GS1 Colombia

El Lenguaje Global de los Negocios

A Starter Session About GS1 Standards

Leonel Pava, GS1 COLOMBIA
10 April 2018

POLÍTICA ANTI-MONOPOLIO

1. The business decisions and that all GS1 standards are voluntary and not mandatory

2. Refraining from discussing prices, margins, discounts, suppliers, marketing or product plans, or other competitively sensitive topics.

3. If anyone has concerns about the propriety of a discussion, please inform a GS1 Colombia as soon as possible

Please review the complete GS1 Colombia antitrust policy at:
https://www.gs1co.org/comunidad/gruposcolaborativos.aspx

© GS1 2016

Agenda

- GS1 Standard Overview
- GS1 in Healthcare
- GS1 Healthcare Intiatives

© GS1 2016

GS1 Standard Overview

Healthcare challenges
Changing landscape

Aging population

New high-cost advanced medical treatments

Intense performance scrutiny

Increasing patient empowerment

© GS1 2016

GS1 purpose

- **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 2016

GS1 by the numbers

1 million

over 1 million companies worldwide use GS1 standards

150 countries

25 industries served across 150 countries

5 billion

Barcodes scanned more than 5 billion times per day globally

112 MOs

112 Member Organisations around the world

© GS1 2016

The Global Language of Bussines

GS1 Standards

Identify GS1 Identification Numbers

Companies, Products, Locations, Logistics, Assets, and Services

Capture GS1 Data Carriers

Barcodes and EPC-enabled RFID

Share GS1 Data Exchange

Master Data, Transactional Data, and Physical Event Data

© GS1 2016

GS1 Standards in Healthcare

© GS1 2016

It is Real …

© GS1 2016

EL PAÍS

SOCIEDAD

Un paciente del hospital de Lugo muere por un error de medicación

El fallecido recibió un fármaco destinado al enfermo de al lado

XOSÉ HERMIDA

Santiago de Compostela - 11 ABR 2001

Antonio González Fraga, de 78 años, estaba el pasado domingo en su habitación del Hospital Xeral de Lugo a la espera del alta. Nunca se la darán. Una enfermera, según sus familiares, le suministró por error el medicamento

Capturan banda que habría causado muerte de 16 bebés con medicamentos falsificados

BLU Radio. Vacunación / Foto: referencia BLU Radio Bucaramanga

EL UNIVERSAL

CARTAGENA - COLOMBIA | JUEVES 5 DE ABRIL DE 2018

REGIONAL

Fiscalía incautó 55 mil medicamentos falsos en Montería

NIDIA SERRANO M. | 23 de Febrero de 2017 02:44 pm

© GS1 2016

Complexity in the healthcare supply chain …
it is about value networks

Pharmacist. Das Buch des Lebens
por Marsilius Ficinus, Florencia 1508.

Today:
+ 13.000 Trade items

© GS1 2016

From Supply Chain

To Value Network

The industry in charge, consumers respond

INDUSTRY-DRIVEN VALUE CHAINS

CONSUMER-DRIVEN VALUE NETWORKS

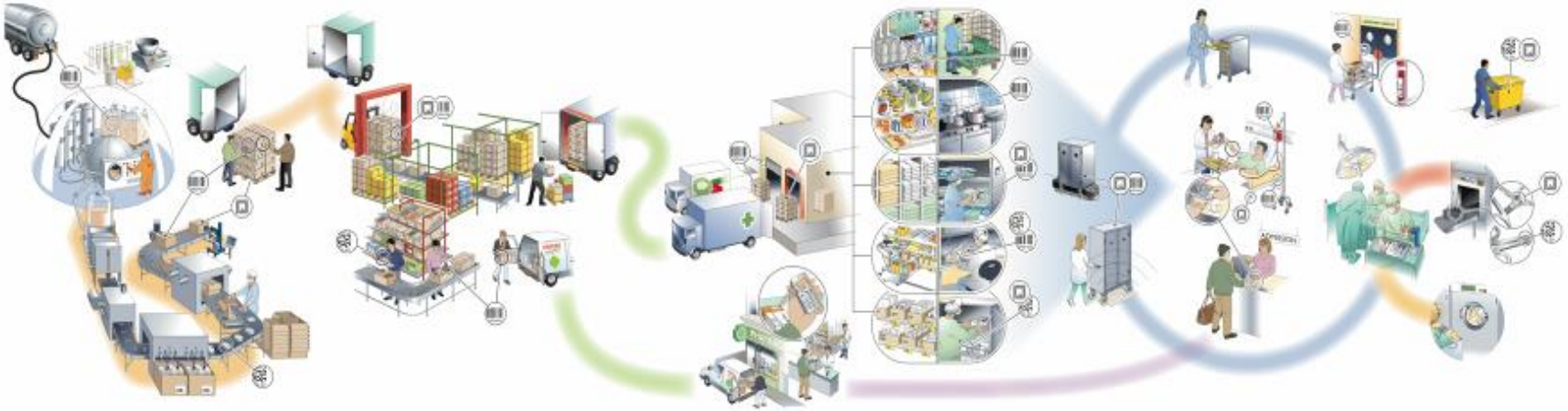
© 2015 Capgemini. All Rights Reserved.

Consumers in charge, the industry responds

© GS1 2016

GS1 Healthcare mission

To lead the healthcare sector to the successful development and implementation of **global standards** by bringing together **experts** in healthcare to enhance **patient safety** and **supply chain efficiencies**.



© GS1 2016

Why is important to identify, capture and share information?

© GS1 2016

Why is important to identify, capture and share information?

© GS1 2016

Why is important to identify, capture and share information?

© GS1 2016

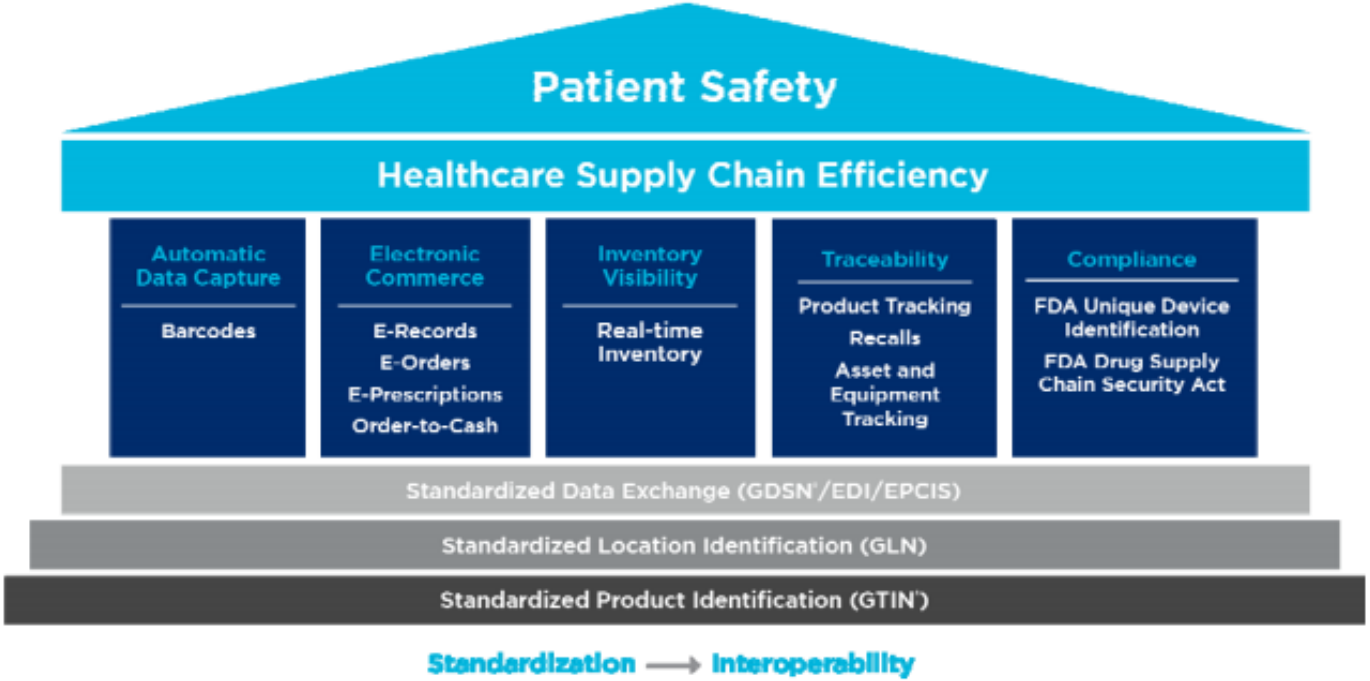
Why is important to identify, capture and share information?

Diverging country requirements

Manufacturing headache

© GS1 2016

GS1 Standards in Healthcare



© GS1 2016

GS1 Standards in Healthcare

© GS1 2016

IDENTIFY

GS1 Identification Standards in Healthcare

© GS1 2016

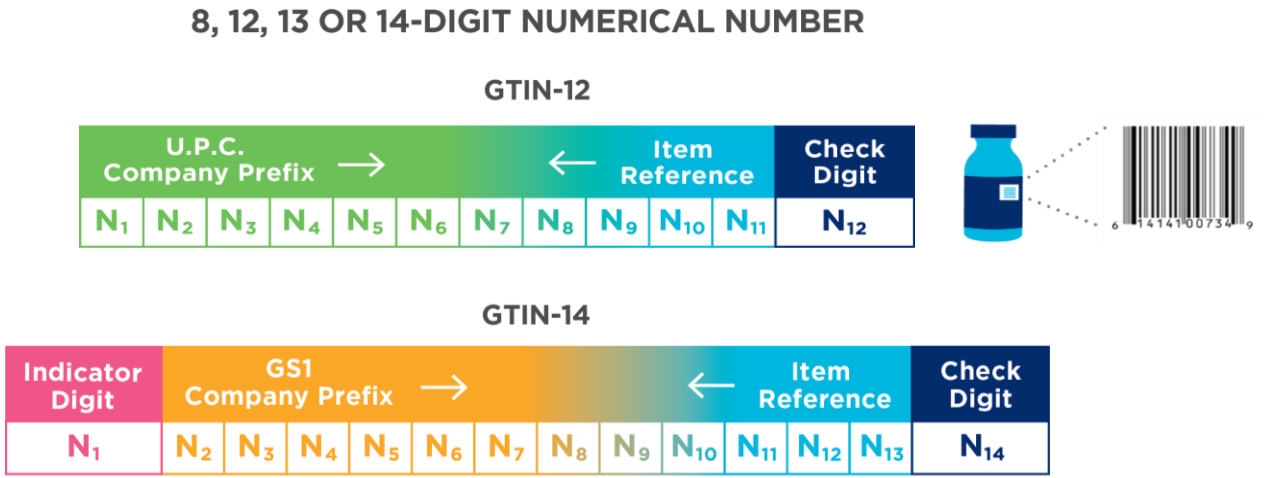
What is a GTIN?

Global Trade Item Number	• An identification number of the GS1 System, therefore unique and unambiguous
Globally Unique Number	• 8, 12, 13, or 14 Digits • Identifies Products or Services
A Global Standard	• For Collaborative Commerce

© GS1 2016

Global Trade Item Number (GTIN)

A number that uniquely identifies trade items. GTINs are encountered most frequently at retail point of sale and on inner packs, cases, and pallets of products in a distribution center/warehouse.



© GS1 2016

Healthcare Model
GTIN® plus Secondary Information

© GS1 2016

What is a Global Location Number (GLN)?

- A GS1 System standard for collaborative commerce
- Always a unique 13-digit number that identifies:
  - Legal entities
  - Functional entities
  - Physical locations
- May also be encoded within a barcode for specific business applications and placed on shipping labels
  - "Ship to – Deliver to" locations
  - "Bill to – Invoice to" locations
  - "Purchased from" locations
  - Shelf locations

© GS1 2016

Global Location Number (GLN)

Used to identify physical and functional locations as well as legal entities. GLNs are used to identify parties to business transactions; functional groups within a company; or real, physical "places" that might ship, receive, process, or hold inventories.

13-DIGIT NUMERICAL NUMBER

GS1 Company Prefix →							← Item Reference				Check Digit
N_1	N_2	N_3	N_4	N_5	N_6	N_7	N_8	N_9	N_{10}	N_{11}	N_{12}	N_{13}

© GS1 2016

Serial Shipping Container Code (SSCC)

- A globally unique 18-digit number that identifies a specific logistics unit of products:
  - e.g. pallets, air cargo containers, returnable totes, boxes for parcel delivery, etc.
- Used as a reference number (license plate) only
- Used inside Advance Ship Notice (ASN, EDI 856)
- A global standard within the GS1 System
- An ISO standard for transport labels worldwide
- Reuse of SSCC is 1 year

- **Do not confuse with Global Trade Item Number® (GTIN®)**

© GS1 2016

Serial Shipping Container Code (SSCC)

- Used for an item of any composition established for transport and/or storage which needs to be managed through the supply chain.
- The SSCC should be used in the Advance Shipping Notice (ASN).

18-DIGIT NUMERICAL NUMBER

Application Identifier	Extension Digit	GS1 Company Prefix →										← Serial Reference					Check Digit
00	N_1	N_2	N_3	N_4	N_5	N_6	N_7	N_8	N_9	N_{10}	N_{11}	N_{12}	N_{13}	N_{14}	N_{15}	N_{16}	N_{17}	N_{18}

© GS1 2016

CAPTURE

GS1 Data Carriers in Healthcare

© GS1 2016

GS1 Data Carriers

- EAN/UPC *(Used in Healthcare)*
- ITF-14
- *GS1-128 (Used in Healthcare)*
- GS1 DataBar
- GS1 DataBar with Composite Component
- *GS1 DataMatrix (Used in Healthcare)*
- EPC-enabled RFID *(Used in Healthcare)*

* Barcodes not to scale.

In this presentation, the letters "U.P.C." are used solely as an abbreviation for the "Universal Product Code" which is a product identification system. They do not refer to the UPC, which is a federally registered certification mark of the International Association of Plumbing and Mechanical Officials (IAPMO) to certify compliance with a Uniform Plumbing Code as authorized by IAPMO.

© GS1 2016

Features of EAN/UPC

- Encodes ***only*** the Global Trade Item Number® (GTIN®)
  - GTIN-12, GTIN-13, or GTIN-8
- Point-of-Sale (POS) scanning
  - POS scanners are optimized for EAN/UPC
- Omni-directionally readable
- Enables fast and accurate tracking of retail consumer trade items in the supply chain

© GS1 2016

USAGE of EAN/UPC

- Used on standard trade items to uniquely identify products in the food, healthcare (OTC), consumer products, apparel, electronics, and hardlines industries.
- Used for trade items crossing POS
- Items marked are typically intended to be scanned at retail point-of-sale (POS), but this symbology is allowed for general distribution scanning when magnified to between 150-200% of the nominal size.

© GS1 2016

Features of GS1-128

- Encodes ***all*** of the GS1 Identification Keys and all additional GS1 Application Identifiers (AI) up to 48 characters
- Allows for "concatenation" of data strings
- "All the info in one scan"
- Enables fast and accurate tracking of non-consumer trade items and other specific data in the supply chain

© GS1 2016

Usage of GS1-128

- Used on standard trade items, locations, logistic units, and assets in the supply chain
- Uniquely identifies trade items or assets in cartons, inner packs, cases, pallets or locations
- Through the use of AIs, it can be used to share batch/lot number, serial number, expiration and best before dates, physical locations and entities, etc.
- GS1-128 is ***not*** intended to be scanned at retail point-of-sale (POS)

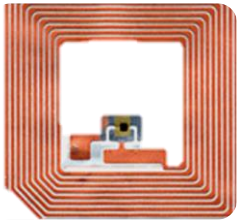
© GS1 2016

GS1 - DATAMATRIX

Allows to include:
GTIN, Lot, Expiration Date and Serial.

Data capture is made product by product through a two-dimensional reader

EPC - RFID



Allows the serialization of medicines.

The lot and expiration date traceability is done through the association of the serial to the database that hosts this information

Facilitates the mass capture of products

Two different technologies that serve the same purpose.
EPC-RFID does not replace the GS1 Datamatrix, coexist

© GS1 2016

SHARE

GS1 Data Sharing Standards in Healthcare

© GS1 2016

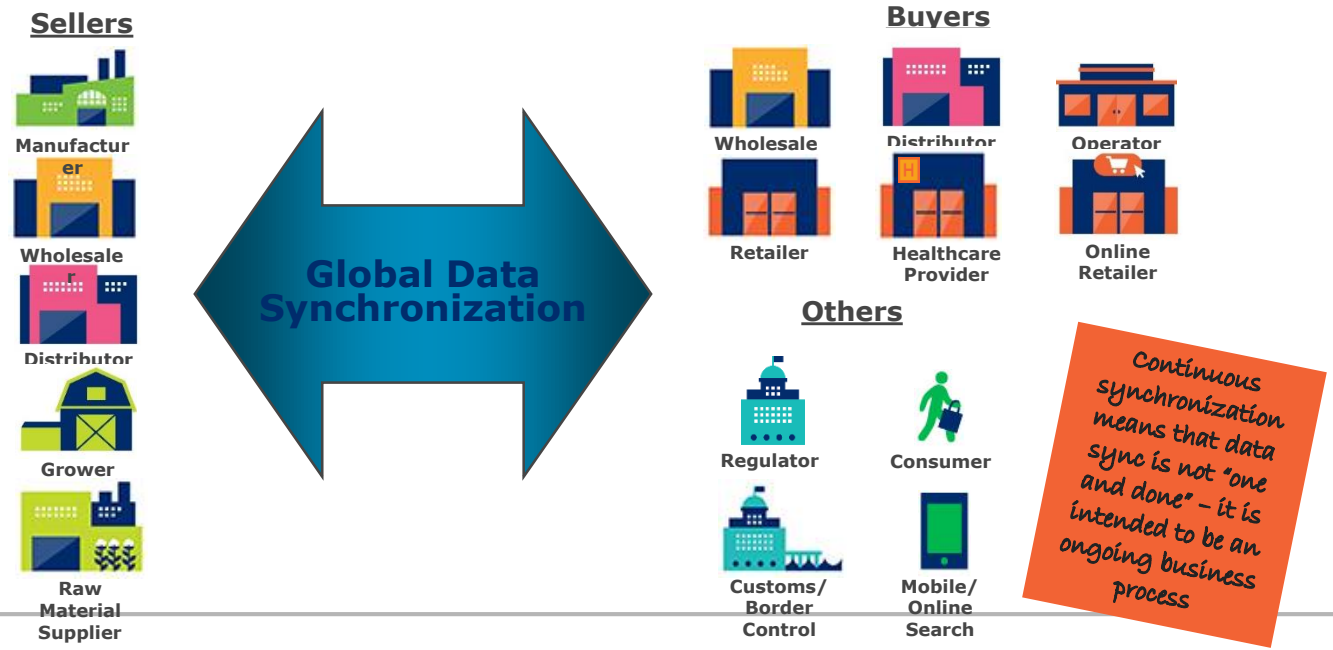
Global Data Synchronization Network (GDSN)

The GS1 Global Data Synchronisation Network® (GDSN®) is a network of interoperable data pools enabling collaborating users to securely synchronise master data based on GS1 standards. GDSN supports accurate, real-time data sharing and trade item updates among subscribed trading partners.

© GS1 2016

Global Data Synchronization

Data synchronization is the electronic transfer of <u>standardized product</u> and <u>entity</u> information between trading partners and the continuous synchronization of that data over time



© GS1 2016

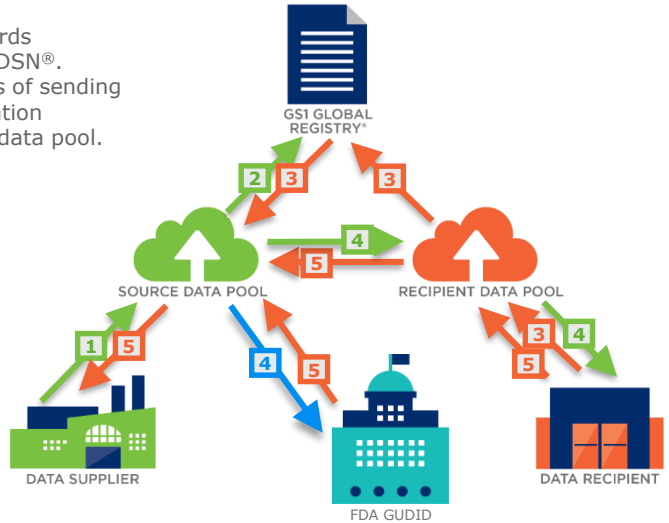
Data Flow via GDSN®

The **GS1 Global Registry**® is a single repository where basic data is registered. The GS1 Global Registry identifies the data pool location of source data.

Data Pools provide data that is standards conformant, and interoperable in the GDSN®. The data pool performs the transactions of sending and receiving validated product information between partners inside or outside the data pool.

Select one data pool as a SINGLE point of entry to the GDSN

Step 1 : Load Data
Step 2 : Register
Step 3 : Subscription
Step 4 : Publish Data
Step 5 : Recipient Confirmation



3rd Party Government Database Loading: The FDA utilizes the HL7 SPL message to receive machine to machine feeds of product information. To accomplish this the source data pool can act as a 3rd Party Provider of data on behalf of a Data Supplier. Data confirmation messages will be returned to the Source Data Pool. The Source Data Pool will communicate these return messages to the Data Supplier.

© GS1 2016

Electronic Product Code Information Services (EPCIS)

EPCIS is a GS1 standard that enables trading partners to share information about the physical movement and status of products as they travel throughout the supply chain – from business to business and ultimately to consumers. It helps answer the "what, where, when and why" questions to meet consumer and regulatory demands for accurate and detailed product information.

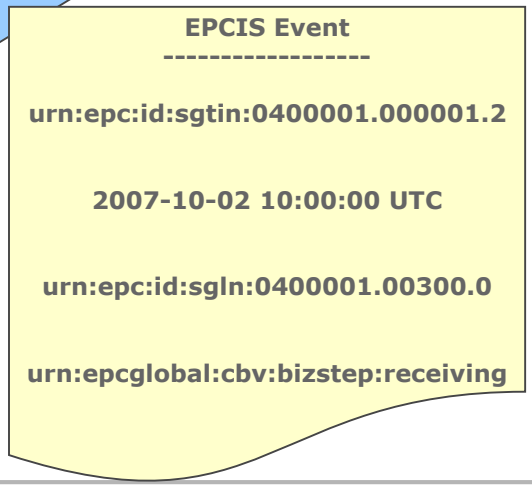
https://www.gs1.org/epcis

© GS1 2016

EPCIS Visibility Data Content

- Visibility data consists of events, each of which records something that happened in the real world.
- Often, though not necessarily, triggered by reading an RFID tag.
- An event has four dimensions:
  - What: what physical objects were involved (EPC)
  - When: when the event took place (timestamp)
  - Where: where the event took place (location identifier)
  - Why: what business process step was being carried out

Where and Why are what distinguish EPCIS visibility data useful to a business application from raw RFID or Bar Code data



© GS1 2016

The healthcare supply chain needs global standards

- **Medication errors** result in additional treatments, disabilities and even loss of life
- **Counterfeiting** is an increasing global threat
- **Traceability** from manufacturer to patient is problematic
- Product **recalls** can be difficult to manage, in particular for healthcare providers
- Manual interventions in the healthcare supply chain decrease its **efficiency and accuracy**

© GS1 2016

Ultimately, it’s all about…

PATIENT SAFETY!

© GS1 2016

GS1 Standards Initiatives

© GS1 2016

GS1 collaborating with global organisations

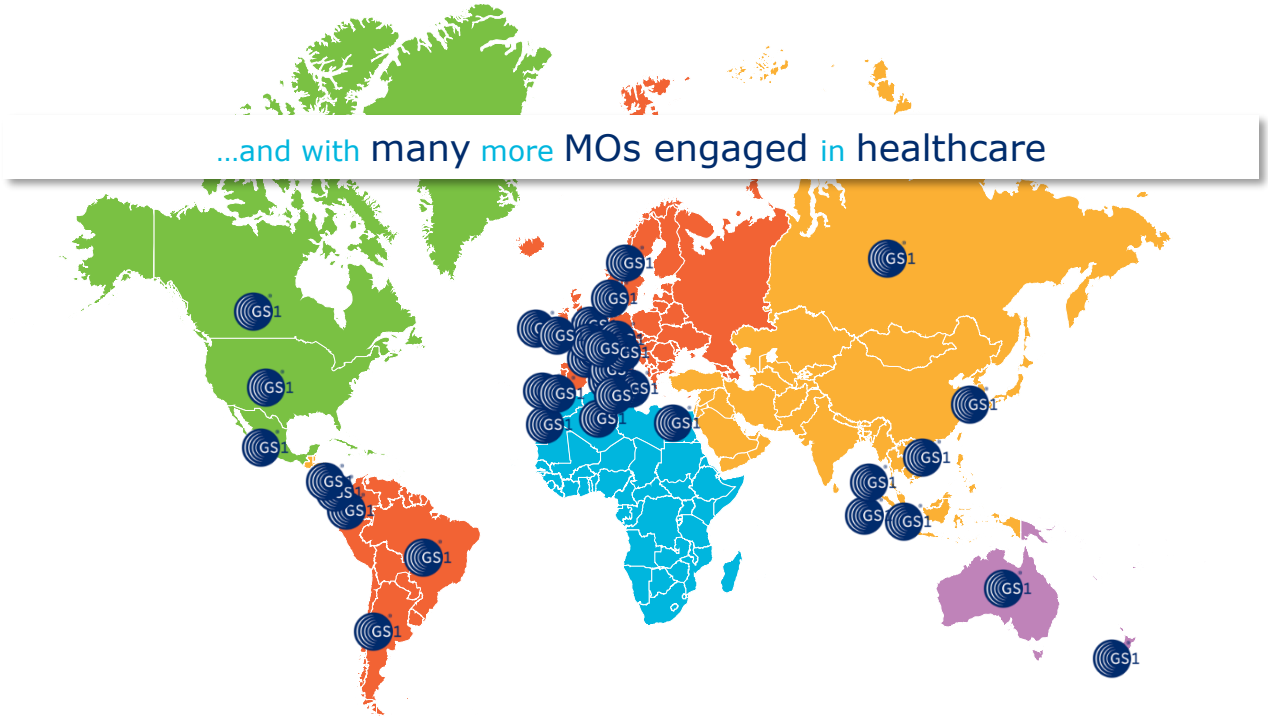
© GS1 2016

GS1 Healthcare: an expanding, committed community of globally engaged stakeholders…

…and there are many more companies working with GS1 at a local level

© GS1 2016

…working together with GS1 Member Organisation (MO) User Groups in 40 countries



© GS1 2016

…as well as with leading hospitals and government agencies to implement GS1

© GS1 2016

GS1 Standards in Healthcare

GS1 Healthcare Reference Book 2017-2018: Stories of successful implementations of GS1 standards

- Stories from around the globe describing use of GS1 standards in various healthcare settings - https://www.gs1.org/healthcare/reference-books

- **Local Stories:**
  - **Legrand - 2017/18 Version**
  - **Centro Médico IMBANACO - 2017/18 Version**
  - **Fundación Valle del Lili - 2016/17 Version**
  - **Coopidrogas - 2016/17 Version**

© GS1 2016

Healthcare Provider Advisory Council (HPAC) webinars

When: Each month.
Who: Healthcare stakeholders interested in learning about GS1 Standards implementation
Why: Learn about successful GS1 standards implementations via case study presentations.

Next webinar: Tuesday 17 April 2018

Speakers: Mr Simon Moores, Director of Finance and Mr John Cotter, Programme Director of Activity Based Funding, Ireland

Leading global innovation in healthcare - a hospital wide approach to adopting GS1 standards, St. James's Hospital, Dublin, Ireland

St. James's Hospital, is recognised globally for its innovation. During this webinar Mr Simon Moores, Director of Finance and Mr John Cotter, Programme Director of Activity Based Funding will outline:

1. the approach and the process within the hospital;
2. the challenges encountered and how these were overcome;
3. how data enhances not only patient safety but also clinical decision making;
4. how data from the point of care enables patient level costing;
5. how the scan at the point of care can automate the re-ordering of product from the supplier;
6. how improving the supply chain has a direct and positive impact on patient safety.

© GS1 2016

GS1
Healthcare Event 2018

English | Español

Register

Home Programme Hotel & Travels Practical Information

33rd Global Healthcare conference

April 10 - 12

Bogotá, Colombia

Safer, more efficient care starts with a simple scan.

© GS1 2016

GS1 COLOMBIA Workgroups

Healthcare Providers

To support the definition and implementation of collaborative initiatives focused on increasing patient safety based on best practices in GS1 standards and best practices in hospital logistics.

Retail Healthcare Group

To promote the development of collaborative initiatives that optimize operations and strengthen relations between pharmaceutical industry and retailers.

© GS1 2016

Questions?

© GS1 2016

Thanks and Enjoy the Conference!

© GS1 2016