



**TechNet-21**



DEPLOYING AN ELECTRONIC LMIS:  
MAKING THE RIGHT CHOICE

**What's the right solution for you?**

Jan Grevendonk, Chris Wright  
15:00 CET, November 4th, 2021

# INTRODUCTION



# TechNet-21



# We are TechNet



Established by WHO and UNICEF in 1989, we are a global network of immunization professionals committed to strengthening immunization services by:



**building**  
relationships



**sharing**  
knowledge



**coordinating**  
activities

Our goal is to improve immunization services by bringing together immunization professionals at **every** level, in **every** country, and from **every** sector.



# TechNet-21 presence

The network has two complementary parts:

1. The **TechNet Conference** (held every two years)
2. The **TechNet-21.org** website

Membership is free and joining is easy

We support the TechNet-21 community on Telegram

- [TechNet-21 Community \(EN\)](#)
- [Communauté TechNet-21 \(FR\)](#)
- [TechNet-21 announcements \(EN\)](#)
- [Immunization Supply Chain \(EN\)](#)



# TechNet-21 online presence

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# e-LMIS are crucial building blocks towards IA2030 goals

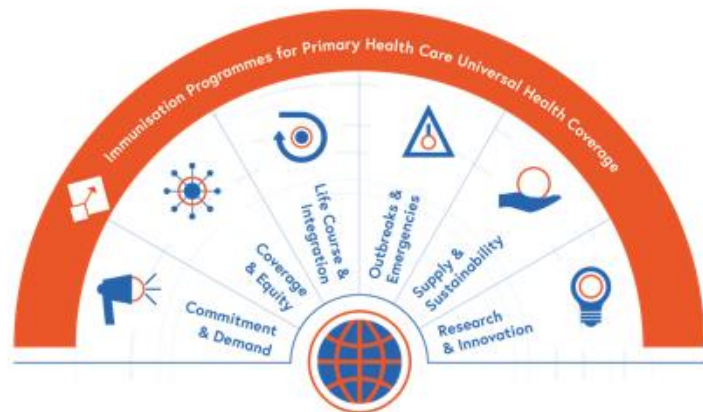


## IA2030 Goals and Objectives

### 3 Impact Goals

- 1 Reduce mortality and morbidity from vaccine-preventable diseases for everyone throughout the life course.
- 2 Leave no one behind, by increasing equitable access and use of new and existing vaccines.
- 3 Ensure good health and well-being for everyone by strengthening immunisation within primary health care and contributing to universal health coverage and sustainable development.

### 21 Strategic Priority Objectives



Lives saved

Elimination goals

Less Zero-Dose Children

Reach Coverage Targets

Strategic Priority Objective 1.4: Secure high-quality supply chains for vaccines and related commodities and effective vaccine management, within the primary health care supply system

Indicator at global level: Proportion of time with full availability of DTPcv and MCV at service delivery level (mean across countries)


# Core Functionality of an eLMIS



- Inventory management (at health facility, district stores)
  - Functions as an electronic stock card/ledger
  - Records stock received, issued, lost/wasted (with reason code), transferred, along with expiry dates and stock balances (by batch and by product)
- Transactions management: requisition/allocation/transfer & receiving
  - Supports transactions to order (requisition) or allocate (informed push) supplies or to transfer supplies to another facility, and to confirm receipt (proof of delivery)
  - Can suggest quantities based on different criteria (max/min, optimal stock quantity, etc.) and allow user over-ride
  - Enables supervisor review and approval

# Additional Functionality an eLMIS *might* do



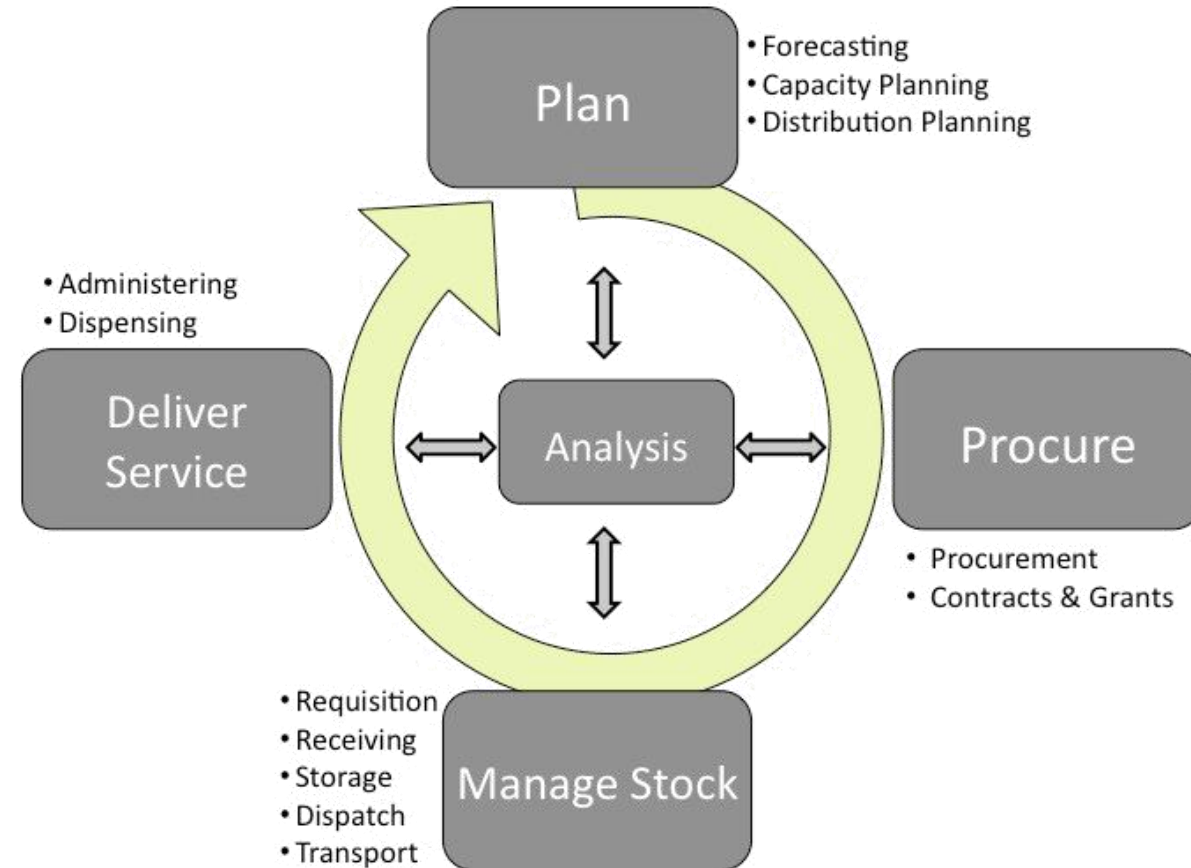
- Manage dispensing (to patients) or issuing (to wards or outreach workers)
  - Support annual forecasting and supply planning (national level)
  - Support procurement
  - Warehouse management (national/subnational stores)
  - Transport planning & management
  - Asset management (CCE, diagnostics, other equipment)
  - Business intelligence (dashboards, decision-support, alerts, scenario modeling)
  - Enable in-app feedback/supportive supervision, peer networking
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# What are your requirements?

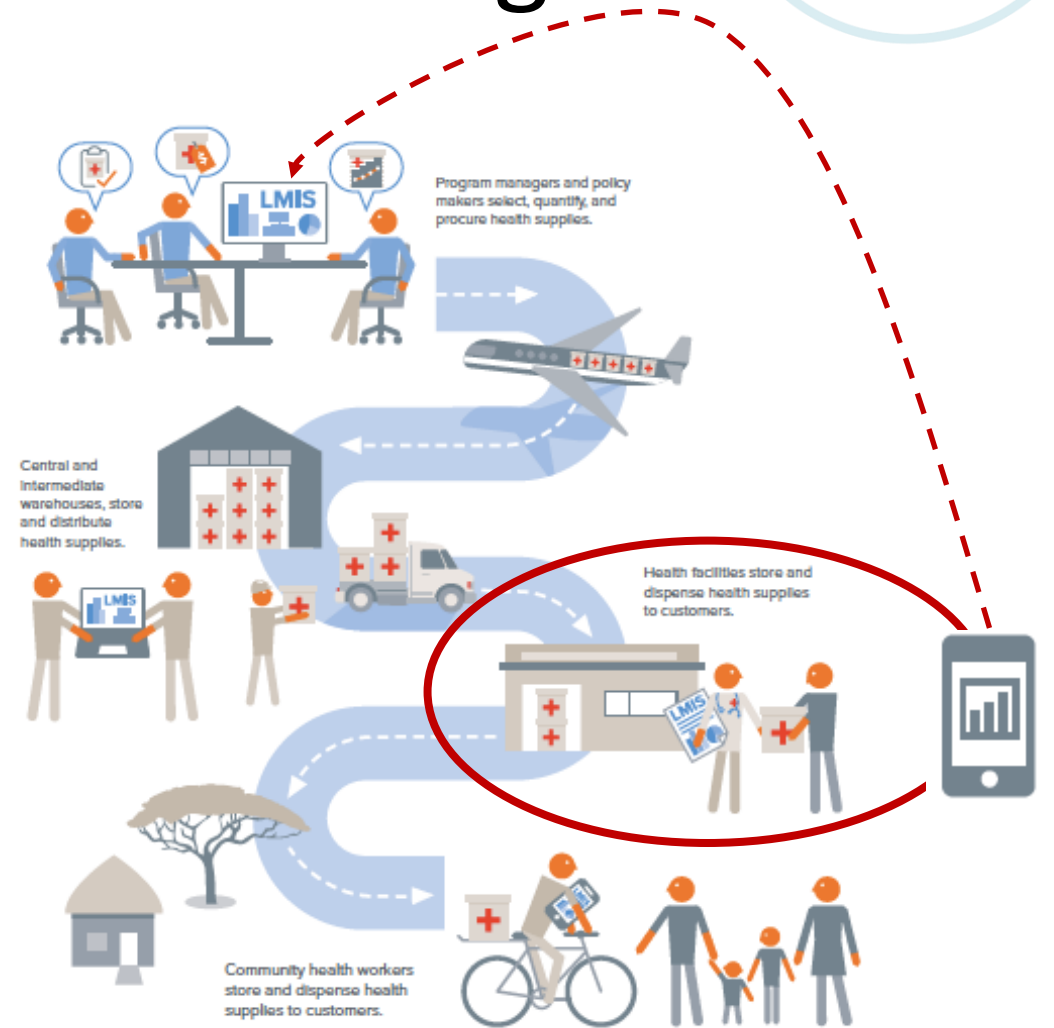


- Before choosing an eLMIS, map out exactly what you want the system to do—what processes to digitize—in *your* country/programme context
- Be strategic: consider what you need the eLMIS to do now *and* how it might grow over the next five years



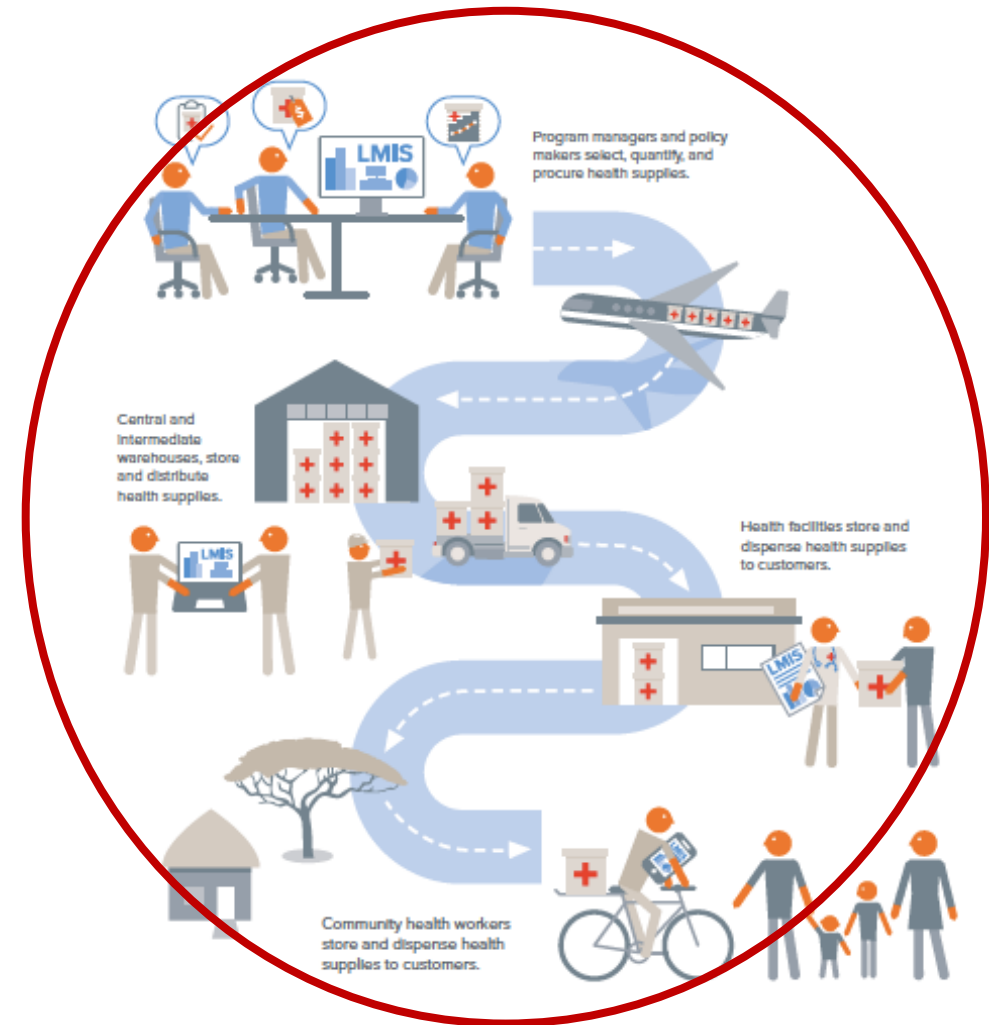
# Scenario 1: Last Mile Stock Monitoring

- Country A has a lot of zero dose children in remote areas, and vaccine stock outs are a major contributor. An eLMIS needs to be able to monitor vaccine availability at the last mile (service delivery level) and make any issues visible for corrective action



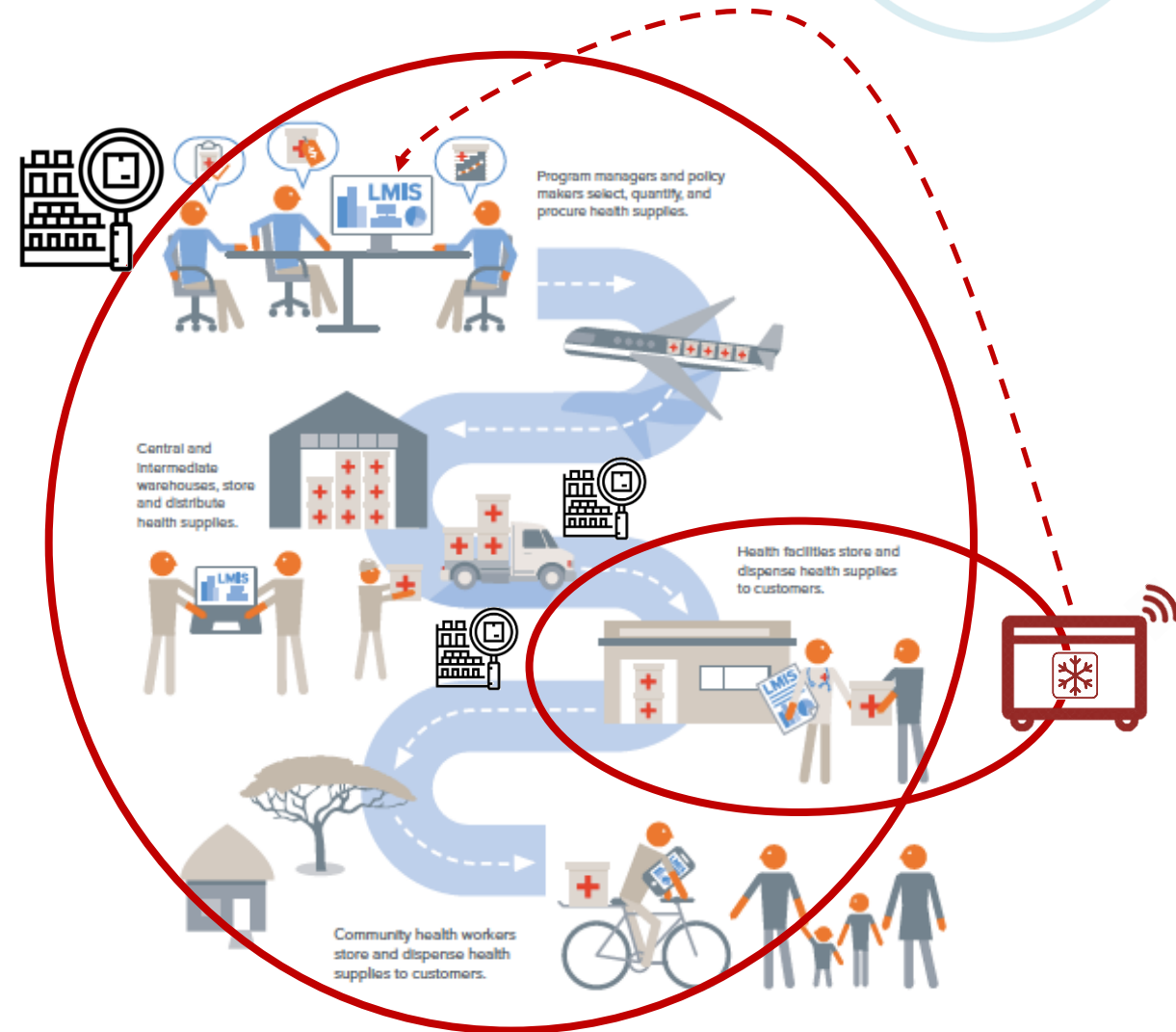
# Scenario 2: Integrated Supply Chain

- Country B has decided to integrate its supply chains across health commodities, especially at the central and regional store level. Ideally, the chosen eLMIS supports procurement and warehouse management as well as inventory management and stock transactions.



# Scenario 3: Optimal Stock Levels

- Country C has experienced too much wastage, especially in remote areas. Their ideal eLMIS may integrate some temperature monitoring, but also help with better replenishment, e.g. suggesting more rational order quantities so that buffer stocks are optimized within min and max levels.





Empowered lives.  
Resilient nations.  
Resilient nations.



# Electronic Health **Information** Network (eHIN)

*...transforming Malawi's Health Supply Chain*

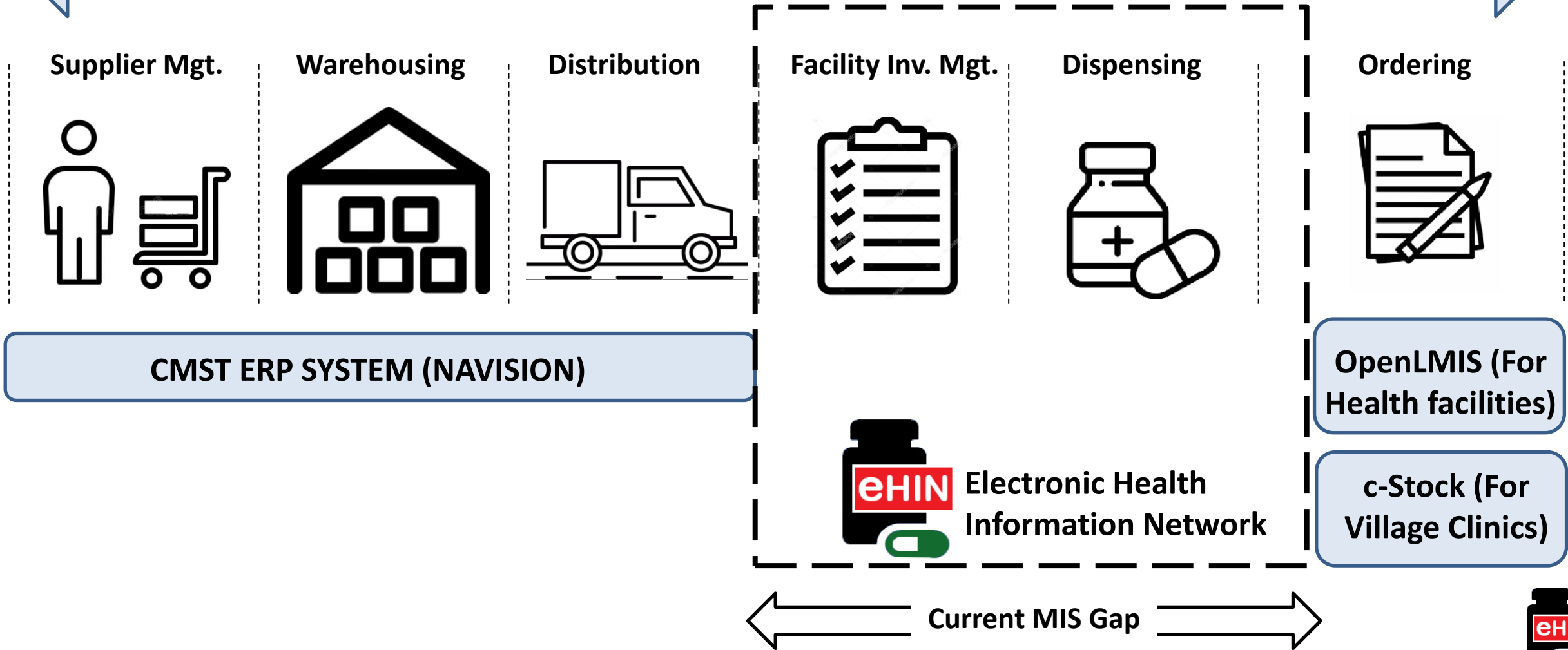
# Background



- The Ministry of Health (MOH) has a mandate to ensure health service delivery through the availability of medicines and medical supplies in all public health facilities in Malawi
- The Pharmaceutical unit of the Health Technical Support Services (HTSS) Department is tasked with ensuring that health products for the public sector are available and properly managed across the 700 health facilities and about 5000 village clinics in the country.
- This requirement is the same for the EPI program to ensure proper management of vaccines and reduce wastage through real time data access.
- To make accurate supply chain decisions there is a need for tools that facilitate the generation, transmission, collation, analysis and presentation of logistics data. When these tools are automated, we are able to arrive at these decisions faster
- The shift has begun from automating information systems to making them intelligent, systems that think and prompt users to act
- To meet the above and improve the availability of data for decision making, and in support of the ETE agenda of the MoH, the Ministry of health is deploying the eHIN platform to all health product management points in the country



# The E2E Concept



# Current Deployment Status



- The platform was initially deployed in 3 districts; Blantyre, Rumphi and Ntchisi bringing 700 entities online with about 1,000 health workers trained.
- In these districts, the deployment initially targeted medicines and medical supplies. With the COVID pandemic we quickly had to train all vaccine management sites (861 entities with an additional 1,100 health workers). This is also complete.
- The next phase will target the training of 600 pharmacy storage points in all districts in the country, training 1,300 health workers. This phase will be completed by December 2021
- System usage continues to grow average usage is at about 75% of all entities that have been brought online.

## Supporting the true last mile





# Critical Success Factors



- Clear and detailed business process mapping
- Strong political will, the Head of Pharmaceuticals is a champion for the system
- System was deployed to meet a specific need and close a gap that the health supply chain has had for a long time
- Deployed at a time that digitization and the need for efficiency is high on every agenda

# Challenges to Deployment



- Availability of staff for training and conflicting schedules
- Mitigation of risks to mobile phones going missing or stolen
- COVID restrictions limit the number of participants we can train in each session

# Near Future Activities



- Improving data use through review meetings and snap reports
- Supportive supervision to recently trained entities
- Deployment of dashboard monitoring screens to management offices
- Training of Management users on the eHIN monitoring mobile app

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# Thank You!



*Transforming Malawi's Health Supply Chain...*

# Next webinar series


## Temperature Monitoring: Keeping a Cold Chain Cold

- Explore the different technologies available for active temperature monitoring of your cold chain
- Practical experiences from countries using 30 Day Temperature Recorders (30DTRs) and Remote Temperature Monitoring Devices (RTMDs) will provide some best practices and lessons learned from using the different devices
- Future of temperature monitoring and what is on the horizon



# Keeping a Cold Chain Cold: session titles and dates



- **Session #01: Where are we with temperature monitoring of cold chain?**  
Thursday, November 11, 15:00 CET
  - **Session #02: Data at your fingertips: how to best use your 30DTR data**  
Thursday, November 18, 15:00 CET
  - **Session #03: RTMDs: How to get the most out of your real-time temperature monitoring data**  
Thursday, November 25, 15:00 CET
  - **Session #04: Equipment Monitoring Systems (EMS): The future of interactive cold chain performance monitoring**  
Thursday, December 02, 15:00 CET
  - **Session #05: Connecting the dots: Using CCE temperature monitoring data to improve cold chain systems and maintenance practices**  
Thursday, December 09, 15:00 CET
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# CONCLUSION



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