



# The world of GS1 standards in healthcare

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**GS1 Global Office**



# **Healthcare Topics**

- Background
- Where we are going
- Where we are today
- What this means to you
- Questions



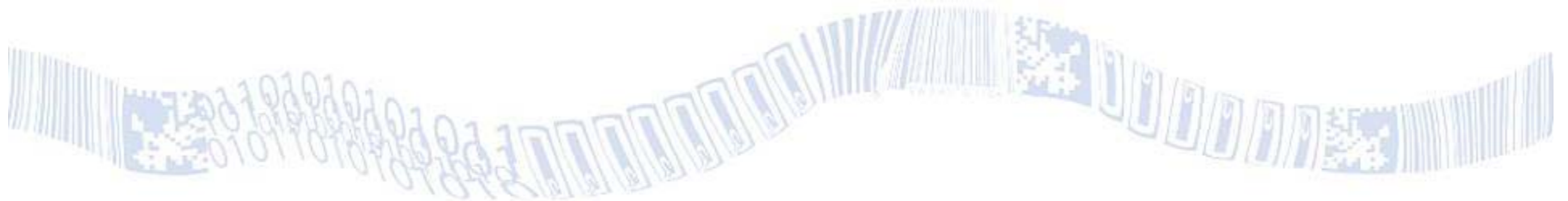
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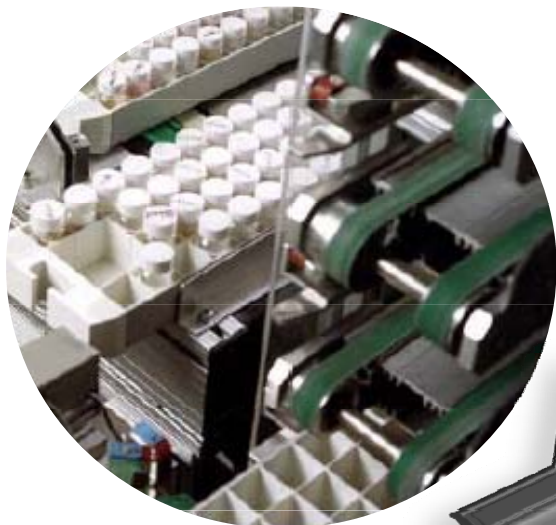
## **Security, traceability and efficiency in healthcare**

are currently at the forefront of  
government regulations and industry  
concerns around the world.





# The healthcare supply chain... *simplified*



**Manufacturer**



**Healthcare  
provider**



**Distributor, wholesaler, GPO, ...**



**Patient**

# The healthcare supply chain ... *in real life*



# **Healthcare Challenges & opportunities**

- 1. Improving patient safety**
- 2. Increasing supply chain efficiency**
- 3. Ensuring regulatory compliance**





## Medication errors « *To err is human* »



- In the U.S., the Institute of Medicine estimated that medication errors cost at least **\$3.5 billion** in extra medical expenses.



- In the U.S., medication errors in hospitals result in preventable adverse events with **7,000 patients dying** per year.



- A research article in British Medical Journal (BMJ) found a total prevalence of **74.5** medication errors per 100 patient days in intensive care units; **0.9%** of the total study population (n=1,328) experienced permanent harm or died



# Reducing medication errors

## *An example*



Gelre Ziekenhuizen in the Netherlands:

Electronic prescription and bar code point-of-care system

**reduced medication errors by 74%**

-from 3.10% to 0.84%



# Counterfeit medical products

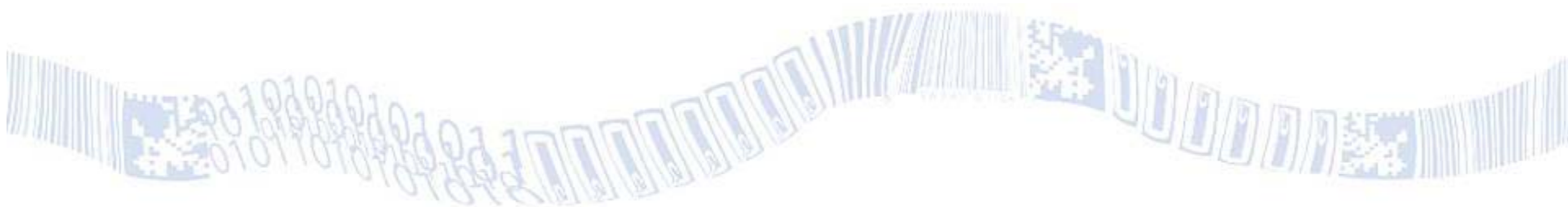


- Counterfeit drugs sales expected to reach **US\$75 billion** in 2010
- **Increasing global threat**
  - In parts of Africa and Asia counterfeit drugs exceed 30%
  - In Europe and North-America around 1% of pharmaceuticals are counterfeit



## Postmarket surveillance and product recalls

- **60%** of approximately 66,000 adverse event reports received by the FDA in the United States **lacked the lot number or another meaningful identifier**
- In 2009, US FDA has **recalled nearly 5,000 products**



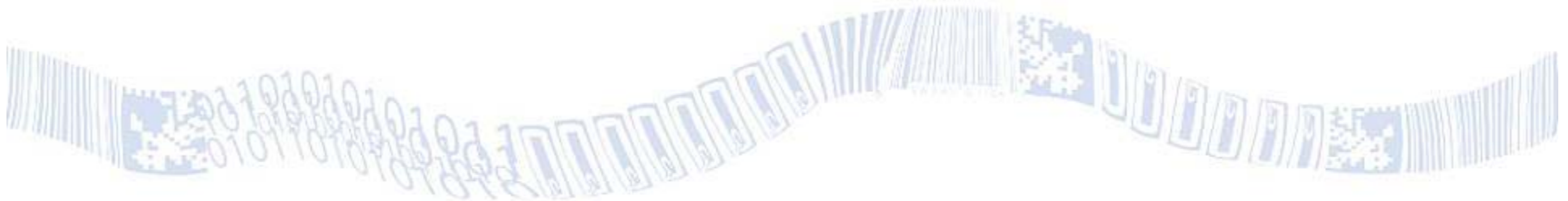


**Healthcare**

# Increase supply chain efficiency



- Improve order and invoice process
- Optimise receiving
- Reduce inventory & improve shelf management
- Increase productivity
- Improve production and packaging process
- Improve benchmarking and management of supply cost



# Increase supply chain efficiency

## *An example*



New inventory system based on bar code scanning for the Cardiac Catheter Laboratories at Leeds Teaching Hospitals NHS, U.K.:

- Reduced stock levels by **56%** from GB£1.6 million to GB£700,000
- Electronic order system reduced staff time dramatically and reduced the costs of the purchasing process **from GB£7.05 per line to GB£0.39**



## Increase supply chain efficiency *Another example*



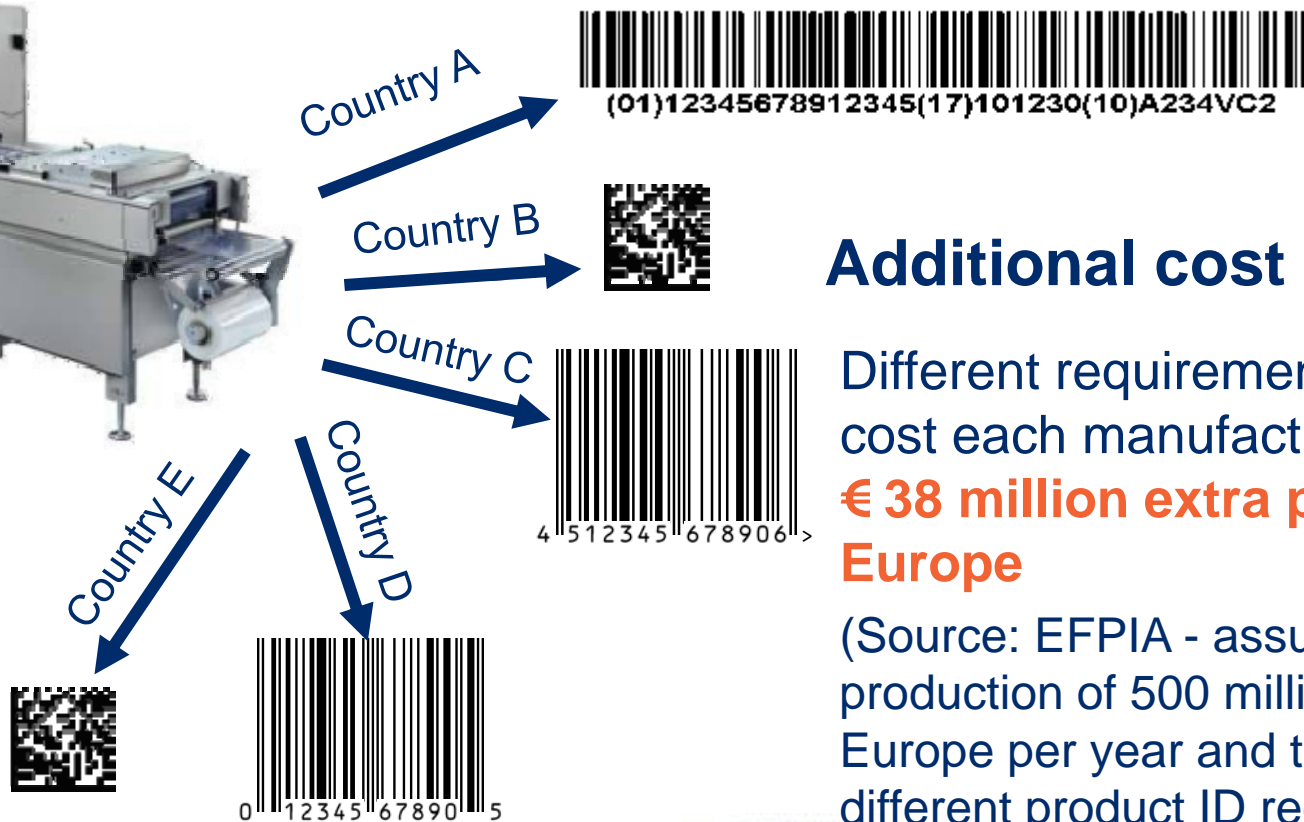
Introduction of real-time consumption data capturing system (barcode-enable) at the International Medical Center of Japan, Tokyo:

- Inventory was cut to a tenth
- Improved inventory management: cost reduction of JP¥ 467 million (about **US\$3.9 million**) for pharmaceuticals and medical supplies
- Improved process management of mixing of IV drugs: **US\$1 million** cost savings



# Increase supply chain efficiency

## One more example



### Additional cost and risk

Different requirements could cost each manufacturer **up to € 38 million extra per year in Europe**

(Source: EFPIA - assuming production of 500 million packs in Europe per year and three different product ID requirements)





**Healthcare**

# Ensure regulatory compliance

Regulatory requirements are being developed that will impact supply chain management in the healthcare sector



And many more...





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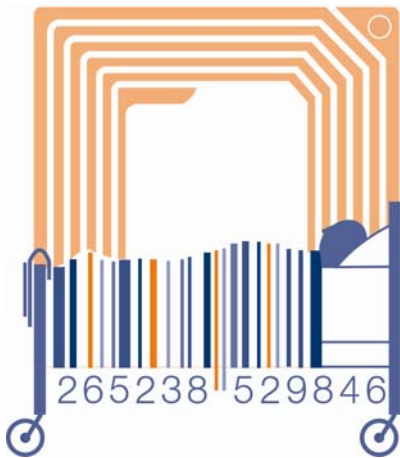


# GS1 Standards in Healthcare ... Our vision



GS1 Healthcare envisions a future where the healthcare sector utilises GS1 global standards for all items, locations, people and processes to drive patient safety and supply chain efficiency improvements-- starting with the manufacturer and ending with the patient.





# Speak one language

**across country or regional borders  
between supply chain partners and  
within an organisation**

**Sector-wide implementation of global  
supply chain standards needed**



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# GS1 Healthcare

## Global, Voluntary Healthcare User Group

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.



# Leading healthcare organisations pave the way...

Corporate members of the global user group





# Leading healthcare organisations pave the way...

## Healthcare providers and Group Purchasing Organisations going global



France



Germany



Netherlands



Hong Kong



Switzerland



Germany



Germany



USA



Austria



USA



Ireland



Netherlands



France



USA

 **GS1 Healthcare Global work groups**

- AIDC Application Standards
- Global Data Synchronisation & Product Classification
- Traceability in Healthcare
- Public Policy

Meet bi-weekly via conference call  
and 3 times per year in the global conferences.



# GS1 Healthcare Global conferences



Toronto



Granada



Rome



London



Paris



Brussels



Berlin



Minneapolis



Orlando



Princeton



Washington



Vienna



Hong Kong



Tokyo



São Paulo



# **GS1 Healthcare** Global reach – Local reach

108 GS1 Member Organisations  
1,800 employees





# Local Healthcare user groups driving adoption



France



Canada



Austria



Russia



US



UK



Malta



Australia



Serbia



Singapore



Belgium & Luxembourg



New Zealand



Switzerland



Algeria



Spain



Japan



Morocco



Tunisia



Netherlands



Germany



Macedonia



Sweden



Slovakia





# GS1 Healthcare

## Global, Voluntary Healthcare User Group

To be the **recognised, open and neutral source** for regulatory agencies, trade organisations and other similar stakeholders **seeking input and direction for global standards** in healthcare for patient safety, supply chain security & efficiency, traceability and accurate data synchronisation.

# GS1 Healthcare Increasing global recognition



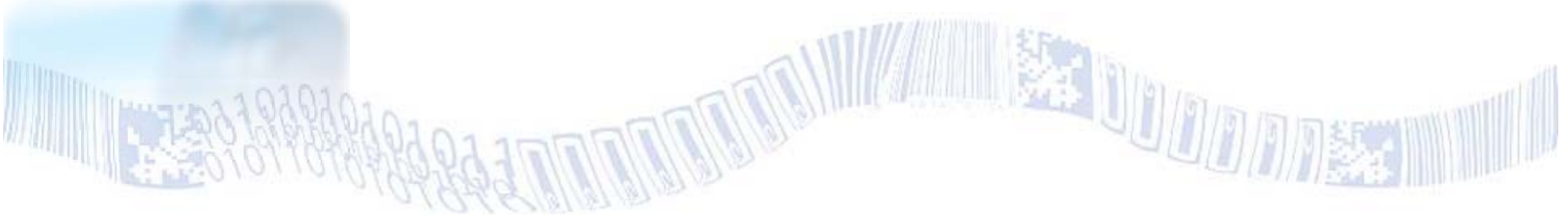
And many more...

# **Healthcare** **GS1 Standards for Healthcare**

**Standards development continues,  
but set of global standards available to build on:**



- ✓ AIDC Application Standards for 90% of medical products
- ✓ AIDC Application Standards for small instruments
- ✓ Healthcare extension in next GDSN release
- ✓ Global Traceability Standard for Healthcare



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# Healthcare Global system of standards

## An integrated approach

- Standardised identification keys
  - *Products, locations, assets, ...*
- Standardised data carriers
  - *Bar codes & RFID*
- Standardised sharing of static data
  - *Data on products & locations*
- Standardised sharing of dynamic data
  - *Event data*
- Standardised electronic communication



Global reach

Open standards

Proven standards

**Meeting the challenges  
of today's Healthcare supply chain:  
patient safety, security, visibility, efficiency, accuracy, ...**



# **Healthcare** **How to get started**



1. Contact your local **GS1 Member Organisation** for guidance
2. **Join a local user group** to work with other healthcare stakeholders to advance the sector-wide implementation of standards
3. **Join the global user group** to work with other healthcare stakeholders to develop global standards and support global harmonisation





# The time has come for healthcare !

It will be a journey to get there, but  
the patient safety and efficiency  
benefits are and will be substantial.