Global Health
Supply Chain Summit

Alhaji Abubakar Mohammed
Jonah Dienye

November 17, 2020

Global Health
Supply Chain Summit

Thanks to our generous sponsors

Optimizing Supply Chain Management for Efficiency Using the Commodity Order Management System (COMS) in Nigeria

Alhaji Abubakar Mohammed
Data Analytics and Reporting Manager

Jonah Dienye
MIS Manager - Supply Chain Information Systems

USAID GLOBAL HEALTH SUPPLY CHAIN PROGRAM
Procurement and Supply Management

USAID FROM THE AMERICAN PEOPLE

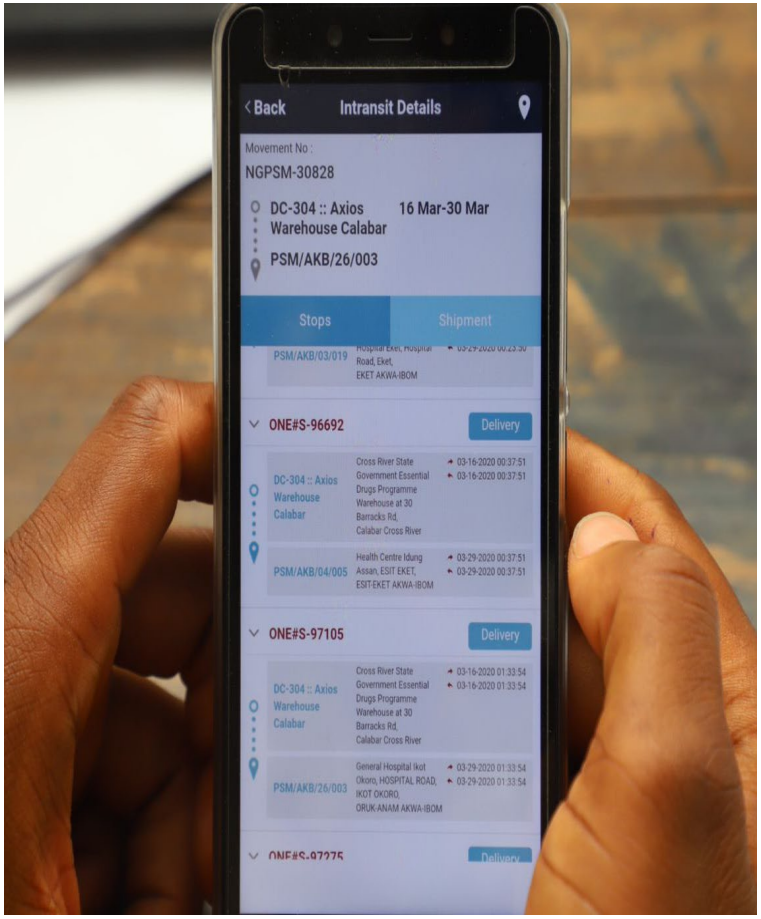
PEPFAR U.S. President's Emergency Plan for AIDS Relief

Project Description and Context

- GHSC-PSM in Nigeria ensures **uninterrupted supplies** of **HIV/AIDS, Malaria, Family Planning medicines and commodities** across 36 states and the Federal Capital Territory.
- GHSC-PSM works with the Government of Nigeria to manage health commodity supply chain data through the **Nigeria Health Logistics Management Integrated System (NHLMIS)** and supports
- last-mile delivery of health commodities from 6 axial warehouses to ~17,000 health facilities near the households of patients.

The Problem vs. the Intervention

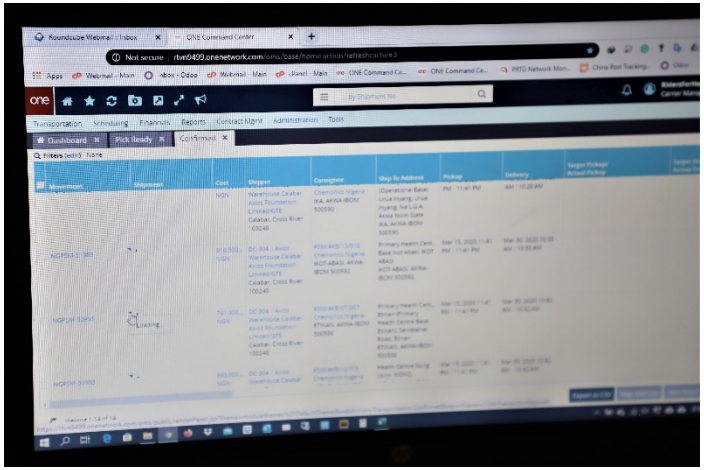
- Orders for last-mile **delivery were completed manually using spreadsheets**
- This cumbersome process is **prone to human error** and requires a great deal of back-and-forth communication, which can cause a 72-hour delay
- To cut down on errors and streamline the process, GHSC-PSM introduced the Commodity Order Management System (COMS) in early 2019 that includes **a direct interface and visibility between the warehouse and NHLIMS.**



COMS Rollout Across Project Sites

- In May 2019, last-mile delivery orders from COMS were electronically received for the first time by the axial warehouse in Calabar.
- By November 2019, all four axial warehouses were receiving orders electronically.

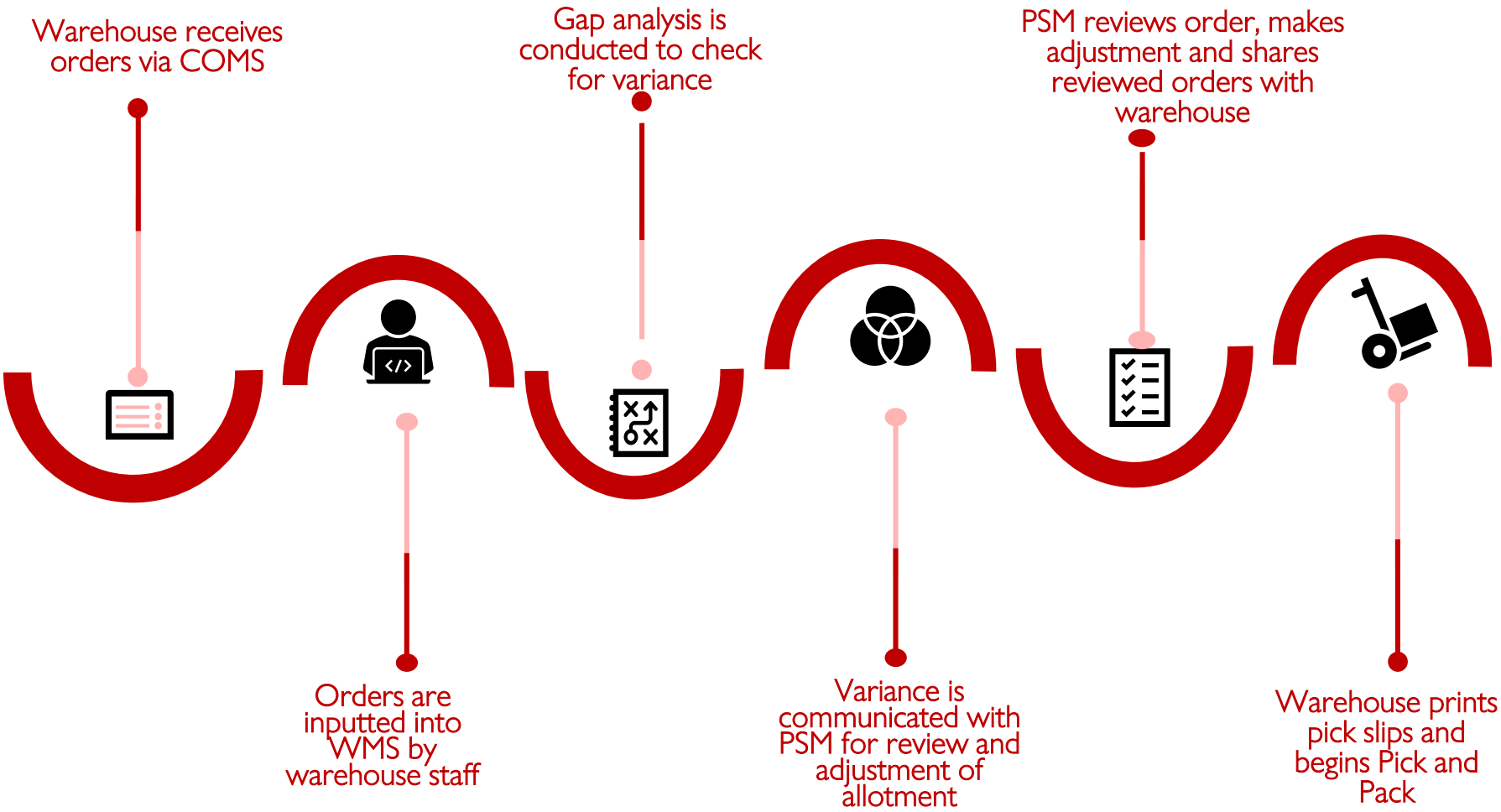
Confirmation of commodities by facility staff



App showing commodities assigned to drivers for delivery in Calabar

- The electronic proof of delivery (ePOD) system used to deliver commodities to facilities in Akwa-Ibom in Nov. 2019.
- Rollout extended to Sokoto, Kano, Katsina, Jigawa and Kebbi states in Jan. 2020.

COMS: Before and After (1)



Global Health
Supply Chain Summit

Before and After COMs (2)

Orders were managed from several platforms—Orders were managed from the desk-top, physical documents, NHLMIS and WMS

One Central Platform for Order Management—With integration of NHLMIS and WMS – orders are managed from one digital central platform—COMS

All parties work from data on different platforms—All parties involved in order management work with data from desk-top, physical documents, NHLMIS and WMS

All parties work from one data— All parties involved in order management work with data from one cloud-based system, eliminating cases of inconsistencies

Manual order processing took up to 48 to 72 hours before pick & pack could commence —this includes several reviews and revisions of order quantities before pick and pack could commence

48 to 72 hours of work saved each LMD cycle—Pick and pack commences within an hour of receipt of the orders; LMD lead-time reduced

Global Health Supply Chain Summit

Before and After COMs (3)

Delayed response to data request—There is delayed response to data request because data is on different platforms and cannot be quickly accessed during LMD

Quick response to data request—Improved data quality, quick response to data request, more efficient process that impacts on improved OTD and OFR and strengthens donor and GON confidence in GHSC-PSM

Completion of LMD took a longer time—The level of effort used in generating the pick slips was more, which has negatively impacted the general lead time for completion of the entire LMD process

Improved lead time for completion of LMD—The level of effort used in generating the pick slips has reduced drastically, which has positively impacted the general lead time for completion of the entire LMD process

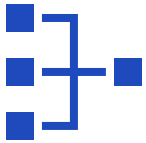
Deliveries of commodities could not be confirmed immediately—With the physical POD, confirmation and monitoring of pick-ups and deliveries could NOT be done real-time, signed PODs were returned hours or days later

Deliveries of commodities are confirmed real-time—With the ePOD, confirmation and monitoring of pick-ups and deliveries can be done real-time by 3PLs as well as PSM at the same time

Incidents of data entry error—The manual entry of the LMD orders into the WMS was prone to data entry error

Reduced data entry error—The elimination of the manual entry of the LMD orders into the WMS have reduced data entry error, e.g.. batch numbers, manufacturer, expiry date are inputted automatically by the system.

Key Lessons (1)



- **Multiple Systems Integration:** Systems integration projects are complicated if not done correctly.

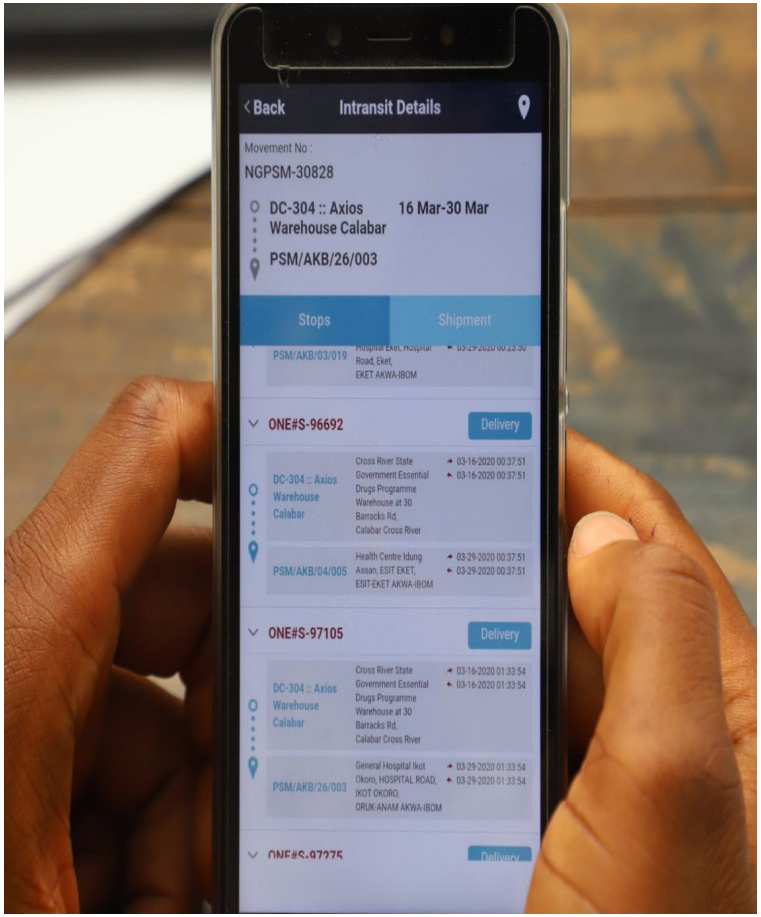
- **Delivery Cycle Times:** Bimonthly delivery cycle limits the pace of deployment of new features and/or bug fixes.

- **Change Management:** Challenges can be addressed by bridging the communication gap between different stakeholders to improve understanding of the requirements and processes.

- **Software Limitations:** Implementation is sometimes limited by software development lifecycle. Features requiring major customization are thus delayed.

Key Lessons (2)

- **Well Articulated Vision**: Articulating a clear vision, key goals and objectives from the beginning is vital for implementation.
- **Communication:** Clear communication throughout the process is important to achieve set goals and objectives.
- **Documentation along with monitoring and tracking:** This ensure outputs aligns with set objectives in all phases of implementation
- **Developing A Master Data Set:** It is essential to develop a **master data set** for both the product and facility to avoid any supply chain delays.



Achievements

- COMS has provided one central platform for order management; a key element in overall improvement in logistics.
- Data sits in a cloud-based system and is easily accessible from anywhere, eliminating inconsistencies and removing the need for gap analysis and multiple reviews.
- Orders managed from one digital central platform, saving time and improving efficiency
- Within an hour of receiving an order, pick and pack commences, leading to a reduced lead time in last mile delivery.

72 hours saved — Bimonthly (per distribution cycle)

18 days saved — Annually

38% unit cost reduction

In last mile delivery

$2,000,000

Cost savings annually

Global Health
Supply Chain Summit

Thanks to our generous sponsors