

## USAID COVID-19 Vaccine Technical Assistance Implementing Partners Forum

# Digitizing Immunization Data to Strengthen Routine Immunization and Primary Healthcare in Kenya

Dickson Otiangala, Vicky Maiyo, Grace Njenga, Denis Omondi, Penina Anyango, Sam Ontiri, Ruth Wanjala, Amos Chweya, Amina Ismail, Isaac Mugoya.  
USAID/MOMENTUM Routine Immunization Transformation and Equity, Kenya.

Strengthening Data Availability, Monitoring, and Use for Decision Making

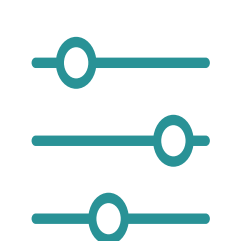


### CHALLENGE

As of July 5, 2023, there have been 343,786 confirmed cases of COVID-19 and 5,689 deaths reported in Kenya. Kenya began vaccinating against COVID-19 in March 2021. MOMENTUM Routine Immunization Transformation and Equity worked with a consortium of experts, national leaders, and local organizations to improve uptake of COVID-19 vaccines by strengthening stakeholder and community engagement; developing partnerships to increase access to and uptake of COVID-19 vaccines; conducting data review, analysis, and microplanning; strengthening supply chain planning and systems; and training health workers.

Kenya currently collects routine immunization (RI) data manually, using several tools and a monthly aggregation on the digital KHIS platform. Clients are given individual vaccination cards or booklets as proof of vaccination.

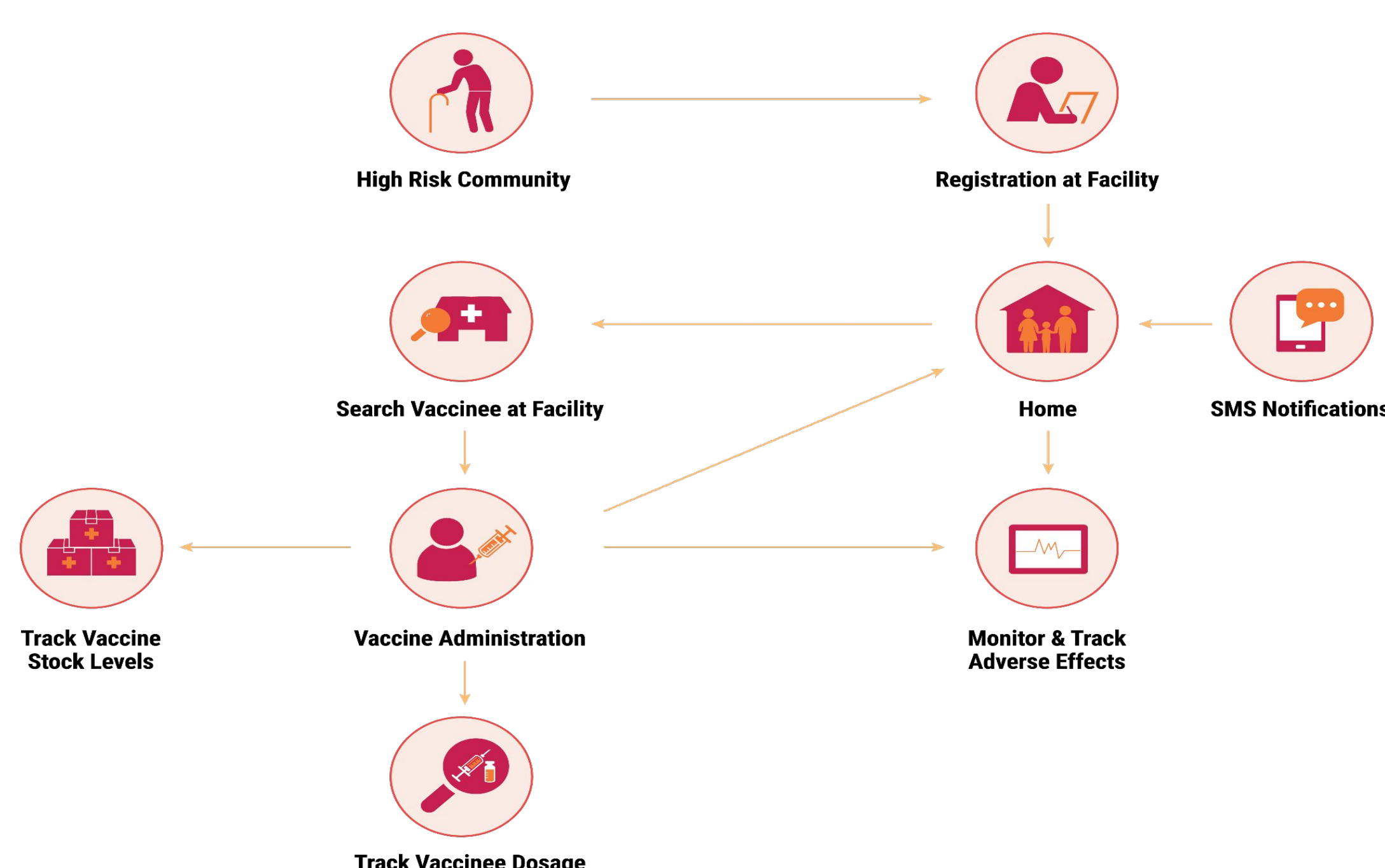
The current manual system has limited data visibility at each level of the health system and immunization records are often lost by both the health system and individual clients, leading to suboptimal monitoring and data use for decision making. Across Kenya, immunization coverage is impacted due to poor data quality and dropout rates.



### INNOVATION

To ensure reliable COVID-19 vaccination data, the Ministry of Health (MOH) and its partners developed an innovation to facilitate the roll-out of COVID-19 vaccines. The ChanjoKE system is an electronic vaccine registry ensuring efficient and effective management of COVID-19 vaccines through tracking and tracing vaccines, monitoring individual immunization schedules, sending out vaccination reminders, issuing certificates to individuals after vaccination, reducing re-vaccination, tracking adverse events following immunization, and providing real-time data through dashboards and reports for decision making.

#### ChanjoKE Management Information System Workflow



### LESSONS LEARNED

This innovation contributed to the real-time data visibility and use of COVID-19 vaccination data in Kenya. As of July 1, 2023, 38.4% adults and 21.9% teenagers (12 - 17 years) were fully vaccinated. The MOH wanted to improve the ChanjoKE system to extend these capabilities to RI data.

To do this, MOMENTUM Routine Immunization Transformation and Equity supported a data backlog root cause analysis and offered technical assistance in a five day workshop with the MOH National Vaccines and Immunization Program, the MOH Health Management Information Systems departments, county teams, and implementing partners to identify areas in the ChanjoKE system that needed to be improved to include RI.

Areas identified:

- Include RI data and microplans.
- Fix user management and access modalities at all levels of the health system.
- Properly label outreach and health facility vaccination data.
- Improve defaulter tracing.
- Allow offline usage due to system downtime and limited internet connectivity.
- Enhance capacity building for health workers by developing a ChanjoKE user guide & standard operating procedures.



### APPLICATION TO ROUTINE IMMUNIZATION OR PRIMARY HEALTH CARE

Including RI data and workflows requires strategies like increasing investments in digital health and internet connectivity, reducing system downtime, real-time client registration at each vaccination site and point, proper planning and increased investments in immunization catch-up activities, and increased investments in human resources for health and job aids in order to be ready for the enhancement of the ChanjoKE system.

An enhanced ChanjoKE system will strengthen RI by improving coverage and indicators through the inclusion of RI data and micro plans, real time tracking data from vaccination sites (fixed or outreach), and improved defaulter tracing mechanisms.