



GS1 African Healthcare Conference

Traceability and verification of anti-malarial commodities in the Ethiopian supply chain

Teddy Berihun, Senior Health Information Systems Adviser USAID, Ethiopia
Al Shiferaw, Deputy Country Director, JSI, Ethiopia
GS1 African Healthcare Conference, Addis Ababa, May 9, 2018





Topics

- Traceability Efforts in Ethiopia
- Verification of malaria medication
- Planned works



Traceability Efforts in Ethiopia

Overview of traceability efforts

- In 2015, USAID, JSI, UNFPA and PFSA collaborated to launch a pilot project in Ethiopia to test the feasibility of using GS1 barcode technology with Global Trade Item number (GTIN) serialization to track a health commodity from a supplier to health facilities.
- The pilot was to provide end-to-end visibility of data for Emergency Contraceptive Pills (EC) by linking HCMIS data with procurement data
- The pilot provided promising results to inform broader traceability efforts in Ethiopia's public health sector.





Traceability Efforts in Ethiopia

Overview of traceability efforts

- PFSA is now utilizing GDTI – Global Document Type Identifier with serialization to track and authenticate outgoing PFSA official invoices
- Assigning a GDTI to each invoices that is linked to a central registry means anyone can easily check for its authenticity.
- A specific application for the prevention of fraud and document falsification is developed.
- Today, any Stoke Transfer Voucher with a GS1 GDTI barcode can be authenticated at verifydoc.pfsa.gov.et using any barcode reader app (Android or iOS) or by typing the human-readable number directly on the website for those without a smartphone



በኢትዮጵያ ፌዴራላዊ ዲሞክራሲያዊ ሪፐብሊክ
 THE FEDERAL DEMOCRATIC REPUBLIC OF ETHIOPIA
 የዕውቀት ፈንድና አቅርቦት ኢደንሲ
 PHARMACEUTICALS FUND AND SUPPLY AGENCY



(253)0857295006049(21)0400058120

Stock Transfer Voucher

Center: Center Test Warehouse: Lebu 2 STV No: 09 - 00358
 PFS: Mekele Hub Date: ጳጉሜ 25, 2009 Delivery Note: _____

M - Nutrition		Pharmaceuticals									
Stock Code	Item Name	Unit	Qty	Unit Cost	Total Cost (ETB)	Manufacturer	Batch No	Expiry Date	M %	Store	
VT.200.121 622	Plumpy Nut - Paste	150	1,232	926.96	1,142,014.72	Nutriset S.A.E	451116 C	30/11/18	0%	L2A	
VT.200.13	Plumpy Nut - Supplementary (RUSF 100) - Paste	150	116	799.07	92,692.12	Nutriset S.A.E	431016 D	31/10/18	0%	L2A	
VT.200.13	Plumpy Nut - Supplementary (RUSF 100) - Paste	150	744	799.07	594,508.08	Nutriset S.A.E	431116 C	31/10/18	0%	L2A	
Sub Total					1,829,214.92						
Total					1,829,214.92						
Insurance					-						
Grand Total					1,829,214.92						

Words: One Million Eight Hundred Twenty Nine Thousand Two Hundred Fourteen Birr and Ninety Two Cents Only

I certify that I have received the above mentioned goods in good condition Name: _____ Signature: _____

Sender:	Name	Signature	Receiver:	Name	Signature
Store Head:	_____	_____	Store Head:	_____	_____
Checked By:	_____	_____	Checked By:	_____	_____
Prepared By:	<u>Yordanos sebsibe</u>	_____	Cost Checked By:	_____	_____

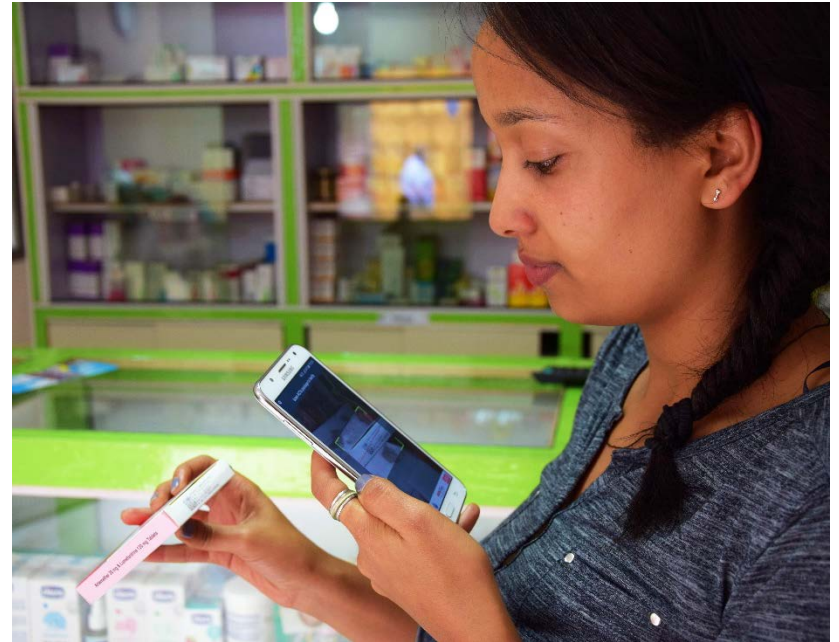
Printed by Yordanos sebsibe on 5/3/2017 1:45:42 AM



Verification of malaria medication

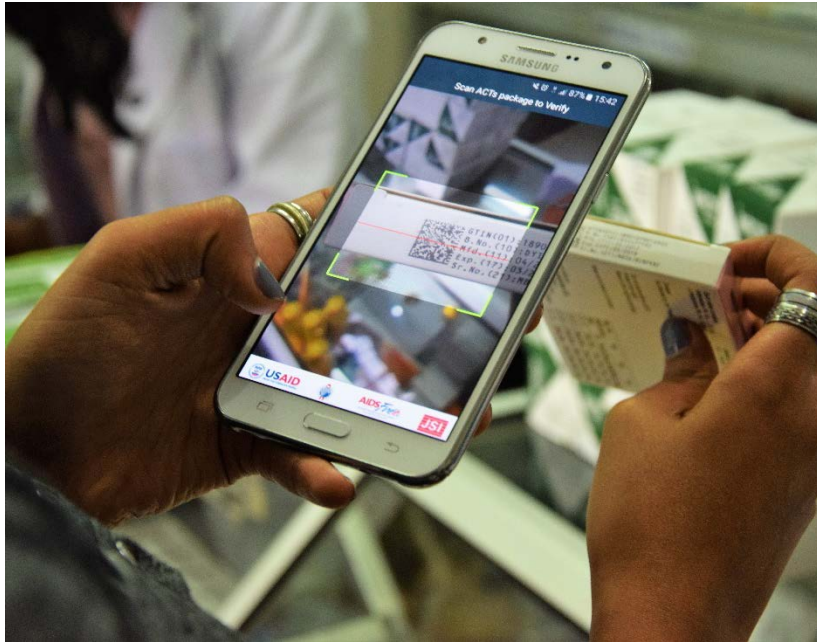
Verifying malaria medication Pilot

- **Purpose** : To develop a GS1 Verification Platform for the public to validate malaria commodities.
- **Why Malaria** :
 - ~ 6.5 million cases per year
 - ACT is prescribed for 70% to 85% of all cases as treatment
 - Estimated procurement share is 95% PFSA vs. 5% UNICEF
 - Counterfeiting of ACT's are increasingly being found in the market





Verification of malaria medication



- **What it does?**

- Manufacturers of ACT provide serialized GTIN used for the ACT products that are shipped to Ethiopia.
- Using this app the public can scan the ACT package and verify that this product is a genuine manufactured ACT and imported by PFSA

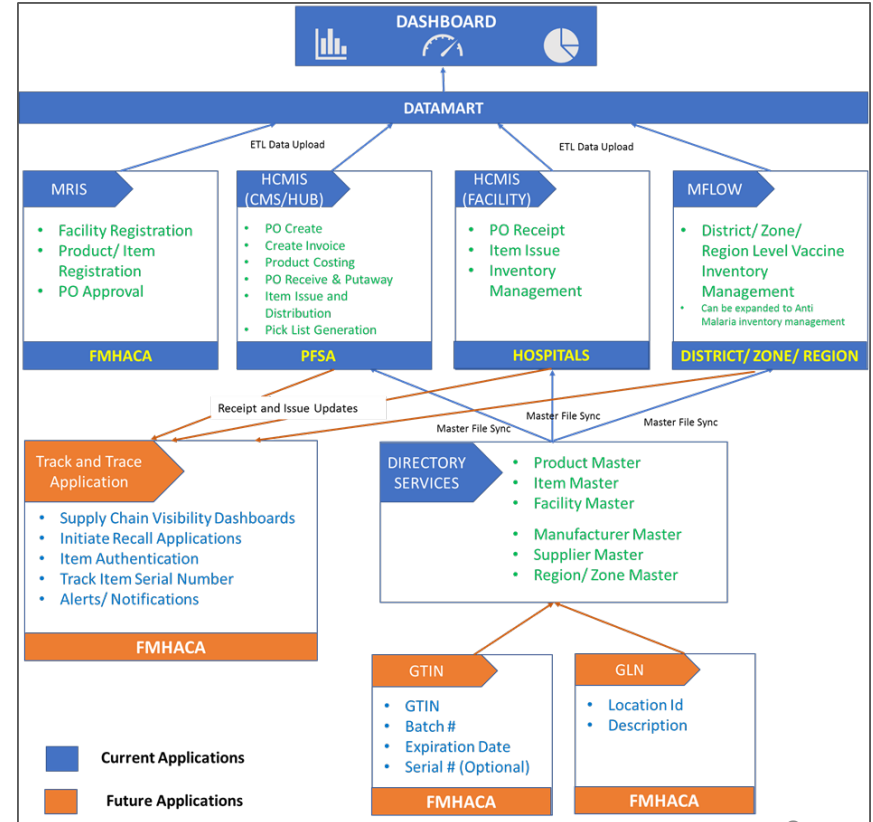
Outcome

- Enabling the public to verify the authenticity of the product by developing a tool that uses global standards to verify malaria commodities
- Learn from the implementation for scale to other category of commodities



Next Step / Way forward

- Expand the Malaria work to other programs / products
- Getting other suppliers onboard to share serialized GTIN for products other than Malaria
- New items will be added based on availability of SGTINs and EDI
- To set up an Interactive Voice Response (IVR) system for users to dial in and enter the GDTI to authenticate PFSA's official documents.
- To finalize the Master facility list application to uniquely identifying facilities using GS-1 standard





Summary

- Standardization of product identification and data exchange provides the basis for the implementation of a traceability system in which visibility in the supply chain can be achieved: we will know exactly where products are at any given time.
- System standardization also supports the conduction of recalls, helps detect counterfeit products (especially relevant in African countries) in the supply chain and assures the right medication, at the right time will be available for the right patient.
- Even though we are still at an early phase of implementation, we believe that our experiences are very beneficial for other countries and could serve as an inspiration.



Thank you