

The journey of NTD data from local, fragmented database systems into stable and secure Health Management Information Systems

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Introduction:

Neglected Tropical Disease (NTD) Programs operate to eliminate or control diseases such as LF, Trachoma, OV, SCH, and STH in endemic countries around the world. Such programs collect routine monitoring and outcome data in relation to their Mass Drug Administrations (MDAs) and Disease-Specific Assessments (DSAs) to assist with programmatic decision-making, inform program progress, report to donors and funders, and provide an evidentiary basis when submitting elimination dossiers to WHO. It is essential that Ministries of health (MOH) within countries have stable and secure database systems with complete current and historical NTD data to protect investments in elimination and control programs.

The Problem:

Despite this, many countries continue to use siloed Excel sheets for the day-to-day management of NTD program implementation, a situation that is fraught with numerous challenges, including lack of a shared single database across all diseases, lack of ability to access the database by multiple users simultaneously in a network-based setting to eliminate data divergence, lack of built-in data security mechanisms (password, virus protection, and regular back-ups), and limited NTD Program personnel capacity to update and maintain the data systems over time. Typically, Ministries of Health employ HMIS - often but not always based on DHIS2 software - as a central repository for all health-related data, spanning programs relating to Malaria, TB, HIV-AIDs, etc. However, NTD data are often not included as part of such systems, and the NTD programs are left to manage their own data systems independently.

Movement Towards a Solution:

In recent years, however, there has been a push to integrate NTD data into centralized HMIS because of the obvious benefits, and countries are slowly moving in that direction - starting with integrating data relating to only a handful of NTD indicators. The movement towards full integration of all NTD data into existing HMIS is essential to ensuring a sustainable path forward as countries move towards full self-reliance concerning managing these debilitating diseases. Act to End Neglected Tropical Diseases (NTDs) | West is a five-year USAID-funded program that aims to eliminate or control five NTDs (LF, Trachoma, OV, SCH, and STH) in 11 West African countries. This poster explores the integration of NTD data into the DHIS2/HMIS in four countries that are part of USAID's Act to End NTDs | West portfolio in West Africa.

Country Progress:

	Ghana	Benin	Côte d'Ivoire	Senegal
MDA	DHIS2 at subdistrict or district level, depending on Internet access; Excel used simultaneously	Excel as main database; DHIS2 data entered annually only	Excel and DHIS2 (latter for LF, OV, and STH as pilot; SCH, TRA to follow)	DHIS2 at health post or district level, depending on Internet access; Excel used simultaneously
MMDP	DHIS2 at facility level for clinic-based records; updated monthly	Excel as main database; DHIS2 data entered annually only	DHIS2 for clinic-based records	DHIS2 at health post level
DSA	Kobo Toolbox (LF, OV, SCH, STH DSAs); ESPEN Collect (LF Confirmatory Mapping)	ESPEN Collect for all DSAs	ESPEN Collect for LF, OV, and SCH DSAs; Tropical Data for Trachoma DSAs	ESPEN Collect for all DSAs
Innovation	Lymph App (Pre-TAS only)	Interoperable system being built between Excel, ESPEN Collect, TT Tracker and DHIS2	Future plans to integrate DSA data into DHIS2	Future plans to integrate DSA data into DHIS2

Conclusions:

All four countries showcased in this poster are demonstrating remarkable progress in a very short time span in moving from older, unstable, siloed Excel-based systems to more stable and secure cloud-based systems for the collection, storage and utilization of their NTD data. While there it is likely that it will take several years for countries to achieve full reliance on DHIS2, it is clear that this will happen in the coming years. Finally, certain countries have demonstrated innovations to facilitate this journey: Benin in developing its interoperability platform and Ghana in developing the Lymph App to facilitate direct DSA data entry into the DHIS2.

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MDA: Mass Drug Administration; MMDP: Morbidity management and disability prevention; DSA: Disease-Specific Assessment

