

Localizing a Digital Adaptation Kit for Immunization: Ghana's Experience

June 2025

Ghana's experience localizing the WHO Immunization DAK



Project context

- Under the Digital Innovation in Pandemic Control project (DIPC), Ghana Health Service (GHS), with support from PATH and GIZ, localized the WHO Digital Adaptation Kit (DAK) for immunization inform the immunization component of the DHIS2 e-Tracker (i.e., the Child Health Module [CHM]).
- The localization process followed WHO SMART Guidelines and informed development of Ghana's enhanced CHM, now functioning as the country's electronic immunization registry.
- The DAK provided standardized business processes, decision-support logic, and indicators tailored to Ghana's immunization policies.

DIGITAL ADAPTATION
KIT FOR IMMUNIZATION
- GHANA



GHANA HEALTH SERVICE

Ghana's immunization DAK is publicly available on the [Digital Square website](#).

Ghana's DAK localization approach

How localization was completed

- A 4-day workshop convened GHS staff and other partners to adapt the global DAK structure to Ghana's reality.
- The process involved:
 - Mapping real workflows before introducing generic models.
 - Developing local personas (e.g., Community Health Nurses, Community Health Volunteers, Expanded Programme on Immunisation Officers) and user scenarios.
 - Aligning workflows with national guidelines (e.g., vaccine tracking, adverse events following immunization (AEFI) reporting).

Tools used

- Structured validation in Excel.
- Shared Google Drive repository with DAK drafts and training materials.
- Hands-on engagement with district and community-level staff during the Volta and Ahafo pilots.



How the DAK informed CHM design

CHM enhancements guided by the DAK



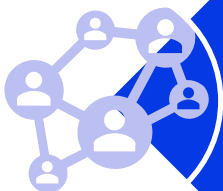
Introduced automated defaulter tracing and SMS reminders.



Aligned stock management and adverse effectives following immunization (AEFI) workflows with facility-level practices.



Added child growth tracking and cold chain inventory fields—all reflected in DAK business processes and data elements.



Built a shared language between technical and programmatic stakeholders.

Lessons learned from Ghana's DAK process



What worked well

- Early engagement of field workers improved relevance and buy-in.
- Using the DAK as a foundational reference reduced development time and helped align stakeholders.
- Contracting with HISP-Ghana—the government's preferred provider and maintainer of the DHIS2 eTracker—enabled seamless coordination for successful system enhancement and provided value by facilitating their early involvement in DAK localization efforts.



Challenges

- Community-level staff were sometimes hesitant to speak in national workshops—staging the process so that community-level staff and national level staff had distinct opportunities to provide input into the DAK localization helped.
- Some facilities lacked devices or internet, making full DAK-aligned digital workflows difficult to maintain.
- Without a national directive, paper documentation is still required, creating duplicate work.

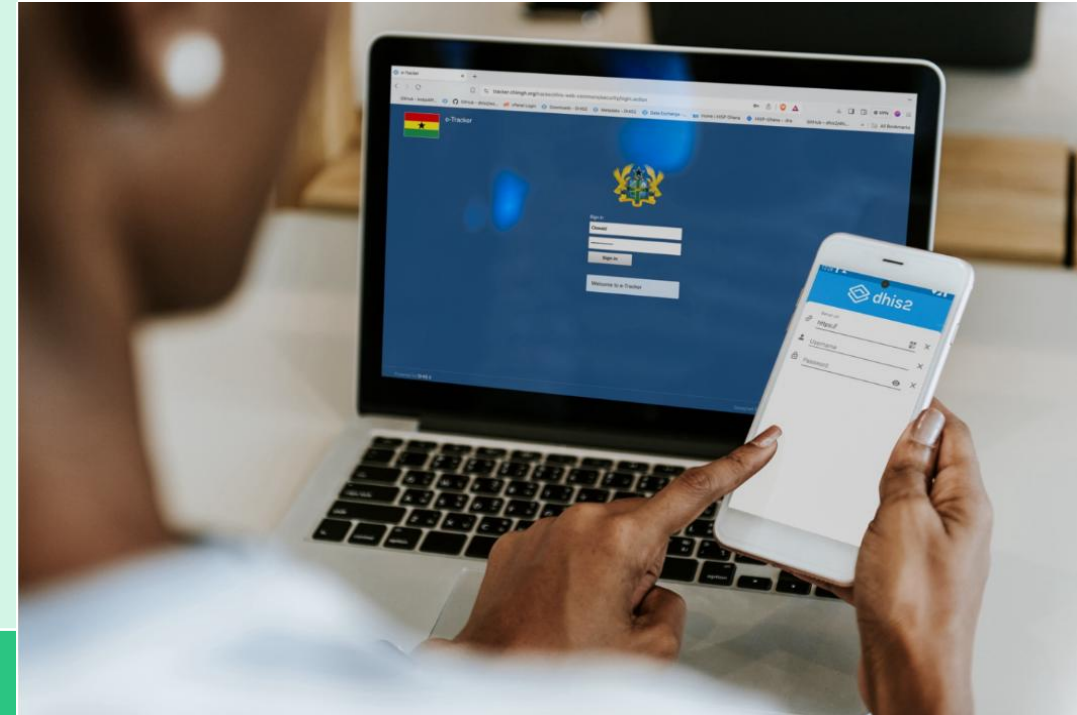
How the DAK will be sustained and scaled

Next steps

- An updated version of the DAK is in development (May 2025) to reflect the latest immunization schedule and logic.
- National leads Pamela Quaye and Daniel Asomaning will maintain the DAK with support from a proposed Change Control Board (CCB).
- Tools like JIRA and SharePoint are being explored for version control and collaboration.

Broader use

- The DAK will serve as a reference point for CHM enhancements, system maintenance, and training.
- Refresher trainings and short scenario-based video tutorials will be stored in a national repository.



The CHM is accessible by computer, tablet, and mobile as a tool helping health managers and workers plan and deliver immunization services.