vision Sierra Leone has accumulated significant experience with digital health programming. Two projects have been active since 2015 in collaboration with national and local government through a multi-stakeholder approach.

With the support of Irish Aid, the [AIM Health Plus](#) project addresses the leading causes of maternal and neonatal mortality and improves young child survival and nutritional status across four countries in Africa. Promoting behaviour change at the household level has been the emphasis. In Sierra Leone, the AIM Health Plus project has included a digital health component since its inception in 2017. The geographic focus is Imperi district and Sherbro Island.



The AIM Health Plus project provides community health workers (CHWs) with smartphones equipped with a tailored version of Dimagi's [CommCare](#) software to use during their home visits. The application supports CHWs who are using the Timed and Targeted Counselling (ttC) approach to promote positive health and nutrition behaviour change among pregnant women and mothers or caregivers of children under 2. The application provides reminders to help CHWs to visit homes at the ideal time during pregnancy, infancy and childhood. It also supports CHWs as they conduct counselling sessions, including enabling them to submit community health data in near real time. This data is then used for planning and decision-making. To boost acceptability of this digital health tool, local language audio clips are incorporated into the application. This digital health intervention is expected to improve the effectiveness of behaviour change communication delivered to women and caregivers of children under 2 as well as strengthen the health system through better use of community-level data.

The **Ebola Vaccine Deployment Acceptance and Compliance (EBODAC)** project was established in 2015 to support the acceptance and uptake of new Ebola vaccines. The project's communication and community engagement strategy includes using appropriate technology to maximise acceptance and therefore impact of an Ebola vaccination programme.

EBODAC is currently supporting the Ebola vaccine trial (EBOVAC-Salone) in Kambia district of Sierra Leone; Mbarara, Uganda; Goma, Democratic Republic of Congo; and Gishenyi, Rwanda, to ensure that the novel prime-boost vaccine regimen is well accepted and successfully deployed. The approach considers CHWs to be the backbone of a community health system.

The digital health innovation, called Mobile Training and Support Service (MOTS) and built on the Grameen Foundation's [MOTEC](#) platform, aims to strengthen networks of front-line health workers and ensure epidemic preparedness, including support for Ebola vaccine campaigns. The technology delivers training modules, including quizzes, to CHWs' mobile phones using Interactive Voice Response (IVR) in their preferred language. The software also enables online and office monitoring of CHWs by management. MOTS is demonstrating its utility to efficiently deliver training for this critical cadre of health workers and overcome well-known barriers to supportive CHW supervision.*

While initially designed to train CHWs to support vaccine-related programmes, the MOTS system was readily repurposed as part of the COVID-19 response. Interactive (IVR) training modules in alignment with national curricula were deployed to prepare thousands of CHWs to follow COVID-19 prevention and practice guidelines and reinforce their understanding of integrated community case management to address leading causes of death in children under 5. This has alleviated the re-training challenge that the health system faced in responding to the COVID-19 pandemic.

WHO Health Focus Areas[†] Supported

- Adolescent and youth health
- Civil registration and vital statistics
- Cross cutting
- Humanitarian health
- Infectious diseases (non-vector borne)
- Maternal health
- Newborn and child health
- Nutrition and metabolic disorders
- Sexual and reproductive health
- Vector-borne diseases
- Water, sanitation and hygiene (WASH)

Stakeholders

- Ministry of Health and Sanitation
- National Telecommunication Commission (NATCOM)
- eHealth Hub
- CHW National Coordination Hub
- Community Advocacy Development Agency
- Janssen Pharmaceutical of Johnson & Johnson

Funding

- Irish Aid (Government of Ireland)
- Innovative Medicines Initiative
- Janssen Pharmaceutical of Johnson & Johnson

Technology Partners

- **Technology:** Dimagi, Grameen Foundation
- **Mobile Network Operators:** Airtel, Orange

Contacts

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* Mc Kenna, P. et. al. 'Mobile training and support (MOTS) service – using technology to increase Ebola preparedness of remotely-located community health workers (CHWs) in Sierra Leone', Mhealth (2019), <https://pubmed.ncbi.nlm.nih.gov/31620462/>.

[†] Categories used to describe health focus areas are established within the structure of the World Health Organization's [Digital Health Atlas](#).

