Achieving supply chain efficiency through innovation

Facilitated by Lindabeth Doby from USAID

Introductions

| Moderator | Uganda | Botswana | Zambia | Zambia |

Ms. Lindabeth Doby

Sr. Digital Supply Chain Advisor

USAID

Mr. Gilbert Rutebemberwa

Manager ICT

Joint Medical Store

Mr. Nick Shamukuni

CMS Quality Assurance Pharmacist

Ministry of Health

Mr. Makomani Siyanga

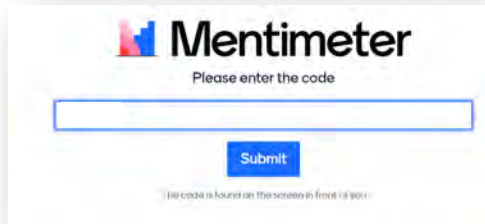Acting Director-General

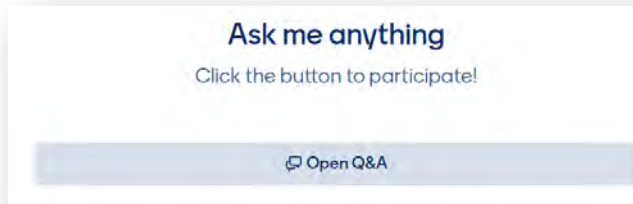Zambia Medicines Regulatory Authority

Mr. Sam Phiri

Principal Systems Analyst

Ministry of Health

How to ask questions

1. Go to menti.com and enter **4335 4726** and tap on Submit
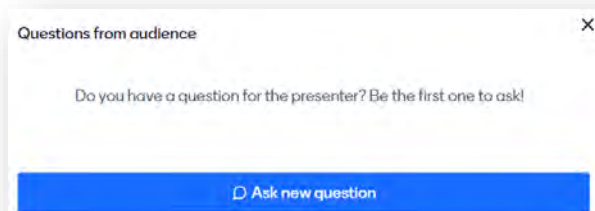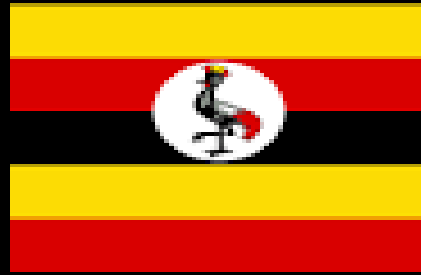

2. Tap on Open Q&A

   Then

3. Enter your question

Country Presentations

UGANDA-JMS DEPLOYMENT OF AUTOMATIC IDENTIFICATION AND DATA CAPTURE (AIDC)

Gilbert Rutebemberwa – Manager ICT

ABOUT JMS-WHAT WE DO?

- Founded in **1979**, as a joint venture between UCMB & UPMB.

- **One stop** centre for All Health solutions.

- **Procurement, Warehousing, sale and Distribution** of Medicines, Sundries, Medical Equipment and Furniture.

- **Bio Medical Equipment** needs assessment, Equipment placement, installation, routine maintenance and repair.

- **Quality Assurance-** ISO 9001:2015 Accredited

- Health systems strengthening and **Capacity Building.**

- **Project management** – Supply chain management.

  - (Proc, Warehousing and Distribution).

GS1 BARCODING SYSTEM INTEGRATION WITH IFS SYSTEM

- ✓ **USAID** contracted **PSM** to support **JMS** to select and implement **AIDC** solution

- ✓ **PSM contracted a firm called Radley to implement the installation and usage of GTINs at JMS**

- ✓ **The Implementation started in October 2022 and it is ongoing.**

Benefits

- Better inventory management
- Improved warehouse efficiency
- Reduced inventory costs
- Reduced labour costs
- Improved security
- Better managerial decision making
- Error elimination

PRODUCT MASTER DATA APPROACH

Product Master data, supported by IFS and the AIDC Endeavor application, was structured to support GTIN and packaging hierarchies, including for products that do not have GTIN, as common brands in Uganda lack GTINs

Enabled the system to operate using GTIN or internal product identifiers (AI [241])

Using internal product identifiers uses Manufacturer ID on the Purchase Order to differentiate packaging hierarchies to label incoming product with Case or Pallet quantities

Implemented a Watchdog process to identify incomplete data prior to needing that data in Purchase Order Receiving

AIDC IMPLEMENTATION APPROACH

Coordinate hardware, software, PMDM and step-by-step transaction data capture
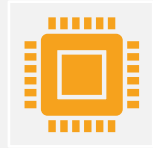
IFS connectivity with the AIDC Application

Users have been sensitized to the need for accurate data in the ERP to minimize expiations on the Watchdog Report

Integrated Product Master Data Management processes between IFS and Endeavor

All possible manufacturers of a product are captured in Master Data

Capture packaging hierarchies with Case and Pallet quantities to fully benefit from the automation

Republic of Botswana
Ministry of Health (MOH)

END TO END DATA VISIBILITY THROUGH GS1 STANDARDS

Central Medical Stores

By Nick Shamukuni

Background

- Central Medical Stores (CMS) is a Division in the Ministry of Health under the Department of Health Services Management (HSM) responsible for the procurement, warehousing and distribution of medicines and other related medical commodities.

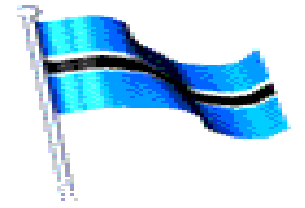- CMS serves the public sector at a **tertiary level** (referral hospital), **secondary level** (district hospitals), **primary level** (primary hospitals, clinics, lab services, health Posts) and **NGOs** (public health commodities)

- It supplies the whole country using the pull system for effective distribution of health commodities.

- Botswana Postal Services is an <u>outsourced</u> service responsible for Warehouse Management and Distribution of health commodities.
  - This includes transportation/delivery of Pharmaceuticals from CMS to health facilities(113 delivery points).

Botswana National Traceability Strategy

- Strategic Objective 3: Increased supply chain operational efficiencies through the adoption of global standards for product and location identification, data capture, and data sharing.

- The strategy and vision was developed in support of the Ministry of health 2017-2023 strategy.

- This strategy defines the vision to promote and provide integrated, holistic and sustainable, preventative, curative and rehabilitative quality health service to the nation.

IT SYSTEMS USED IN CMS-PULSE WMS

BENEFITS

- Precise location of the product (e.g BK 06-70-04-01) a mapped location
- Identify product attributes (Batch, expiry, description, unit of issue)
- Prevents product mix-ups
- Combat expiry of product by using the ,First to expire, First out (FEFO)
- All products procured are captured on pulse system by a bar code
- Each product has its own unique bar code by which it is identified and tracked for the whole period it is stored in the warehouse

CHALLENGES

- Low battery life
- Constant charging
- Rarely loss of frequency

Use of RF Devices

Receiving Goods
- Used to capture received products into the pulse system completing the receiving process of goods

Inspection of Received Goods
- After quality control approves the received goods, the RF devices are used to capture the products into the warehouse rendering them ready for storage and now part of CMS stock

Capturing & Put-Away
- RF devices are used to put received products (now CMS stock) in bulk locations and replenishment of small picking areas from bulk (used to update Pulse system before physically moving the product)

Stock Control & Call center
- Used in Stock taking (monthly cycle counts, daily empty location checks and scanning unknown products)
- Logs calls from Facilities, Receives orders and captures the orders into the Pulse WMS.

Quality Control
- After QC approves the picked products, the RF device is used to remove the product from CMS stock to dispatch for distribution

Distribution & Dispatch
- Picking of orders from bulk and small picking locations and assembling for QC check
- Packed orders will be confirmed in the Pulse WMS and the system will generate Waybill, Route Map, load orders and ready for delivery.

Way Forward

- Need for visibility of products – unique identifier

- Need to develop infrastructure for visibility

- Require interfaced systems to enhance the use of the GS1 standard

- Interactions with stakeholders

- Legislative framework for the implementation for compliance with the standard
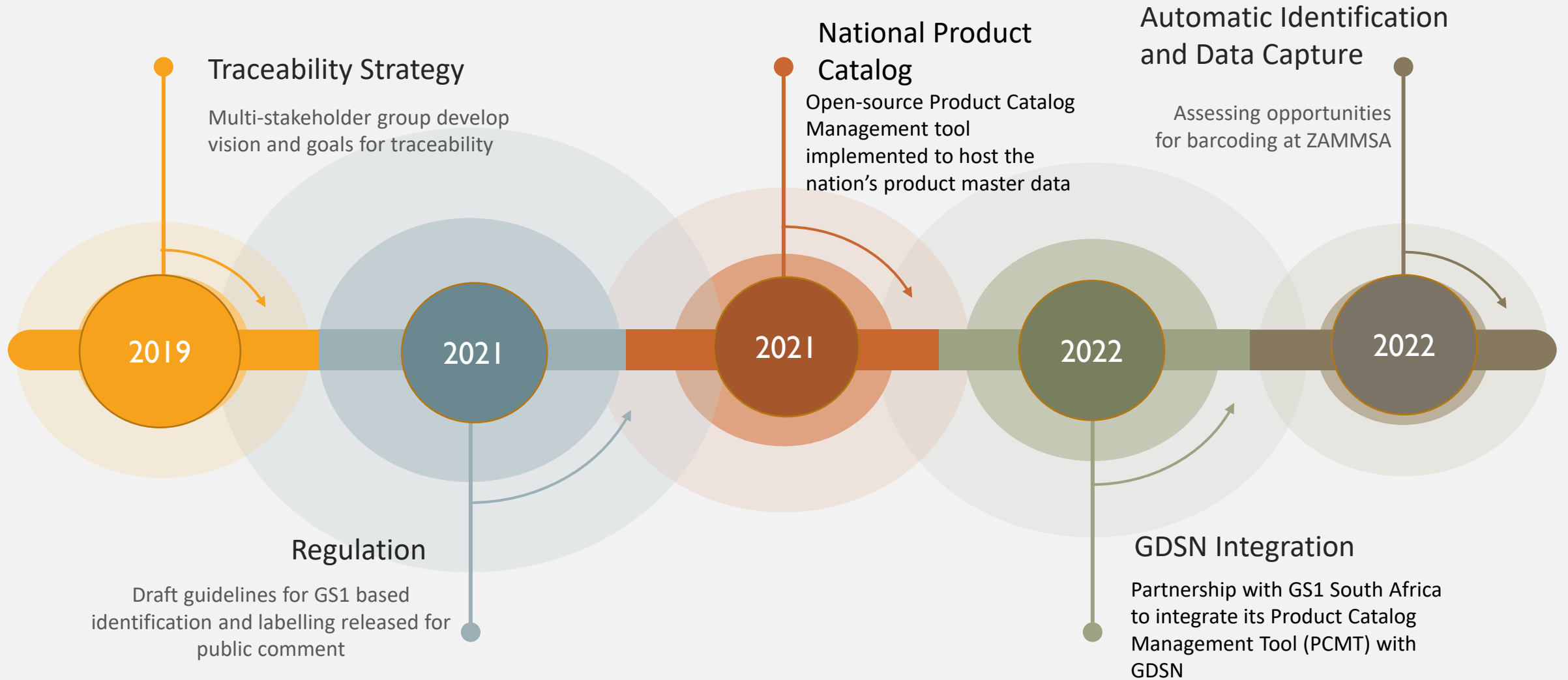
Advancing Pharmaceutical Traceability in Zambia

Presented by:

Sam Phiri – Ministry of Health

Makomani Siyanga – Zambia Medicines Regulatory Authority

BACKGROUND

Traceability Strategy

Multi-stakeholder group develop vision and goals for traceability

2019

2021

Regulation

Draft guidelines for GS1 based identification and labelling released for public comment

National Product Catalog

Open-source Product Catalog Management tool implemented to host the nation's product master data

2021

2022

GDSN Integration

Partnership with GS1 South Africa to integrate its Product Catalog Management Tool (PCMT) with GDSN

Automatic Identification and Data Capture

Assessing opportunities for barcoding at ZAMMSA

2022

EXPECT EFFICIENCY GAINS AT THE CENTRAL WAREHOUSE

ZAMMSA is a key player in the National Supply Chain forming an interface between suppliers and beneficiary health facilities.

By virtue of its position, ZAMMSA aims to develop systems that are interoperable with other systems e.g., eLMIS. Data should therefore be consistent across platforms.

This requires synchronization of data with a source of truth for product information i.e., PCMT

ZAMMSA uses internal barcodes for bin and floor locations to facilitate put-aways, picking and loading - opportunity to include scanning of GS1 barcodes
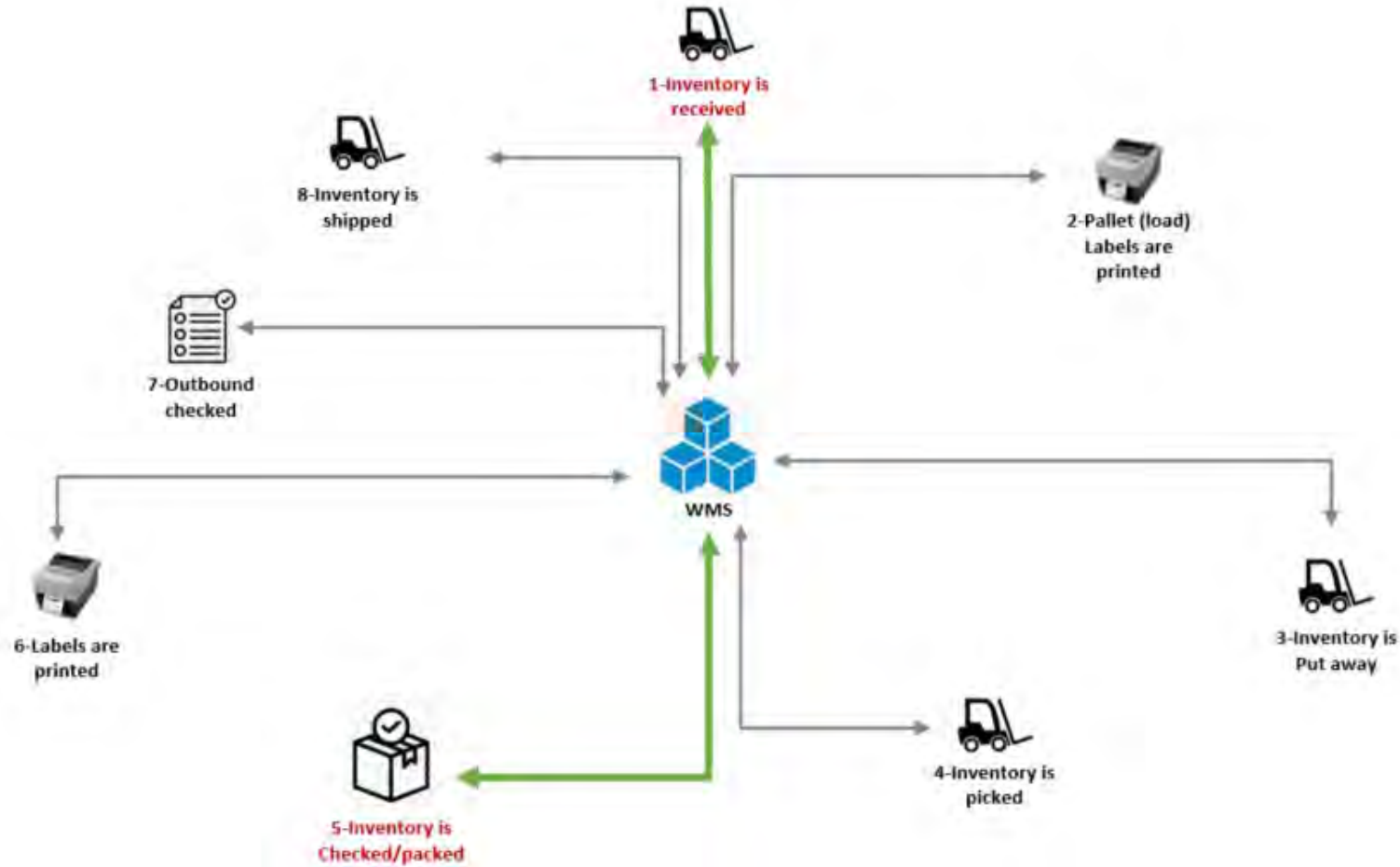
Target Functions: Receiving and Packing

ZAMMSA TRANSFORMATION CURRENT STATE VS FUTURE STATE – RECEIVING AND PACKING

Current State

- WMS data not configured to support the concept of "each" "case", "pallet)
- Manually enter product information - error prone
- Manually calculate self-life for FIFO principles
- Use of Cubiscan to measure volumetrics

Transformation

- Master data from GDSN is shared with WMS through PCMT
- Configure WMS to support data hierarchies (Pallet, each, case)
- Automate integration of WMS with national product catalog

Future State

- Attributes such as volumetrics sourced directly from GDSN via PCMT
- GS1 Barcode is scanned, GTIN used to query master data against MSL SKU.
- GTIN data used to automatically complete the receiving documents

TRANSFORMATION

WAY FORWARD

Strengthen the legal frameworks and guidelines

Enforcing the master data sharing and data capturing from the national product catalogue through GDSN to ZAMRA and ZAMMSA

Position ZAMMSA hubs to receiving standardized product data from ZAMMSA.

Capacity building of ZAMMSA Staff on GS1 standards

Facilitated Discussion

Q&A

Closing

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