INFORMATION SYSTEMS FOR SUPPLY CHAIN MANAGEMENT

The case for connecting separate and interoperable technology applications for LMIS and HMIS data.

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Using technology to improve global health
UNIQUE CHARACTERISTICS OF LMIS AND HMIS

- Health management information systems (HMIS) collect, aggregate and use service data from health facilities.

- Logistics management information systems (LMIS) collect and use medicines supply data from health and storage facilities.
DEFINING HMIS

- A *health management information system (HMIS)* collects and reports program information, such as incidence of disease, client/patient information, and health services rendered. HMIS data can be used to determine disease patterns or to track health services use, as well as to monitor and evaluate health service delivery.

- DHIS2 is the most widely used application in LMICs, and is optimized for *data reporting*.
47 DHIS2 DEPLOYMENTS

https://www.dhis2.org/inaction
DEFINING LMIS

- A logistics management information system (LMIS) is an information system that is used to collect, organize, and present logistics data gathered from all levels of the health system. An LMIS enables logisticians to collect the data needed to make informed decisions that will ultimately improve product availability and customer service. One immediate decision that is made based on logistics data is the quantities of products that should be resupplied to health facilities.

- OpenLMIS, Logistimo, and Real Time Value Network™ are examples of LMIS applications in use in Africa and Asia; they are optimized for supply chain management.
15 KNOWN ELMIS DEPLOYMENTS

Does not include DHIS2 as a data collection tool
CAN DHIS2 BE AN ELMIS?
EXCHANGING DATA BETWEEN LMIS & HMIS

Logistics Management Information System (LMIS)

An LMIS provides the data needed to operate a supply chain. It collects data about health products such as quantities consumed, stock on hand, losses and adjustments.

Integrated HMIS/LMIS Dashboard

Improved supply chain performance, improved service delivery, better data, and enhanced communication.

Health Management Information System (HMIS)

An HMIS collects and reports program information such as disease incidence, client/patient information, and health services rendered. HMIS data can be used to track disease patterns and health service utilization.

SYSTEM INTEROPERABILITY IN ERITREA

Linking LMIS and HMIS Data for Improved Use of Information

• Intervention: General restructuring of the facility-based Routine Health Information Systems

• Before the improved RHIS, vaccine stockouts went unreported

• After linking LMIS and HMIS, vaccine stockouts could be monitored monthly, and the relationship between stockouts and children vaccinated could be tracked

• Evidence of an elevated stockout percentage alerted MOH to request additional vaccines from donors
THE VISION OF DATA EXCHANGE IN AN HIS
TANZANIA’S HIE, PHASE 1

Care and Treatment Center

Org. may post FR updates via HIM/IL.

CTC2 (HIV)
(multiple instances)

FR updates to/from HIM/IL.

SUPPORTED SYSTEMS

Facility Registry

eLMIS

DHIS2

INTEROPERABILITY LAYER (IL)

Data rules: Privacy, Confidentiality, Security, integrity and Quality

HEALTH INFORMATION MEDIATOR

Transport | Message Type | Data Elements | Codes


DHIS2/eLMIS FR updates from HIM.
THANK YOU