Making electronic product catalogues through a single point-of-entry a reality

Mike Wallace

Abbott

GS1 Healthcare Topics

- Background

- Where we are going

- Where we are today

- What this means to you

- Questions

Topics

- **Background**

- Where we are going

- Where we are today

- What this means to you

- Questions

Managing master data

Critical business processes require reliable product and location data:

- Distribution systems
- Inventory replenishment
- Billing/accounts payable
- Traceability systems (pedigree systems, adverse event reporting, product recalls, barcode point-of-care systems,, …)
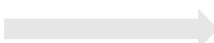
Inaccurate or bad data add cost and risk
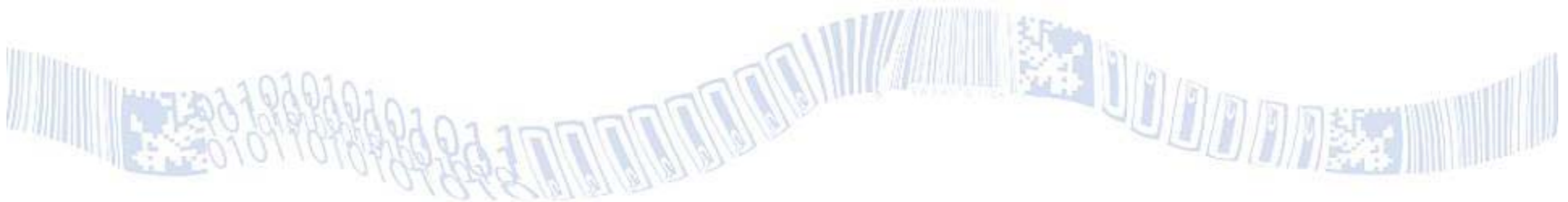
Managing master data *today*

Product catalogues - current situation:

- **Varying methods of communicating new items**

  Supplier A - printed catalog

  Supplier B – price quote

  Supplier C – PDF data

  Supplier D – Excel tables

  Supplier E – text data

  Supplier F – link to website

- **Varying methods of communicating updates/changes (or not communicating)**

- **Varying descriptions and levels of detail (product attributes)**

Same product – different numbers

For example*:

3M product with reference # 8630

Same product in different databases of distributors:
- Allegiance   M8630
- Owens & Minor   4509008630
- BBMC-Colonial   045098630
- BBMC-Durr   081048
- Kreisers   MINN8630
- Midwest   TM-8630
- Pacific   3/M8630
- UnitedUMS   001880

   Source: US DoD Study

Different products – same number

For example:

Part Number 10313 in Premier Inc. Product Item Master refers to

- Medtronic's - "NEEDLE CARDIOPLEGIA ADULT 16GA 5/8IN TIP 10IN"
- Hantover's - "CARTRIDGE REPLACEMENT STUNNER YELLOW F/CALVES/HEAVY HOGS"
- Chattanooga Group's - "ACCESSORY TRACTION REPLACEMENT STRAP XL FOR HALTER THORACIC RESTRAINT"
- HF Scientific's - "TEST KIT WATER FREE CHLORINE DPD 25ML SAMPLE PHOTOMETRIC 1000/PK"

* Source: US DoD Study
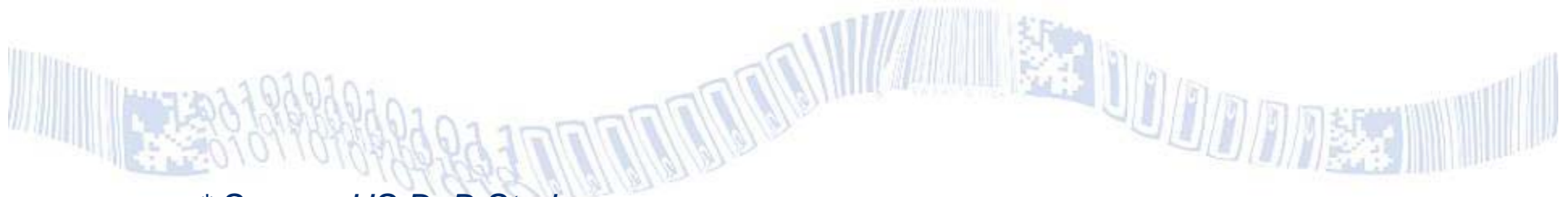
No standardised product information

Inconsistent packaging data

- Order 20 cases, receive 20 boxes
- No uniform Unit of Measure standard

Unit of Measure	Description	Unit of Measure	Description
BD	BOARD FOOT	LOT	LOT
BDFT	BOARD FOOT	LOTS	LOT (MULTI)
BN	BUNDLE	LY	LINEAR YARD
BO	BOLT	LYRS	LINEAR YARD
BOLT	BOLT	NU	NUT
BR	BARREL	NUTS	NUT
BRRL	BARREL	OZ	OUNCE
BX	BOXES	OZS	OUNCES
BXES	BOXES	PA	PAD
CO	COIL	PADS	PAD
COIL	COIL	PI	PINT
CR	CARBOY	PINT	PINT
CRBY	CARBOY	PK	PACKAGE
CS	CASE	PKGS	PACKAGE
CSES	CASE	PL	PAIL
CT	CARTON	PLS	PAILS
CTON	CARTON	PR	PAIR
DR	DRUM	PRS	PAIR
DRUM	DRUM	QR	QUIRE
DZ	DOZEN	QRES	QUIRE
DZEN	DOZEN	QT	QUART
EA	EACH	QTS	QUART
EACH	EACH	RE	REAM
FE	FEET	REAM	REAM

GS1 Healthcare

Manufacturer	Manufacturer	
SOUTHLAND TECHNOLOGY 3M	3M 800-327-5380	3M C/O EL
3M CO PHOTO PRODUCTS DIV	3M CO	3M C/O FL
3M DIAGNOSTIC SYSTEMS INC	3M DENTAL 800-237-1650	3M C/O G(
3M ELECTRICAL SPECIALTIES DIV	3M ESPE DENTAL DIVISION 800-364-3577	3M C/O H(
3M HEALTH	3M ESPE UNITED STATES	3M C/O IN
3M HEALTH CARE CDI	3M ESPE	3M C/O JA
3M HEARING COMPONENTS	3M HEALTH CARE 800-521-2818	3M C/O LU
3M INDUSTRIAL TAPES LTD	3M HEALTHCARE PRODUCT	3M C/O N/
3M MEDICAL DEVICE DIV	3M HEALTHCATE	3M C/O N(
3M MEDICAL IMAGING SYSTEMS DIV	3M MEDSURGE	3M C/O O\
3M MEDICAL PRODUCTS DIV	3M MINNESOTA MINING MFG OFFICE	3M C/O RE
3M MEDICAL-SURGICAL DIV	3M MINNESOTA MINNING & MFG.CO.	3M C/O S/
3M MEDICAL/SURG	3M OCC. HEALTH AND ENV. SAFETY DIV	3M C/O SC
3M PHARMACEUTICS AND MEDICAL S	3M OCC. HEALTH AND ENV. SAFETY DIV.	3M C/O TH
3M-MEDICAL/SURGICAL	3M SARNS/CDI	3M C/O TH
3M/ OCCUPATIONAL AND SAFETY DIV	3M SURGICAL	3M C/O TH
3M - MINNESOTA MINING &	3M UNITEK 800-423-4588	3M C/O TI\
CO	3M UNITEK	3M C/O W
3M FEDERAL GOVERNMENT	THREE M/ ESPE	3M C/O W.
3M FEDERAL SYSTEMS DEPARTMENT	3M COMPANY C/O WAHL CORP.	3M COMM
3M HEALTH CARE SYSTEMS	MINNESOTA SCIENTIF	3M COMM
3M HEALTHCARE $250 MINIMUM ORDER	CORPORATE ALLIANCE 3M CUSTOMER SERV	3M COMP.
3M HEALTHCARE(MINNISOTA MINNING)	3 M HEALTHCARE	3M COMP.
3M MEDICAL - CREDIT CARD	3 M UNITEK CORP	3M COMP.
3M MEDICAL PRODUCTS	3-M	3M COMP.
3M OCC. HEALTH AND ENV. SAFETY DIVISION	3-M COMPANY	3M COMP.
3M OCCUPATIONAL AND SAFETY DIV	3-M COMPANY-C/O O	3M COMP.
3M SAFETY DIVISION	3-M COMPANY-C/O OEM PRODUCTS	3M CONS\
3M-DENTAL PRODUCTS DIVISION	3-M PHARMACEUTICALS	3M CONS\
3M-HEALTH CARE	33M HEALTHCARE	3M CORP.
3M DENTAL PRODUCTS DIV.	3M	3M DENT/
3M UNITEK CORPORATION	3M PUERTO RICO	3M DENT/
3M UNITEK DENTAL PRODUCTS	3M SPECIALITY CHEMICAL	3M DEUT:
3M BIOLOGICAL	3M % SAN-MAR	3M HEALT
3M ESPE DENTAL PRODUCTS	3M (CRJ7242)	3M HEALT
3M HEALTH CARE (MED/SURG PRODS)	3M - MINNESOTA MI	3M HEALT
3M C/O CHECKPOINT METO	3M - MINNESOTA MINING & MFG.CO	3M HEALT

Multiple manufacturer names

Order with whom?

Data errors in healthcare

GS1 Healthcare

% of total Data error	Manu-facturer	Distributor	GPO	Healthcare provider
Missing Middle Levels of Packaging	15-20%	1-4%	20-25%	15-25%
Hard "Packaging Quantity" Errors	1%	1%	2%	2-5%
Unit of Measure Confusion/Misuse	2-6%	1-3%	2-5%	Unknown
Missing Packaging—not Middle Level	3-8%	3-8%	3-7%	5%
Manufacturer Name Problems	NA	2-5%	1-4%	30%
Obsolete Products	1-4%	2-5%	1-8%	5-15%
Missing Product Brand Names	2-5%	5-10%	5-10%	20-25%
Incomplete Item Descriptions	5-15%	3-12%	5-15%	10-20%
Wrong Customer Unit Prices	Unknown	1-2%	NA	1-2%
Customer Paid More Than Lowest Contract Price	NA	Unknown	NA	3-6%

Source: US Department of Defense Study

Bad data add cost and risk

- **Inaccurate and inconsistent data in the Healthcare supply chain add billions of $, € … in costs**
    - Supply chain information inefficiencies
    - Inaccurate data in transactions
    - Purchase orders and invoices with errors
    - Manual work-around processes to correct errors

- **Inaccurate and inconsistent data add risk to patient safety**
    - Disruptions may result in the inavailability of products to treat a patient
    - Medication errors due to incorrect relabeling

GS1 Healthcare Managing master data *tomorrow*

Supplier = data source

Needs single point-of-entry

- One database to load new item data and update data on existing items

Needs security

- Autorisation access by supply chain partners

Standards-based

- Standard identification keys
- Predefined (set of) product attributes

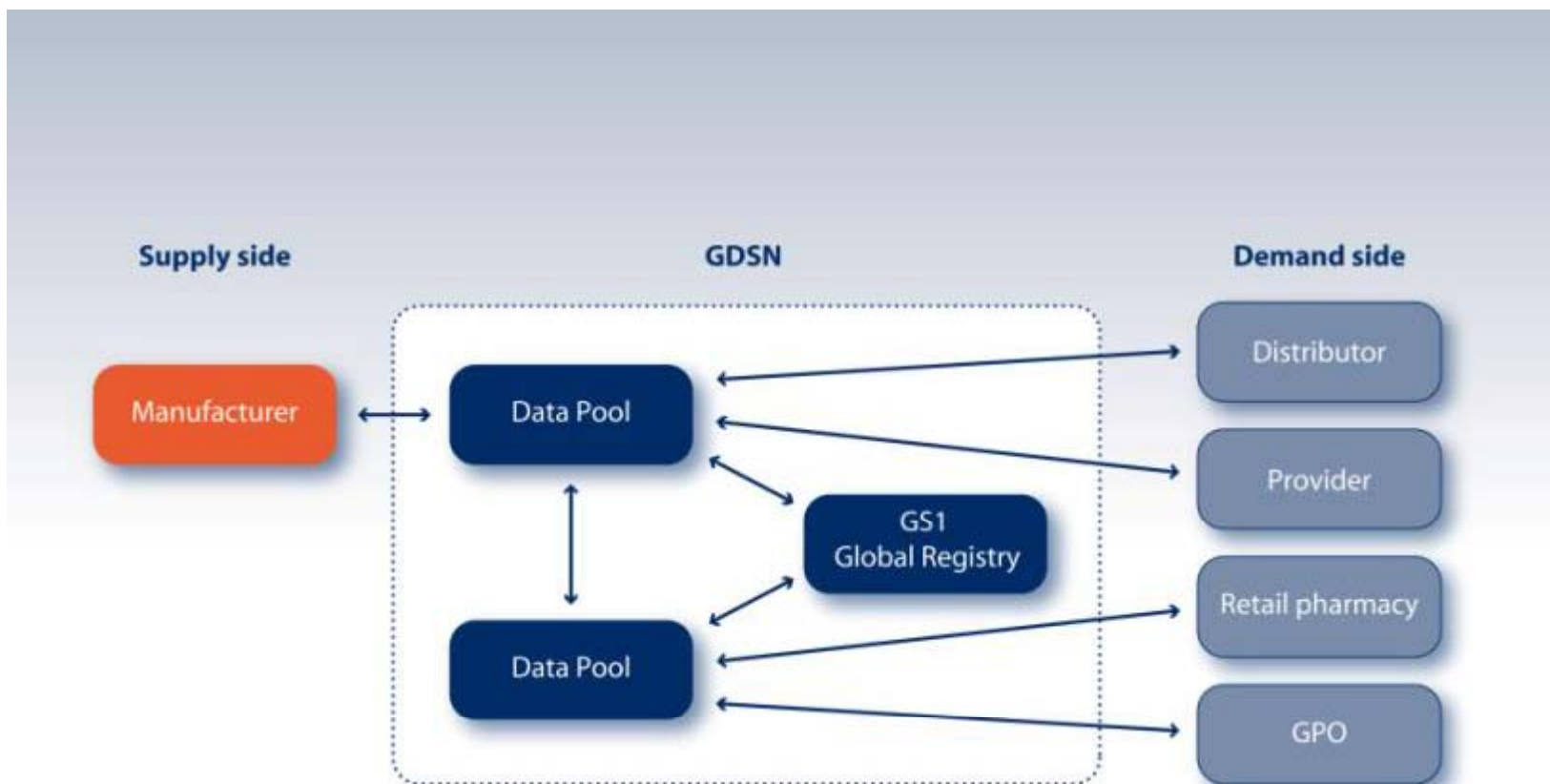## Hospital = data recipient

Needs single point-of-truth

- One source for up-to-date, accurate data
- Continuous synchronisation

Standards-based

- Standard identification keys
- Consistently formatted information
- Complete information

Global Data Synchronisation

Supply side

GDSN

Demand side

Manufacturer

Data Pool

Data Pool

GS1 Global Registry

Distributor

Provider

Retail pharmacy

GPO

GDSN data exchanges

How GDSN works

Source internal database

Source datapool

GS1 Global Registry

Recipient datapool

Recipient internal database

1. Load data
- The seller registers product and company information in its data pool

2. Register data
- A small subset of this data is sent to the GS1 Global Registry

3. Request subscription
- The buyer, through its own data pool, subscribes to receive a seller's information

4. Publish data
- The seller's data pool publishes the requested information to the buyer's data pool

5. Confirm & inform
- The buyer sends a confirmation to the seller via each company's data pool, which informs the seller of the action taken by the buyer using the information

GDSN data attributes

25 mandatory attributes

- 8 mandatory attributes required to register products in the GS1 Global Registry

- 17 mandatory attributes to operate in the GDSN

200+ optional attributes

- Trading partners decide whether to exchange additional information

- There are currently 203 optional GDSN attributes which support healthcare specific needs

- 33 new data requirements are being added to the GDSN standard

Topics

- Background

- **Where we are going**

- Where we are today

- What this means to you

- Questions

GDSN for Healthcare…Vision

All product information for every item is current, correct, and available **via a single globally-accessible network**

Topics

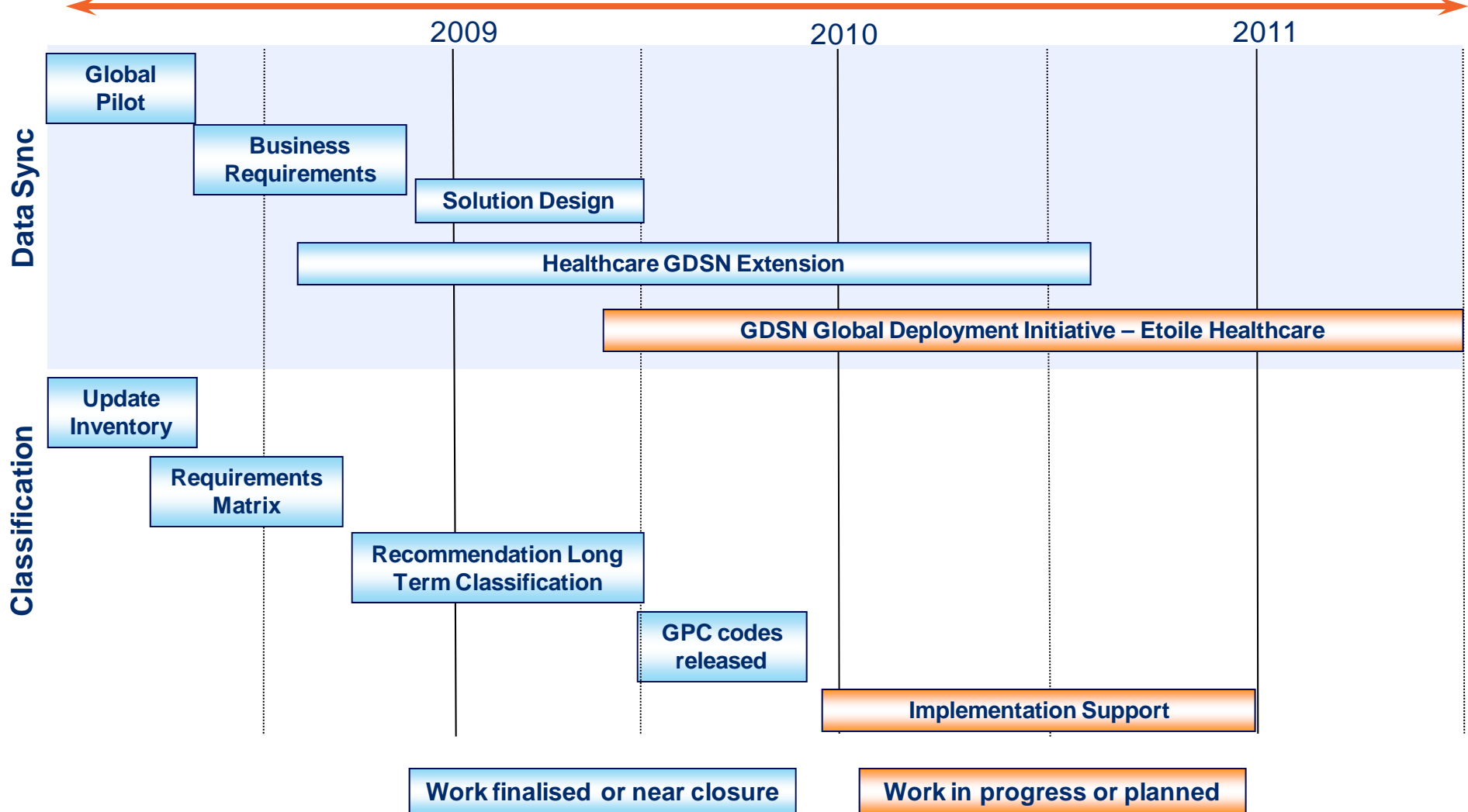- Background

- Where we are going

- **Where we are today**

- What this means to you

- Questions

Global GDSN Implementation Initiative for Healthcare

A global implementation initiative to use the GDSN's unique position to **meet current and emerging requirements for electronic product catalogue data**, including pending regulatory demands and commercial needs for reliable product data between healthcare trading partners.

40 GDSN implementation attributes for healthcare

Global Trade Item Number (GTIN)

Pack Level

Manufacturer Part Number

Hierarchy (Parent GTIN)

Hierarchy (Child GTIN)

Hierarchy (Quantity of Children)

Publisher Global Location Number (GLN)

Target Market

Brand Owner and GLN

Manufacturer Name and GLN

Functional Name

Brand Name

Description

Height + Unit of Measure

Width + Unit of Measure

Depth + Unit of Measure

Gross Weight + Unit of Measure

Net Content + Unit of Measure

Consumer Unit Y/N

Orderable Unit Y/N

Invoice Unit Y/N

Shipping Unit Y/N

Base Unit Y/N

Variable Unit Y/N

Returnable Package Y/N

Marked with Lot Number Y/N

Bar code Type

GPC code

Optional Classification Agency

Optional Classification Agency Value

Start Date

Effective Date

Shelf Life From Production

Shelf Life From Delivery

Contains Blood

Implantable

Contents of Concern

Reusability Types

Brand or Generic Flag

Does Product Contain Latex

Global GDSN Implementation Initiative for Healthcare
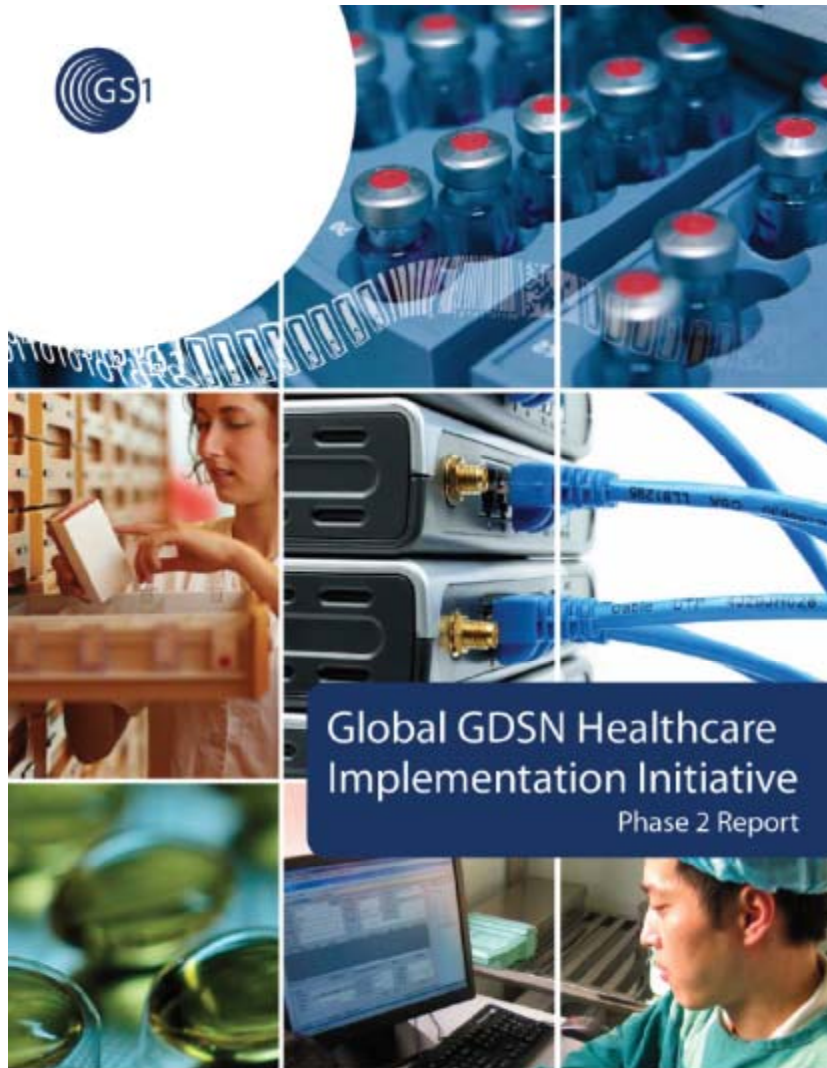
- Launched June 2009
- Today:
  - Participation: 26 healthcare organisations
  - Connections: 57 live
  - Finalised Phase 2 report: sharing lessons learned
- Next step:
  - Expansion to more countries and more participants

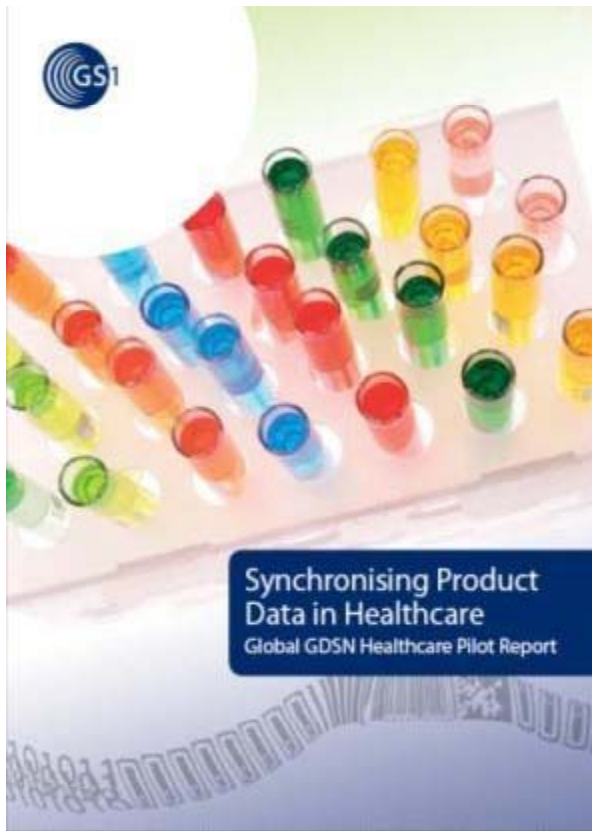# GS1 Healthcare — Global GDSN Pilot (2008)

Amerinet

ASCENSION HEALTH

MAYO CLINIC

PREMIER

MERCY
SISTERS OF MERCY
HEALTH SYSTEM

U.S.

Australia

Baxter

B|BRAUN
SHARING EXPERTISE

BD

Results 2008 Global GDSN Pilot

Demonstrated that the GDSN works across international boundaries

- Interoperability among data pools
- The technology works in various settings

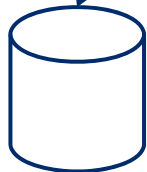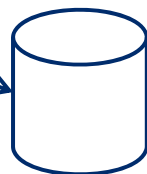**Report available at www.gs1.org/healthcare**

US Department of Defense Pilot (2007)

GS1 Healthcare

GS1 GDSN
Global Data Synchronisation Network

1SYNC

Global Registry
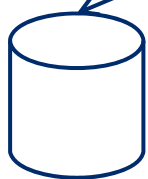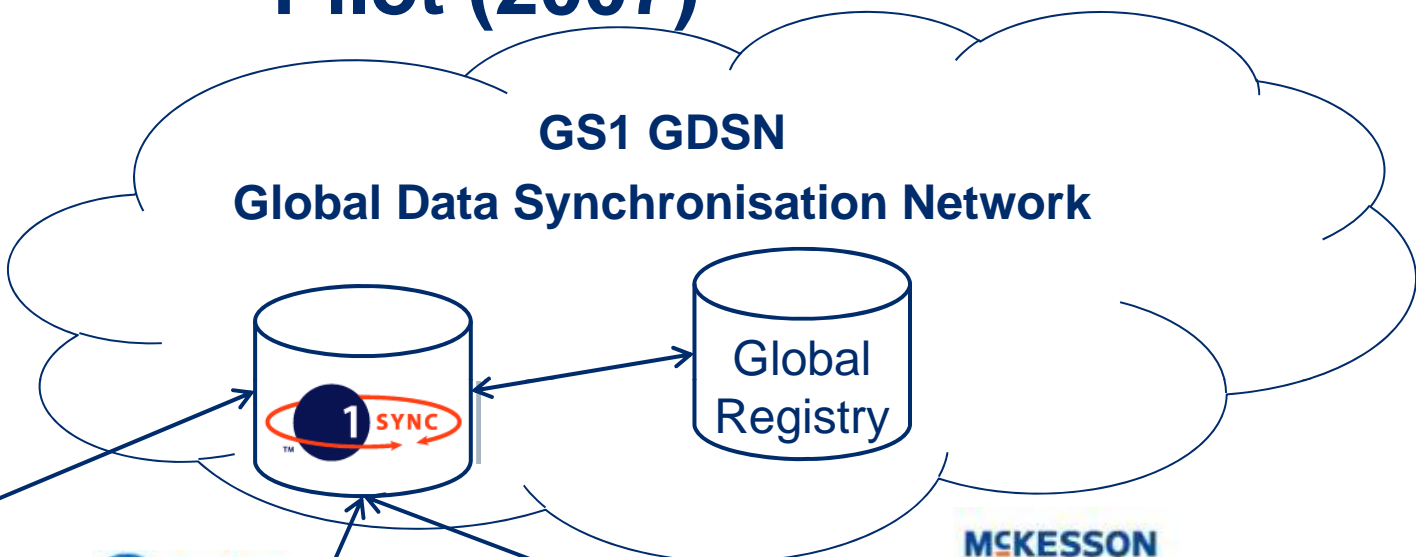
On boarding partner

Manufacturer

Distributor/Wholesaler/GPO

Healthcare provider

© 2010 GS1

Results 2007 DoD Pilot

GS1 Healthcare

- **Opportunities identified to saves costs**
  - Better contract price available
  - Saved $18.7M so far at 30 + hospitals
- **Opportunities identified to increase DoD eCommerce**
  - Moved $7.766M to eCommerce services
- **Created robust DoD & VA Med Surg product data bank of 1 million + records**
  - Accurate master records for 93% ($407M) of DoD buys
  - Joint DoD & VA access to pricing, packaging, product ID
- **Created active collaboration with Healthcare Industry**
  - Ongoing pilots with manufacturers and PV distributors
  - PDU as goal within Healthcare Standards Organizations

GS1 Healthcare **Topics**

- Background

- Where we are going

- Where we are today

- **What this means to you**

- Questions

ONE global standard for data synchronisation in healthcare

Putting the standards at work…

How Abbott got started

- **Participated** in standards development work groups

- **Participated in Australian pilot**
  - Monash Project 2006
  - Demonstrated supply chain process improvements through data synchronisation - National Product Catalogue (through GS1net, a GDSN-certified data pool)

- **Participating in Global GDSN Implementation Initiative**

- **Live in « GDSN in Retail »**

Streamline and optimise processes	7. Use data for transactions
Synchronise more products with more trading partners	6. Measure success and expand
Continuous synchronisation of data	5. Start data synchronisation
Buyer subscribes to supplier and products	4. Subscription to supplier and products
Load products and register with Global Registry	3. Register supplier and products
Internal preparation and planning	2. Identify trading partners and products
Gain access to the GDSN	1. Subscribe to a GDSN-certified Data Pool

Goal: Single global source of truth for product data

GDSN session this week

This Week:

- Wednesday, 15:30 – 17:00   (breakout sessions)
  - Introduction session: Data synchronisation in healthcare

GS1 Healthcare Join us!!!

Global teams

- GDSN Work Group
- Global GDSN Implementation Initiative

Local teams

- Contact your local Member Organisation representative or a GDSN-certified data pool

GS1 Healthcare Topics

- Background

- Where we are going

- Where we are today

- What this means to you

- **Questions**