Getting started with Traceability in your hospital/healthcare setting

The Basics

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October 2019
Introductions

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Safer, more efficient care starts with a simple scan

The first scan in 1974 (45 years ago)

EAN

today
An international standards organisation

We are...

- Neutral and not-for-profit
- User-driven and governed
- Global and local
- Inclusive and collaborative

- Serving over two million companies
- Over 20 sectors
- 2,500 people helping us to achieve our vision
- Across 150 countries
- More than 6 billion barcodes read all over the planet every day
Global collaboration of standards organisations
Agenda

• Introduction
  1. Why Traceability?
  2. GS1 standards as an enabler in ehealth
  3. Guidance for healthcare providers – getting started
• Resources
• Final thoughts
• Q&A
Why Traceability?
Hospital and Healthcare supply chains

Are they safe?
Are they efficient?
Are they transparent?
Risks to Patient Safety when standards not in place

**Adverse event**
- Medication errors
- Wrong site surgeries
- Wrong implant or prosthesis
- Retained foreign object post-surgery
- Misplaced oro- or naso-gastric tubes

**Product Recall**

**Patient Identification**

- Medication errors
- Wrong site surgeries
- Wrong implant or prosthesis
- Retained foreign object post-surgery
- Misplaced oro- or naso-gastric tubes
Patient Safety and Traceability today

State of the art medical technology VS Supply Chain Traceability from the Dark Ages
McKinsey & Company report on benefits of a single global standard

New McKinsey report “Strength in unity: The promise of global standards in healthcare”

Highlights the patient safety benefits and cost savings of adopting a single global supply chain standard in healthcare

Available at:
http://www.gs1ie.org/healthcare

Source: http://www.mckinsey.com
Benefits: Patient Safety

- Improved **recall** procedure and **adverse event** reporting
- **Documentation** of product/patient relationship – in **electronic health records** (EHR) and registries
- **Visibility** of **inventory** – availability of devices
- Reduction of **medical errors**
- Provides supply chain **security-anti-counterfeiting**
Benefits: Clinical and hospital staff

- More time for **patient care** and **clinical duties**
- Less time spent **looking for items**, patients, staff etc..
- Less time spent with **paperwork, transcribing** notes etc..
- Reduction in **manual workload**
- **Ease of reporting** when required to look back post-event

But this can only happen if solutions are standardised and interoperable ie: systems can talk to each other
The Vision for Patient Safety – Getting it right first time!


- Recall management
- Inventory management
- Purchase to pay
Regulation – a barcode for every product

**Medical Devices:**
Unique Device Identification (UDI)
- (01) Product Code/GTIN
- (10) Batch
- (17) Expiry
- Serial number (where applicable)

**Deadline for EU:** May 2020

*Note: FDA regulation already in place*

**Pharmaceuticals:**
Falsified Medicines Directive (FMD)
- (01) Product Code/GTIN
- (10) Batch
- (17) Expiry
- (21) Serial Number

**Deadline for EU:** 9th Feb 2019

*Note: FMD Use and Learn period ends 31st Jan 2020 on phased basis*
Scan4Safety in the NHS

“The introduction of GS1 standards will allow every NHS hospital in England to save on average up to £3 million each year while improving patient care”

Lord Carter’s interim report on efficiency savings potential for the NHS
The Scan4Safety journey

In 2014, the Department of Health and Social Care mandated the use of GS1 standards within the eProcurement strategy.

In January 2016, six NHS Trusts are being fully-funded by the Department of Health and Social Care to become demonstrator sites of excellence:
- The Leeds Teaching Hospitals
- North Tees and Hartlepool NHS Foundation Trust
- Plymouth Hospitals
- Derby Teaching Hospitals
- Royal Cornwall Hospitals
- Salisbury NHS Foundation Trust

In September 2017, Derby Teaching Hospitals NHS Foundation Trust becomes the first Trust to complete all four phases of Scan4Safety.

Every healthcare provider and every supplier of every product and service into the NHS must comply with GS1 standards by 2020.

NHS Provider and Supplier contracts will reflect this.

Lord Carter’s Interim report in 2015 finds that the “introduction of GS1 standards will allow every NHS hospital in England to save on average up to £3 million each year while improving patient care.”
What is driving the need for standardisation in Irish Healthcare?

- Procurement Efficiencies
- Product Recall
- Government Requirements
- Patient Safety
- Regulatory Requirements
- Scan4Safety
- Cross border trade
- Operational Efficiencies

“Barcodes can turn everything into data”
Standardisation in Irish Healthcare - Current challenge

Example of duplication with supplier code:

<table>
<thead>
<tr>
<th>Manufacturer</th>
<th>Catalog #</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medtronic</td>
<td>305905</td>
<td>Mosaic ® 305 Porcine Heart Valve ..................</td>
</tr>
<tr>
<td>BD</td>
<td>305905</td>
<td>3mL BD SafetyGlide ™ Syringe .....................</td>
</tr>
<tr>
<td>J &amp; J</td>
<td>305905</td>
<td>Protectiv ® IV Catheter System ....................</td>
</tr>
</tbody>
</table>

• GTIN can be linked to existing code
• GTIN is globally unique
• GTIN is in the barcode on the packaging

GTIN is now included as a requirement in HSE tenders for Medical Devices

• Track and Trace difficult
• No uniqueness in coding
GS1 standards as an enabler in ehealth
Majority of Irish hospitals are members of GS1 Ireland and can use the GS1 prefix to create globally unique identifier for products, places, people, assets, logistics items and more...

*Talk to GS1 Ireland to learn more!*
How do our Standards work?

IDENTIFY

CAPTURE

SHARE

USE

Manufacturer  Item

GLN  GTIN

EAN/UPC  GS1-128

Master Data  Transactional Data  Event Data

The Global Language of Business  © GS1 Ireland 2018
Product Identification – the GS1 GTIN / UDI

What is a GTIN?

A Global Trade Item Number (GTIN) is used for the unique identification of healthcare products worldwide. The GTIN is encoded in a standard barcode to enable scanning.

The GTIN is the primary device identifier for majority of healthcare products.
Solving the challenge of the unit of order

There is a GTIN for every hierarchy of packaging >> removes errors in re-ordering

<table>
<thead>
<tr>
<th>Single Unit Package</th>
<th>Multiple Unit Package</th>
<th>Case or Shipper</th>
<th>Pallet</th>
</tr>
</thead>
<tbody>
<tr>
<td>GTIN A</td>
<td>GTIN B</td>
<td>GTIN C</td>
<td>GTIN D</td>
</tr>
</tbody>
</table>
Barcodes can turn everything into data!

Typical barcode in healthcare

WHEN THE UDI (DI) IS A GTIN

GTIN encoded in an EAN 13 barcode

GTIN encoded in a GS1-128 barcode

GTIN encoded in a GS1 DataMatrix

Healthcare is moving to a barcode with more traceability in one beep!

WHEN UDI HAS DYNAMIC DATA

GTIN with Lot Number encoded in a GS1-128 barcode

GTIN with Batch, Expiry and Serial Number encoded in a GS1 DataMatrix

Batch, Expiry and serial number are now often included
Healthcare Providers: Quick Poll

There are many barriers to the implementation of barcode scanning projects in healthcare. Please select from the following what you consider to be the biggest barriers to the implementation of barcode scanning projects in healthcare.

1. Organisation & Budget
2. Lack of Mandate
3. ICT and System Interfacing Issues
4. Readiness of Suppliers (GS1 Compliance)
5. Lack of Standardisation and Interoperability

Please add additional comments into the Q&A box.
Guidance for healthcare providers- getting started
Getting started – things to think about (1)
“I want to start scanning products in theatre”

• **Pick an area that is manageable and document the current issues**
  - Find champions to work with
  - Document before and after for future business cases

• **Start with an internal assessment of the products and system:**
  - Do the products have GS1 barcodes?
  - Do you have a clean product file?
  - Does your system have a field to store the barcode number?
  - How does your system handle Each, case/box quantities?
  - Think about what system you will use to do the scanning
  - Do you need to procure an additional system and can this interface to your existing system?
Getting started – things to think about (2) “I want to start scanning products in theatre”

- Establish a **steering group** of key stakeholders in your hospital and include GS1
- Prepare a **business case**
- Work with **procurement to engage with your suppliers** so they know that are working on scanning at the point of care
  - Where suppliers currently don’t have barcodes allow time for them to start labelling
  - Include requirement for GTINs in tender documents
- Allow time to **gather data and GTINs for products** – this can be time consuming!
- **Prove in one area** before expanding the scope and celebrate the small wins!
Getting started – What do I need?
“I want to start scanning products in theatre”

1. **Barcodes**
   - To be present on products, locations, people and assets (GS1 Standard), you may need to talk to GS1 to get a GS1 company prefix (or your hospital may already have one)

2. **Software**
   - Your own internal ERP system, or an interface to do the scanning

3. **Hardware**
   - PC/Handheld device
   - 2D Handheld scanner
   - Printer (you may need to print barcode labels depending on what you are doing)

*Software should be GS1 compliant this is becoming a feature on tenders*
What support does GS1 provide to healthcare providers?

- **GS1 Barcode license**
  - Guidance on how to generate and assign GS1 unique identifiers

- **Advice and consultancy on the implementation of standards-based traceability solutions**
  - Barcode readiness assessment
  - Training for healthcare providers
  - Process mapping and advice
  - Developing the business case for Traceability based on standards including Proof of concept
  - Certification of solution providers
Final Thoughts

- **Traceability is a huge opportunity** throughout healthcare and not just in clinical areas:
  - Opportunity for food traceability and catering
- **Get started with a focused area** and build from there (find a champion)
- **Design in the standard from the start** (biggest challenge is legacy systems and labels)
- **Collaboration is important** (site visits, best practice case studies etc)
- **GS1 is here to help and provide guidance**
Healthcare Providers: Quick Poll

Would you like to learn more? Please indicate a topic or add a comment on exiting the webinar:

1. Medication safety
2. Traceability in non-clinical areas eg: catering
3. Case studies e.g. Scan4Safety and eProcurement
4. More about GTINs and barcoding
5. Other

Please add additional comments into the Q&A box or in feedback as you exit the webinar
Resources
Case Study- new video

Traceability of special infant feeds at CHI at Temple Street

Safer services for patients: 
Traceability of infant feeds

A case study by the Special Feeds Unit

https://www.youtube.com/watch?v=PJKaLi1NMI4&feature=youtu.be
Case Studies- GS1 website

Irish Case Studies

Best practice patient safety and traceability of infant feeds at CHI (Children’s Health Ireland) at Temple Street
The new electronic traceability system ensures complete, real-time visibility of each special feed across the hospital; in stores; in the feed preparation areas; on the ward, right to the patient.

Scan for Safety / Scan for Surgery St. James’s Hospital – leading global innovation in healthcare
St. James’s Hospital has established the Scan for Surgery programme as well as introducing the automatic tracking of precious tissue samples. Both projects make use of GS1 standards-based technology to deliver improved patient safety and efficiency.

eProcurement at St. James’s Hospital, Dublin
Delivering world-class patient safety and efficiency in healthcare by taking paper and cost out of procurement. St. James’s Hospital embarked on a proof of concept project using GS1 Standards to automate and standardise the end-to-end ordering process.

Surgical Instrument Traceability
The deployment of GS1 Identification and bar code standards in the Irish Health Service Executive’s (HSE) Central Decontamination Units (CDUs)

https://www.gs1ie.org/healthcare/resources/case-studies/
Hospitals: report a barcode that does not scan

New online tool for healthcare providers

- Upload a sample on our online tool
- We will check if the barcode print appearance is adequate
- We can provide feedback to you to engage with your supplier or trading partner, or, we can do so on your behalf

https://resources.gs1ie.org/c/170905

This service is available to Healthcare Providers in Ireland
Communications

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• Community
Questions and Answers
Contacts

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Thank you for attending!

*Please share any thoughts or feedback you may have as we close the webinar*