Achieving Efficiency in Health Logistics with Global Healthcare Supply Chain Standards

An Oral Presentation to the 2017 Health and Humanitarian Logistics Conference

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### MAIN ACTIVITIES IN HEALTHCARE & HUMANITARIAN SUPPLY CHAINS

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<td><strong>PROACTIVENESS</strong></td>
<td>Proactive approach towards improving fulfillment operations</td>
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# CHALLENGES, SOLUTIONS AND TRENDS

## Challenges
- Unstable disease patterns
- Better informed patients
- New health markets
- Growing competition
- **Increasing cost pressure**
- Outsourcing and more complex supply chain
- **More strict regulations**
- Innovation

## Logistic Implications and Required Actions
- Segregating supply chains
- Empowering the consumer
- Building up local capabilities
- **Increasing supply chain transparency and visibility**
- **Maintaining supply chain adaptability, collaboration and convergence**

## Trends
- Transition from supply chain to Logistics Network with interconnectivities, agility, priority risk management based on distribution channels, and different types of production.
- **Supply chain cost management.**
- Complexity reductions.
- Optimization and efficiency
- **Real-time operational performance monitoring.**
- Patients/victims-complaints management with proactive/impulse problem-solving approach
- **Product security and regulatory compliance**
TECHNOLOGY IN HEALTH & HUMANITARIAN LOGISTICS

• Technology drives inter-connectivity

• Flexible logistics network promotes agility and efficiency

• Digitisation improves ways to capture data and use them for real-time information system for the supply chain

• More accurate data helps to achieve better disaster logistics, up-to-date information and tracking system for identification of persons, commodities and counterfeits.
Supply chains upon which lives depend: GS1 standards can make a difference!

Often the supply chain is broken:

- Critical products are not available when needed
- Drugs are expired or not stored correctly
- Inventory management is not optimal
- Traceability is not achievable
- Responsibility towards donors not fulfilled

Development:
Routine health system

Humanitarian:
Response to crises
GLOBAL STANDARDS IN H & H LOGISTICS

Benefits

✓ Bridge cultural and developmental divides
✓ Enhance integration and seamlessness in information management and communication
✓ Enhance warehouse management

Benefits (continued)

✓ Remove barriers and national complexities and enhance better visibility and tracking of commodities across boarders
✓ Improved procurement and transport management
✓ Efficient prepositioning of humanitarian goods

GS1 provides innovative technology-based global standards that do not only solve challenges of humanitarian and healthcare logistics/supply chain but proactively optimise for the future.
Intro video
GS1 believes in the power of standards to transform the way we work and live.

We create a common foundation for business by uniquely identifying, accurately capturing and automatically sharing vital information about products, locations and assets
We enable visibility through the exchange of authentic data
We empower business to grow and to improve efficiency, safety, security and sustainability
We are:

Neutral and not-for-profit
User-driven and governed
Global and local
Inclusive and collaborative
GS1 by the numbers

- 1 million companies worldwide
- 150 countries
- 5 billion times per day globally
- 112 Member Organisations around the world

Developing standards for over 1 million companies worldwide
25 industries served across 150 countries
Barcodes scanned more than 5 billion times per day globally
112 Member Organisations around the world
Identify: GS1 Standards for Identification

- GLN: Global Location Number
- GTIN: Global Trade Item Number
- SSCC: Serial Shipping Container Code
- GRAI: Global Returnable Asset Identifier
- GIAI: Global Individual Asset Identifier
- OSRN: Global Service Relation Number

Capture: GS1 Standards for Barcodes & EPC/RFID

- EAN/UPC
- GS1-128
- ITF-14
- GS1 DataBar
- GS1 DataMatrix
- GS1 QR Code
- GS1 Composite Barcode
- EPC HF Gen 2
- EPC UHF Gen 2

Share: GS1 Standards for Data Exchange

- Master Data (Global Data Synchronisation Network (GDSN))
- Transactional Data (eCom (EDI))
- Event Data (EPC Information Services (EPCIS))

Interoperability

- Item Master Data
- Location Data
- Item/Shipment Tracking
- Traceability
- Product Recall/Withdrawal
- Pedigree
- Purchase Order/Dispatch Advice/Invoice

The Global Language of Business
Dear NGO Representative,

I am pleased to inform you that the Economic and Social Council (ECOSOC) at its Substantive Session of July 2011 adopted the recommendation of the Committee on Non-Governmental Organizations (NGOs) to grant Special consultative status to your organization “GS1”. On behalf of all staff of the Non-Governmental Organizations Branch, please accept our heartfelt congratulations.
GS1 Healthcare: an expanding, committed community of globally engaged stakeholders...

...and there are many more companies working with GS1 at a local level
Huge cost savings and patient safety benefits when adopting a single global standard in healthcare

“Implementing global standards across the entire healthcare supply chain could save 22,000-43,000 lives and avert 0.7 million to 1.4 million patient disabilities”

“Rolling out such standards-based systems globally could prevent tens of billions of dollars’ worth of counterfeit drugs from entering the legitimate supply chain”

[We] “estimate that healthcare cost could be reduced by $40 billion-$100 billion globally” from the implementation of global standards

“Adopting a single set of global standards will cost significantly less than two” (between 10-25% less cost to stakeholders)

USAID-PSM developed a Strategy for Global Standards adoption based on GS1

**IDENTIFY**
Assignment of numbers to items and locations

**CAPTURE**
Marking of application identifiers on packaging and labeling

**SHARE**
Exchange of master and transactional data

**USE**
Data management; streamline processes; track and trace

Source: USAID supplier summit in Dubai, February 2017
WHO and USAID/UNFPA

Recognising the possibility to improve the supply chain with global standards:

• **WHO**’s 2015 Generic Preferred Product Profile for Vaccines (PSPQ2) recommends barcodes with GS1 standards (Global Trade Item Number - GTIN, lot number and expiry date) on all packaging levels with the exception of primary packaging

• **USAID** and **UNFPA** requirements for reproductive health products will be put into action now – same approach: GTIN, lot number, expiry date – later serialisation
GS1 Humanitarian Initiative

Humanitarian supply chains are vital but not optimised

Supply chain is critical

Humanitarian costs are rising

Select supply chain needs

- Greater visibility and accountability
- Improve speed of response by addressing bottlenecks
- Improve efficiency through improved sharing of data

GS1 Humanitarian Initiative works with partners:

- UNHCR project
  - Will use GS1 standards in their logistics
- Global Pandemic Supply Network
  - Multi-stakeholder initiative using GS1 standards
GS1 standards will support increased speed, accuracy, visibility, and co-ordination essential to effective response

Why?
- 360 million people could die in one year
- 10% of global GDP could be lost
- USD 54 billion cost of SARS in 2003
- >50% cost of response is in supply chain and logistics

Who?
- World Health Organization
- World Food Programme
- World Economic Forum
- University of Minnesota
- USAID
- US CDC
- UPS Foundation
- GS1
- NEC
- Manufacturers like Henry Schein, Johnson & Johnson, Becton Dickinson

What?
- Estimation of Needs
- Knowledge of stocks and supply limitations
- Country logistics capacity assessments
- Real time information on routes
- Information platform providing upstream and downstream visibility
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